ASERC Journal of Socio-Economic Studies

Journal homepage: www.ajses.az

Volume 3, Number 2,(2020) Pages 34-47

THE IMPLICATIONS OF IFRS 9 – FINANCIAL INSTRUMENT STANDARD EXPECTED CREDIT LOSS MODEL IMPLEMENTATION ON FINANCIAL STATEMENTS OF BANKS OF AZERBAIJAN REPUBLIC

Simnar Pashazada^a

^aDepartment of Accounting and Audit Baku Engineering University Khirdalan, Azerbaijan



ABSTRACT

On 24 July 2014 International Accounting Standards Board issued brand new IFRS 9 – Financial Instruments standard. The practical application date is determined 1 January 2018, with early adoption permitted. The research aims to identify the main implementation results of the new IFRS 9 – Financial Instrument ECL model on the banks' financial statements. The primary research method utilized during the research process is the applied research method, i.e., the consequences are identified by direct application of the ECL model's requirements to the three leading banks. As this research is done for the first time in Azerbaijan, the conclusion reached will be the information base for future research progress.

Keywords: IFRS 9; Financial instruments; Expected credit loss (ECL); International Accounting Standards Board (IASB); Financial statements.

A S E R C

INTRODUCTION

The International Accounting Standards Board had issued a brand-new standard on the measurement, classification, and recognition of financial instruments under IFRS 9 – Financial Instruments standard. This standard superseded the older IAS 39-Financial Instruments standard and became compulsory to be applied from 1 January 2018. The standard came with the solutions of the matters which were not explicitly dealt with in the IAS 39, such as more comprehensive calculation of expected credit losses, hedge accounting, and derivatives (BDO, 2018)

The main inherits of IFRS 9 standard are as follows:

- 1. The change in the recognition, measurement, and classification of both financial assets and financial liabilities:
- 2. Three-stage modeling to recognize and estimate expected credit losses;
- 3. Hedge accounting methods.

Phase 2 is the main point of this dissertation as the ECL model for receivables have been altered dramatically under IFRS 9.

The new ECL model's change will have adverse effects on the banks' financial statements, as the new ECL model requires much earlier recognition of irrecoverable debts than the previous model under IAS 39.

The new ECL model's main implication is that it requires to provide an allowance before the event of default happens to inform the investors beforehand. Moreover, under the new ECL model, entities are required to integrate forward-looking adjustments in calculating expected credit losses. This will further boost the fair presentation concept as estimated allowance will reflect both past information and future expected economic patterns (Gornjak, 2017).

Current research aims to briefly compare the new IFRS 9 standard with the previous IAS 39 standard. Moreover, this study will focus on more the implications and consequences of the new IFRS 9 ECL model in the banks' financial position and performance. Therefore, research answers the following questions:

- 1. What are the new conditions for measuring and recognizing the financial assets and financial liabilities under the new standards IFRS 9?
- 2. What will be the effects of applying the new Expected credit loss model (ECL) on the companies' profitability, liquidity, and solvency ratios, including main banks?
- 3. Will the application of the new standard requirement by banks cause recognition of material allowances for credit losses on loans compared to older standards?

To examine the effects of the new ECL model on the banks' financial statements, I use the applied research method is used as this research aims to develop techniques and procedures. Moreover, coming to the data to be used, secondary data will be used, as the data will be collected from the banks' financial and management statements. During the research, both qualitative and quantitative research methods are utilized. Furthermore, the findings are being generalized to a broader population, i.e., to all Azerbaijan Republic banks. The cross-sectional studies are used in the research as the conclusions are calculated on the figures on December 31, 2017.

1. BACKGROUND

1.1. Problem in previous standard and need for a new financial reporting standard

During the 2008 financial crisis, the conceded affirmation of credit losses that are connected with advances and other financial instruments was perceived as an inadequacy in existing bookkeeping measures. This is a direct result of how the debilitation prerequisites under IAS 39 relied upon a realized brought about incurred loss model, i.e., credit losses are not seen until a default event occurs. Since default events are on occasion acquired over the lives of advances, there was a con-

found in arranging the affirmation of the credit spread unavoidable in the interest charged on the advances over their lives and any impedance credit losses that get apparent soon. A further recognized deficiency was the multifaceted idea of different elements using different approaches to manage processing weakness (Beatty and Liao, 2014).

According to IASB Conceptual Framework, the proposed impairment model relies on anticipation that credit losses as contradicted should on brought about losses for each money related asset recorded at amortized cost. In this procedure, the hidden ECLs were to be seen over a budgetary asset's life by recollecting that them for the computation of the compelling loan cost (EIR) when the preferred position was first seen. This would make a reward for credit setbacks over a money-related asset's life, hence facilitating the affirmation of recognizing hardships for that of the credit spread sure in the interest charged. Following changes in credit, disaster wants would be reflected in getting the ball rolling acclimations to profit or hardship subject to the first EIR (Bernanke and Lown, 2015).

The IASB decided to reform the estimation and part of early on credit losses from confirming the effective interest rate (besides acquired or began credit-prevented monetary assets) to tackle these challenges. Accordingly, the money related asset and the mishap reward would be evaluated freely, using an extraordinary effective interest rate that is not adjusted for basic credit losses. Such a procedure would help address the troubles raised and empower substances to utilize their present accounting and credit danger; the official's structures in this manner decline the level of the imperative mix between these frameworks (Bushman and Williams, 2014).

By calculating expected credit losses from effective interest rates, an element must gauge credit losses' current estimation utilizing the first effective interest rate. This displays a problem since estimating ECLs using such a twofold rate tallies the ECLs that were evaluated into the financial resource at beginning acknowledgment. This is because the reasonable estimation of the advance at unique acknowledgment as of now mirrors the ECLs, so to accommodate the ECLs as an extra recompense is a twofold check these misfortunes. Subsequently, the IASB reasoned that it was not proper to perceive lifetime ECLs on beginning acknowledgment. To address the operational difficulties while attempting to lessen the impact of twofold tallying, just as to imitate (roughly) the 2009 Exposure Draft result, the IASB chose to seek after a double estimation model that would require a substance to perceive (Cohen and Edwards, 2017).

1.2. IFRS 9 - Financial Instruments standard

The new impairment prerequisites in IFRS 9 depend on an ECL display and supplant the IAS 39 incurred loss model. The ECL model applies to obligation instruments (for example, deposits of banks, loans, debt securities and trade, and other receivables) recognized at amortized cost or reasonable incentive through another detailed salary, in addition to rent receivables and agreement resources. Loan commitments and financial guarantee contracts that are not estimated at reasonable incentive through benefit or misfortune are likewise remembered for the extent of the new ECL model (Comert and Colak, 2014).

The ECL model's core value is to mirror the general example of crumbling, or increase, in the credit nature of money-related instruments. The ECL approach has been usually alluded to as the three-component approach, even though IFRS 9 doesn't utilize this term (Ernst and Young, 2017).

The amount of expected credit losses to be recognized as allowance amount or provision depends on whether the loan has been subject to default risk or decrease in debt recoverability since the initial recognition date (PricewaterhouseCoopers, 2017).

2. METHODOLOGY

2.1. The dataset of the research

The research dataset is obtained from 3 different financial and management statements of the banks of Azerbaijan Republic as of 31 December 2017. The banks loan portfolio ranges from 180.3 to 279.9M AZN (Mean_{loan portfolio} = 235.4M AZN, SD_{loan portfolio} = 40.31).

2.2. Hypotheses

Hypothesis 1

The allowance for expected credit losses on loan portfolio figure is predicted to increase by 10-30% on average compared to the previous standard incurred loss model.

Hypothesis 2

The new expected credit loss model's implementation is expected to lower capital adequacy, especially the CET1 ratio, by 35-50 basis points (bps) on average.

3. RESULTS AND DISCUSSION

Under the new standard company should recognize expected credit losses at the end of each reporting date based on either 12-month ECL or lifetime ECLs. The choice between 12-month ECL and lifetime ECL should be based on whether there is a substantial increase in the credit risk of financial assets or liabilities from initial recognition. Any change in allowance for credit losses should be immediately recognized in the statement of profit or loss and other comprehensive income as impairment gain or loss (Abad and Suarez, 2017).

In many cases, determining whether there has been a substantial spike in credit risk or there is no additional significant spike in the credit risk of a financial instrument may not be possible. Therefore, in some cases, Company should determine the credit risk of financial instruments on a collective basis (Moddy's Analytics, 2017).

3.1. Segmentation of loan portfolio

To apply IFRS 9 ECL model, firstly, Banks' loan portfolio is divided into segments. Different approaches have been used to the loan segments when implementing the ECL approach to the loan portfolio. For each of the Banks' portfolio following segmentation with common risk characteristics have been applied:

Table 1: Banks' Loan Portfolio Segmentation

IEDC O Cogmont	Description
IFRS 9 Segment	Description
1. Individually significant	This group contains loans with contract origination amount of 800,000 AZN and above and which are individually impaired as of reporting date. Loans included into this group are assessed on an individual basis.
2. Corporate loans	This segment contains all other corporate loans which do not fall into the category of Individually Significant loans. These loans are usually issued to legal entities operating in various industries,
3. Mortgage loans	This segment includes all loans issued to individual clients to buy the residential property. The segment comprises both State Mortgage Fund financed loans and mortgage financed by the Bank (commercial mortgage).
4. Cash loans	The cash loans segment is represented by short and mid-term loans issued in local currency to individual clients between 20 and 65. Amounts range from 300 AZN to 15,000 AZN. The repayment schedule is based on annuity payments.
5. Lombard loans	The Lombard loans segment is represented by loans with a maximum term of 2 years issued in local currency and secured by jewelry items and precious metals. Amounts range from 300 AZN to 10,000 AZN. The repayment schedule is based on annuity payments.
6. Micro loans	The micro loans segment is represented by loans issued to individuals and legal entities engaged in business. Loans are issued in local currency for the maximum period of 24 months and are repaid on an annuity basis. Collaterals vary depending on the project and available assets. The amount of loans range from 20 kAZN to 1M AZN.
7. Consumer loans	This segment includes all other consumer loans issued to individuals to purchase various home appliances, mobile phones and for financing other types of consumer spending. Loans are usually not secured by any hard collateral and issued for maximum 2-3 years.

Source: Created by author

3.2. Staging

IFRS 9 establishes a 3-stage approach for impairment of financial assets, based on whether there has been a substantial decrease in a financial asset's credit risk. At each reporting date Bank has to classify all its loans which are in the scope of this Methodology into three buckets – Stage 1, 2, or 3-depending on the default risk quality from the date of initially recognized (Deloitte and Touche, 2018)

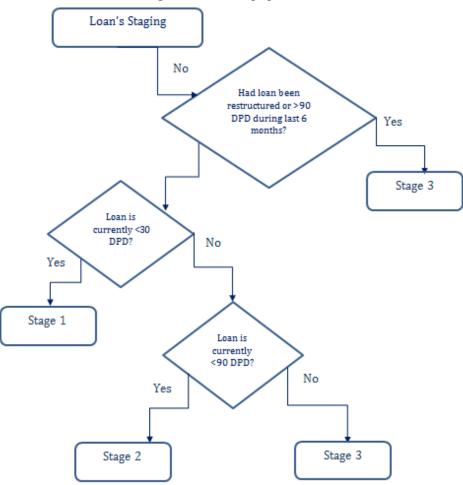


Figure 1: Loan's Staging Decision

Source: Created by the author

Stage 1 includes loans with no substantial spike in credit risk since initially recognized or loans with low default risk on the reporting date. For loans in Stage 1, interest is accrued on the loan's gross carrying amount, and a 12-month ECL is recognized. All loans are classified into this category at the origination date unless they are POCI financial assets (Novotny-Farkas, 2016).

Stage 2 comprises loans with a substantial spike in default risk since the date of initial recognition. Interest for loans in Stage 2 is accrued on the gross carrying amount; however, a lifetime ECL is recognized (Bernanke, 2016).

Stage 3 includes loans that demonstrate evidence of impairment on the reporting date. For such loans, interest is accrued on the net carrying amount (net of allowance), and a lifetime ECL is recognized (Sultanoglu, 2018).

Unless any other information is available, loans are classified as Stage 3 loan (default) when:

• For borrowers exposed to observable seasonality in cash flows due to the nature of the business when agreed payments are more than 120 days past due;

- For credit cards borrowers, when contractual payments are more than 120 days past due;
- For all other borrowers when contractual payments are more than 90 days past due (KPMG., 2014).

Independently from past due status above, Bank classifies loans into Stage 3 loans category when one or more following events occur:

The following staging tree (see figure 1) is implemented during the determination of staging of each loan portfolio.

Staging of other financial instruments, which includes correspondent accounts in Central bank and other banks and due from bank balances, are normally classified as Stage 1, unless there is any objective evidence that correspondent bank is in significant financial difficulty. Due to banks, balances are classified as Stage 1 if the maturity period is not expired. Overdue or prolonged interbank deposits and debt securities are classified as Stage 3 (Vanek and Hampel, 2017).

In calculating expected credit losses, the following generally accepted formula by financial institutions worldwide had been applied. The general rule is multiplying the following components, the probability of default (PD), the loss given default (LGD), and the exposure at default (EAD) (European Banking Authority, 2017):

$ECL = PD \times EAD \times LGD$

3.3. Probability of Default

The probability of default (PD) is one of the first key risk parameters necessary for assessing credit risk. It is defined as the probability of default of a borrower over a one-year period or over remaining time to maturity. It is the likelihood that a loan will not be repaid in its entirety and will fall into default.

The probability of default is indicated in terms of percentages, ranging from 0 to 100%. Markov's migration matrices are used to calculate PD.

12 months PD

For each of the identified segments, Markov's Transition Matrix is used for calculation of Point in Time 12mPD in accordance with the following rules:

- 1. Loan portfolios with the number of overdue days for every loan are extracted from Bank's loan module. Overdue days are calculated as the difference between the current date and due date of the payment in accordance with the loan's repayment schedule;
- 2. Loan portfolios for 24 months preceding reporting date are extracted from the system;
- 3. Based on extracted loan portfolios, Matrix tables of monthly movements of a number of outstanding loans between days past due buckets and "repaid" and "restructured" buckets are built for 24 months preceding the reporting date. Days past due buckets are "Normal", "1-7 days", "8-30 days", "31-60 days", "61-90 days" and "More than 90 days" (See below example):

The graphical description of the Markov Transition Matrix is as follows:

IFRS 9 Segment Car loans Count of Total exposure Column Labels Row Labels **▼** Normal 1-7 gün 8-30 gün 31-60 gün 61-90 gün >90 gün Bağlı RES Normal 252 277 13 1-7 gün 12 2 3 25 8 8-30 gün 6 8 5 2 28 31-60 gün 2 5 61-90 gün 104 >90 gün 106 Grand Total 16

Table 2: Markov Transition Matrix sample

Source: Created by the author

- 4. The average matrix table is calculated based on the matrix tables of 24 months preceding the reporting date;
- 5. In order to estimate 12 months, roll rates above matrix are multiplied by itself 11 times;
- 6. Final 12 months PD rates are calculated as the total of 11 times multiplication of >90 days and Restructured buckets.

An example of a 12-month PD calculation is as follows:

Table 3. 12-month PD calculation

11 times	Normal	1-7 gün	8-30 gün	31-60 gün	61-90 gün	>90 gün	Bağlı	RES	PD 12M
Normal	49.76%	3.43%	3.18%	0.70%	0.17%	0.62%	41.12%	1.02%	1.64%
1-7 gün	46.79%	3.33%	3.17%	0.72%	0.18%	1.86%	41.67%	2.28%	4.13%
8-30 gün	46.20%	3.36%	3.32%	0.77%	0.20%	2.97%	40.72%	2.46%	5.43%
31-60 gün	36.35%	2.61%	2.57%	0.60%	0.16%	12.42%	36.24%	9.04%	21.46%
61-90 gün	22.62%	1.59%	1.62%	0.39%	0.14%	40.77%	31.09%	1.78%	42.55%
>90 gün	5.25%	0.31%	0.46%	0.14%	0.11%	77.62%	16.02%	0.09%	100.00%
Bağlı	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%
RES	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%

Source: Created by the author

3.4. Lifetime PD calculation

To derive Lifetime PD based on 12mPD Annualized Probability of Default formula is used assuming equal loss exposure through the scheduled maturity of the loan:

 $LftPD = 1 - ((1 - 12mPD)^y)$

where:

12mPD – the probability of a default occurring on loan during 12-month after the reporting date; y – is the number of years to maturity as per the loan's repayment schedule

3.5. Forward-looking adjustments

In order to be fully compliant with IFRS 9, the PD calculation should contain forward-looking adjustments for a certain period of time.

Since the domestic economy is heavily dependent on oil exports, Bank incorporates a single macroeconomic forecast of oil price to determine forward-looking adjustment on PD for all of its portfolio segments. Besides, there is a high correlation between population disposable incomes and oil price. It was decided to limit the inclusion of only one variable to the final linear regression.

To build a macroeconomic model, the Bank uses external default statistics due to the absence of sufficient internal statistics on defaults. The historical data of defaults use the Central Bank of the Republic of Azerbaijan's statistics on the share of overdue loans in total loans in the banking system.

In selecting macroeconomic factors to be used in forward-looking adjustment, a regression analysis is developed of dependency between the international market price of Brent Oil and the total NPL portfolio ratio of the domestic banking market.

Regression analysis proved a strong correlation between oil price and NPL ratio in the Azerbaijani banking market. The regression analysis results are presented in Table 5: regression analysis, calculation of regression, and projection of NPL based on three scenarios.

After the market projected NPL data is derived from regression analysis, the Bank applies it to project its own NPL rate using the below formula:

NPL _ bank projection=Current Bank NPL * (NPL _ market projection / NPL _ market) PD is adjusted as follows:

PD adjusted for macro =

(NPL.macro/NPL.current)*(PD.pit/(1-PD.pit))/(1+(NPL.macro/NPL.current)*(PD.pit/(1-PD.pit)))

Where:

NPL.macro -forecasted NPL

NPL.current - existing NPL

PD.pit – Point in time PD as of reporting date

References to various oil price forecasts published by international organizations and financial institutions (e.g., OPEC, Bloomberg, oilprice.com, JP Morgan, etc.) is used.

The NPL rates and Oil prices for January 2016 and September 2018 are as follows:

Table 4: NPL rates and Oil prices

Table 4: NPL rates and Oil prices						
Month	NPL rate	Oil price	Oil price_moved back 2 years			
Jan-16	6.20%	30.70	103.42			
Feb-16	6.54%	32.18	103.46			
Mar-16	6.74%	38.21	107.48			
Apr-16	7.36%	41.58	102.86			
May-16	8.32%	46.74	109.54			
Jun-16	8.35%	48.25	111.80			
Jul-16	9.00%	44.95	102.13			
Aug-16	9.46%	45.84	101.61			
Sep-16	9.52%	46.57	92.68			
0ct-16	8.70%	49.52	87.43			
Nov-16	8.86%	44.73	75.47			
Dec-16	8.95%	53.31	59.62			
Jan-17	9.78%	54.58	43.42			
Feb-17	9.80%	54.87	58.10			
Mar-17	10.24%	51.59	55.89			
Apr-17	10.31%	52.31	56.82			
May-17	11.76%	50.33	61.02			
Jun-17	13.04%	46.37	61.48			
Jul-17	14.10%	48.48	56.56			
Aug-17	14.74%	51.70	44.30			
Sep-17	14.93%	56.15	47.62			
Oct-17	15.55%	57.51	48.43			
Nov-17	15.46%	62.71	44.27			
Dec-17	13.84%	64.37	36.35			
Jan-18	14.55%	69.08	29.24			
Feb-18	14.71%	65.32	30.65			
Mar-18	14.66%	66.02	36.55			
Apr-18	14.46%	72.11	41.58			
May-18	14.32%	76.98	44.62			
Jun-18	14.42%	74.40	48.25			
Jul-18	14.64%	74.25	44.95			
Aug-18	14.40%	72.53	45.84			
Sep-18	14.21%	78.89	46.57			
		. 2.07				

Source: Created by the author

Regression results between 2 years backed-up oil prices and NPL rates are as follows:

Table 5: Regression between oil price and NPL rates

SUMMARY OUTPUT

Regression	Statistics	
Multiple R	0.8624259	
R Square Adjusted R	0.7437784	
Square	0.7355132	
Standard Error	0.015912	
Observations	33	
ANOVA		
	df	SS
Regression	1	0.022784

	df	SS	MS	F	Significance F
Regression	1	0.022784355	0.022784	89.98902698	1.11212E-10
Residual	31	0.007848901	0.000253		
Total	32	0.030633256			
	Coefficients	Standard Error	t Stat	P-value	Lower 95%
Intercept	0.1800988	0.007328198	24.57614	0.00	0.165152829
X Variable 1	-0.0009925	0.000104623	-9.48625	0.00	-0.001205858

Source: Created by the author

3.6. Exposure at default

For stage 1 loans, 12 months exposure at default (12mEAD) for loans is estimated by amortizing loans' outstanding amount in line with a repayment schedule of upcoming 12 months after the reporting date. Default is assumed to happen in the middle of the amortization period, i.e., after six months from the reporting date. For loans to be fully repaid during less than 1 year, default is assumed to happen in the middle of the period until contractual maturity.

Consequently, EAD for 12 months for non-revolving loans being repaid on an annuity basis is calculated based on the below formula:

12mEAD = (Texp - PPmt x M)

where:

Texp – the total outstanding amount of the loan as of reporting date, i.e. principal plus any accrued but not paid interest;

PPmt – average monthly principal repayment of the loan;

M – number of months reflecting the middle point of the period remaining to the maturity of the loan (maximum 6 in cases when maturity is more than one year after the reporting date);

Repayment schedules used are those indicated in loan agreements (annuity, repayment at the end of the period, grace period loans (like in SKMF)).

For revolving loans (credit lines) with no fixed repayment schedule as per loan agreement, a conversion factor of 100% is used to estimate the loan's expected amount at default. 12mEAD for such loans is calculated using the below formula:

 $12mEAD = Contr \times CCF$

where:

Contr – total contract amount (credit line limit) of the loan as per loan agreement;

CCF – is a credit conversion factor, which is the ratio of the drawn amount over the credit line's lifetime to the total contract amount of the credit line. For this methodology, it is assumed to be equal to 100%.

For stage 2 loans, lifetime exposure at default (EAD) is estimated for each year separately by amortizing loans' outstanding amount in line with the repayment schedule of the loan's remaining lifetime each year after the reporting date. Default is assumed to happen in the middle of each year.

Each year's EAD for non-revolving loans being repaid on an annuity basis is calculated based on the below formula:

 $EAD = (Texp - PPmt \times m)$

where:

Texp – total principal outstanding amount of the loan as of reporting date;

PPmt – average monthly principal repayment calculated as a simple average of first and the last month of the relevant year;

m – number of months reflecting the middle point of the year for which EAD is calculated;

For stage 3 loans, Lifetime exposure at default (LftEAD) is equal to the outstanding amount of the loan as of the reporting date:

No repayment schedules are used for loans in Stage 3.

3.7. Loss given default

The general formula for calculation LGD is following:

LGD = 1 - RR - CC

where:

RR - Recovery Rate;

CC - Collateral Coverage;

Calculation of LGD comprises of two components:

- 1. Recovery rate (RR) which represents recoveries of defaulted loans, i.e., repayments collected from the date of default until cure of the loan;
- 2. Collateral coverage (CC), i.e., the ratio of the loan amount secured by the amount of the collateral, is a guarantee given to the Bank by the borrower in the event of a default.

Recovery Rate (RR):

RR is calculated separately for non-defaulted and defaulted loans.

RR for non-defaulted loans is equal to loans' 12m probability of being fully repaid before they defaulted.

RR for defaulted loans is calculated as per the below formula:

RRdf = RR(X+1)m + RR(X+2)m + RR(X+3)m + ...

Where:

RRXm – recovery expected on the X-th month after the default of the loan.

X – number of months that loan is in default as of reporting date;

Recovery rates are calculated based on the Bank's last 5 (five) years' statistics on repayment of loans previously defaulted.

Loss given default for other financial instruments

LGD for other financial instruments calculated as per the formula stated above.

RR of the Corporate Segment of the loan portfolio is used for this purpose.

3.8. Determining significant increases in credit risk

Impact of collateral, credit enhancements, and financial guarantee contracts

The liquidation value of collaterals as per the Bank's loan module is used to estimate recovery from collateral coverage. Haircuts of 70% IS applied to all collaterals except cash and cash equivalents.

Only collaterals representing immovable residential and non-residential real estate, vehicles, and gold have been considered as valid and enforceable collaterals.

The maximum period for recovery from collateral coverage is 5 years. For loans that are overdue for more than 5 years, CC is equal to 0%.

Past due status and more than 30 days past due rebuttable presumption

It is assumed that the credit risk has not gone up substantially since initial recognition when the loan has low credit risk as at the reporting date.

Unless any other information is available to Bank, the latest point when the loan is classified as a Stage 2 loan is:

- For borrowers exposed to observable seasonality in cash flows due to the nature of the business when contractual payments are more than 60 days past due;
- For all other borrowers when contractual payments are more than 30 days past due;

Despite the past, due status Bank classifies the loan as a Stage 2 loan if any of the following occurs:

- Significant deterioration of other loans of the same borrower;
- For corporate borrowers, decline of the borrower's international rating (any internationally recognized agency such as S&P, Moody or Fitch;
- For collectively assessed consumer and mortgage loans: If Bank becomes aware of a significant decline in any particular industry and anticipates the closure of businesses or significant lay-offs within that industry, Bank segments its relevant sub-portfolios to identify customers that rely on those particular industries as the dominant source of employment. That identified group of loans is classified as Stage 2 loans (Ernst & Young, 2018).

Loans may move from Stage 2 back to Stage 1 when the credit quality of the loan shows sign of significant improvement in lifetime PD. Bank classifies loans from Stage 2 back to Stage 1 in following cases:

- All scheduled payments on the loan are made in time or overdue less than 30 days;
- For all loans previously classified as Stage 2 based on any information other than past due status and for which there is evidence that there is no longer a significant increase in credit risk.

Bank classifies loans from Stage 3 back to Stage 1 if all of the following criteria are met:

- All scheduled payments on the loan are made in time or overdue less than 30 days;
- Cure period of 6 months had passed since the loan had been classified as Stage 3, i.e., no restructuring or overdue more than 90 days occurred during 6 months preceding reporting date;
- Any other information other than past due status indicating a significant increase in credit risk is no longer available.

Bank classifies loans from Stage 3 back to Stage 2 if all of the following criteria are met:

- All scheduled payments are overdue more than 30 days but less than 90 days;
- Cure period of 6 months had passed since the loan had been classified as Stage 3, i.e., no restructuring or overdue more than 90 days occurred during 6 months preceding reporting date (Banking Regulation and Supervision Agency, 2016).

3.9. Presentation of expected credit losses in the statement of financial position

IFRS 9 uses the term "expected credit loss" throughout the standard for ECLs accounted for in the statement of financial position. However, there is a question that how these ECLs should be presented in this description. Their presentation varies according to the type of credit risk risks covered by impairment requirements. Any adjustments made to the provision for loss due to an increase or decrease in the amount of ECLs accounted under IFRS 9 are reflected in profit or loss on a separate line as an impairment gain or loss (Rajni, 2018).

From the standard, it is understood that the term of the amortized cost of a financial asset means that it is corrected for any loss provision and therefore will reduce the gross book value in the statement of financial position, respectively, financial assets valued at amortized cost, contract assets must be granted provision for loss from the depreciated cost in the statement of financial position (Laeven and Majnoni, 2016).

IFRS 9 implements direction on when to use the provision: when to apply it with the gross book value of a financial asset. This occurs when the entity is charged for a financial asset that occurs when the entity has no feasible forecast to recover all or part of the contractual cash flows related to a financial asset in its wholeness or a section thereof. IAS 39 does not provide similar guidance, and unregistered guidance does not refer to spelling (Tong, 2014).

Likewise, the standard does not present instruction on the accounting of consequent improvements of a financial asset. Doubtless, there will be a higher threshold in accounting for an asset that has been formerly disposed of, and this will likely take place when cash is collected, alternately fulfilling the deletion criteria. Furthermore, it can be argued that such recoveries should not generally be substantial by virtue of the collection should merely happen when there is no equitable assumption to recover contractual cash flows. Since the nature of the recoveries is comparable to the elimination of impairment, it is acceptable to provide such recoveries in profit or loss in the impairment line as it will present suitable and appropriate information to users of the financial statements (Vyborny, 2013).

CONCLUSION AND DISCUSSION

The following results have been drawn through direct application of the standard to the specified banks of Azerbaijan Republic. The author directly applies the standard to the 3 leading banks. The application then was discussed with Big 4 and Big 10 audit companies to ascertain the procedure was following IFRS standard.

The following table summarizes the amount of ECL on loan portfolio for both older standard and new IFRS 9 standard (due to confidentiality issue, the real names of the banks cannot be disclosed):

ECL on the loan portfolio IFRS 9 Difference, AZN **IAS 39** % change Bank A 112,054,000 23,783,000 88,271,000 26.9% Bank B 154,244,000 171,289,000 17,045,000 11.1% Bank C 13,420,683 15,933,993 2,513,310 18.7%

Table 6: Summary of ECL implementation results

Source: Created by the author

From the above table, it can be said that through the application of IFRS 9 new ECL model, the loan portfolio has been increased between 10-30%. The main reason for that is to calculate ECL on Stage 1 loans. According to IAS 39, there will be no such requirement to recognize an allowance for the loans which do not show any default event. Per IAS 39 the allowance began to be recognized after the loan becomes delinquent. However, according to IFRS 9 ECL has begun to be recognized before the default event on loan was incurred. Therefore, providing 12-month ECL on Stage 1 loans will reduce the overstatement of profits and dividends remain to be distributed to the shareholders.

Moreover, recognition of the ECL on Stage 2 loans has a significant effect on ECL's increase on the loan portfolio. However, in IAS 39 there will be no requirement to recognize any allowance on the loans that are not yet overdue.

Additionally, IFRS 9 requires to reflect forward-looking adjustments in the calculation of the ECL. Therefore, in economies where decline and stagnation are expected, the ECL will be much higher than the economies which have growth expectations.

The CET1 is a component of Tier 1 capital. After 2008 Global Financial Crisis Base Committee issued international standards to review and monitor banks' capital adequacy. These standards, called Basel III aimed to compare the bank's assets with capital to identify whether a bank can stand in crisis.

Capital is required from the banks to prevent and absorb unexpected losses during the normal course of banks' activities. The Basel III Framework aimed to tighten the banks' capital requirements by limiting the type of capital to be included in different capital tiers (Fraisse and Thesmar, 2015).

The CET1 ratio is calculated as Common Equity Tier 1 Capital is divided by Risk-weighted Assets. As indicated earlier, the new ECL model's application resulted in an approximately 10-30% increase in loan portfolio allowance to be recognized in most banks' financial statements. As the allowance figure for the loan portfolio increased dramatically, the weight of risk-weighted assets was increased. Therefore, the application of the new ECL model has resulted in a decrease in CET1 ratio as the denominator in the ratio is increased, which caused the ratio to be decreased. According to the application of the new ECL to the 3 banks of AR, the CET1 ratio of the banks was decreased by 35-55 bps.

The new ECL approach presented under IFRS 9 – Financial Instruments standard tends to affect mostly banks due to the large receivable (loan) turnover, which causes a decrease in equity.

The new ECL approach is expected to have material financial consequences. Firstly, as the new ECL approach is very comprehensive and less open to manipulation than the previous ECL approach presented under IAS 39-Financial Instruments standard, the investors' confidence will be enhanced due to a more accurate and transparent profit or loss balance figures. According to IFRS 9, the Stage 1 loan allowance should be created which is not required under the previous standard. This will prevent the overstatement of profits and a decrease in dividends to be distributed to the shareholders. The ECL model presents more impairment loss burden to the banks than IAS 39, as additional impairment loss is recognized for Stage 1 and Stage 2 loans. This will have two main consequences. Firstly, as a higher impairment to be charged to the statement of profit or loss, the forecasted profit will be much lower. As profit decreases, so do equity. According to the national legislation, banks are required to maintain a certain level of equity. Therefore, if equity decreases, banks will be obliged to increase equity, limit new lending facilities, or sell assets.

Moreover, the decrease in profit will result in a fall in CET1 ratio of the banks. As CET1 is one of the main important indicators of capital adequacy determination and an essential element of the banks' minimum Tier 1 capital ratio according to the Basel III requirements. Therefore, a lower level CET1 ratio will oblige the bank to increase that ratio by either limiting new lending or asset sales.

Thirdly, the shifts from Stage 1 to Stage 2 and Stage 2 to Stage 3 will result in a more volatile profit or loss figures due to the volatile levels of impairment losses. The volatile level of impairment losses will result as Stage 1 loans 12-month PD is used. Stage 2 and Stage 3 loan lifetime PD is utilized, which will result in volatility in ECL calculations. Therefore, the banks that have substantial Stage 2 and Stage 3 loans will tend to result in much higher allowance figures and higher impairment losses. Furthermore, the main difference between IFRS 9 and IAS 39 is including forward-looking adjustments in ECL calculation. This will result in banks utilize the economic events more wisely and more thoroughly. Under IAS 39, only older information was used in calculations, and the banks were resulted to present the information that only occurred in the past. However, according to the standard, banks are obliged to present the impairment calculation integrated with a forward-

looking adjustment, which will be calculated on the basis of the future of the economic outlook. Therefore, the banks which operate in the economies where economic downturn or stagnation is expected tend to have a much higher allowance and expense figures. However, the banks which operate in the economies where economic boom or growth is expected tend to have a much lower allowance for expected credit loss on the loan portfolio and impairment loss figures in the financial statements.

The new standard requirement will result in the banks utilizing their resources more efficiently and effectively and better coordination between the banks' departments, including integrating technical, IT, and Human Resources departments. The Azerbaijani banks mostly lack internal expertise in the application of this standard. Only a small number of banks utilize their resources in implementing this new ECL approach, while most banks are outsourcing.

The complexity of the new ECL model, such as the significant accounting estimates, will be used in the model, making the calculated figures more open to manipulation and harder to understand. Therefore, the standard issuing body of IFRS Foundation, the IASB issued IFRS 7 Financial Instruments – Disclosures standard to disclose the insights from the model more extensively and in high quality to be more understandable to the intended users of the financial statements.

REFERENCES

- 1. Abad, J. & Suarez, J. (2017). Assessing the Cyclical Implications of IFRS 9: A recursive model. ESRB Occasional Paper, 12.
- 2. Banking Regulation and Supervision Agency. (2016). Regulation on the Procedures and Principles for Determination of Classification of Loans by Banks and Provisions to be set aside, 3-5.
- 3. Beatty, A. & Liao, S. (2014). Do Delays in Expected Loss Recognition Affect Banks' Willingness to Lend?. *Journal of Accounting and Economics*, 22.
- 4. Bernanke, B. & Lown, C. (2015). The Credit Crunch. Brooking Papers on Economic Activity,
- 5. Bushman, R. & Williams, C. (2014). Accounting Discretion, Loan Loss Provisioning and Discipline of Banks' Risk-Taking. *Journal of Accounting and Economics*, 22.
- 6. BDO. (2018). IFRS in practice 2018 IFRS 9 Financial Instruments, 5-6.
- 7. Cohen, B. & Edwards, G. (2017). The New Era of Expected Credit Loss Provisioning, BIS Quarterly Review, 4-5.
- 8. Comert, H. & Colak, S. (2014). The Impacts of the Global Crisis on the Turkish Economy and Policy Responses, *ERC Working Papers in Economics*, 14.
- 9. Deloitte & Touche. (2018). IFRS 9: Financial Instruments high level summary, 6-8.
- 10. Ernst & Young. (2017). IFRS 9 expected credit loss, 3
- 11. Ernst & Young. (2018). Impairment of financial assets under IFRS 9, 6-7.
- 12. European Banking Authority. (2017). Report on Results from the Second EBA Impact Assessment of IFRS 9, 8.
- 13. Fraisse, H. & Thesmar, D. (2015). The Real Effects of Bank Capital Requirements, Débats Économiques et Financiers, 10.
- 14. Gornjak, M. (2017). Comparison of IAS 39 and IFRS 9: The Analysis of Replacement, *International Journal of Management, Knowledge and Learning*, 6.
- 15. KPMG. (2014). First Impressions: IFRS 9 Financial Instruments, 4.
- 16. Laeven, L.& Majnoni, G. (2016). Loan Loss Provisioning and Economic Slowdowns: Too much, Too Late?. *Journal of Financial Intermediation*, 12.
- 17. Moddy's Analytics. (2017). IFRS 9 Scenario Implementation and ECL Calculation for Retail Portfolios, 4-5.
- 18. Novotny-Farkas, Z. (2016). The Interaction of the IFRS 9 Expected Loss Approach with Supervisory Rules and Implications for Financial Stability, *Accounting in Europe*, 13.
- 19. Vyborny, O. (2013). Provisioning and used models' description, 12.
- 20. PricewaterhouseCoopers. (2017). IFRS 9 Financial Instruments Understanding the Basics, 7-9.
- 21. Rajni, M. (2018). IASB's independence in the due process: an examination of interest groups' influence on the development of IFRS 9, 14.
- 22. Sultanoglu, B. (2018). Expected credit loss model by IFRS 9 and its possible early impacts on European and Turkish banking sector, *Muhasebe Bilim Dunya Dergisi*, 14-20.
- 23. Tong, T. (2014). A Review of the Expected Credit Loss Model of IFRS 9 Financial Instruments, 8.
- 24. Vanek T.& Hampel, D. (2017). The probability of default under IFRS 9: multi-period estimation and macroeconomic forecast, 4-5.