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**Released December 2016 - Version 3**

# Accounting For Credit Union Mergers

Credit unions historically accounted for mergers under the pooling of interest method. The accounting was relatively straightforward and was accomplished by combining the book values of the two entities. The rules changed on January 1, 2009 when FAS 141R (FAS ASC 805 *Business Combinations*) became effective and the accounting became much more complex. FAS ASC 805 requires credit unions to use purchase accounting and to record the transaction at fair value. This requires the determination of the fair value of the credit union to be merged in ("acquired credit union") and of all of its assets and liabilities. The valuation must also include potential intangible assets such as the core deposit intangible. The fair value estimates must be made in accordance with the requirements of FAS 157 (FAS ASC 820 *Fair Value Measurements and Disclosures*). Please refer to Appendix A for a comparison of the "old" rules to the "new" rules.

***WW Risk Management notes that the purchase accounting rules can apply to a transaction that is not a full merger, including branch acquisitions, purchase and assumption agreements, etc***.

Since the new purchase accounting rules became effective on January 1, 2009, WW Risk Management has worked on over 200 merger and acquisition transactions. We have provided advice on transactions of all sizes and have valued credit unions as small as $2M and as large as over $1B in total assets. This white paper is designed to share what we have learned along the way and to address the most common questions we encounter. We hope you find it useful.


*Prepared by Wilary Winn Risk Management, LLC – December 2016 – All Rights Reserved*

We begin with accounting requirements on Day One – the opening journal entry. Next we discuss the rules for Day Two – the ongoing accounting. Finally, we discuss assessing the goodwill for potential impairment.

## DAY ONE ACCOUNTING

The acquiring credit union must undertake several steps in order to have the information needed to record the transaction.

It must determine the:

- Overall value of the acquired credit union;
- Fair value of the acquired credit union's financial assets and liabilities;
- Fair value of the acquired credit unions non-financial assets and liabilities; and
- Fair value of any intangible assets – the most common being the core deposit intangible.
- Value of the Tradename
- Amount of Goodwill/Bargain Purchase Gain resulting from the transaction.

### Overall Value of the Acquired Credit Union

Valuation experts generally use income-based and market-based approaches to determine fair value. The values derived using the different methods must be reconciled to reach an overall fair value conclusion.

Income Approach

In order to determine the fair value of an entity using an income approach, business appraisers generally first estimate the organization's probable future cash flows. They then discount the cash flows back to the valuation date at an appropriate discount rate. However, WW Risk Management believes that the use of future cash flows is not a reliable indicator of value for financial institutions because items like capital expenditures, working capital and debt are not clearly defined. As a result, we base our analysis on future earnings. WW Risk Management uses an approach that is based on a detailed review of the credit union's recent financial performance. We note that the future earnings to be used for this determination are the earnings that the acquired credit union could generate as a standalone entity and should be based on the assumptions used by market participants. ***This means that the fair value of the acquired credit union can be different than its value to the acquirer.*** For example, for purposes of the valuation, it cannot necessarily be assumed that the acquired credit union costs will go down due to economies of scale, whereas an acquiring credit union could assume this will happen as it build its internal projections.

To determine value under an income approach, we work with our clients to estimate future earnings by developing pro-forma balance sheets and income statements for at least five, and often 10 years, into the future. A key valuation assumption is the rate of future growth. To estimate future growth, WW Risk Management begins with the credit union's historic growth rate and then adjusts it based on any changes in the credit union's field of membership and any significant demographic changes in the area in which the credit union is located. Other key assumptions include:

- Net interest margin – which is dependent on the loan and share mix and future market interest rates
- Non-interest income
- Non-interest expense – the highest cost here is personnel
- Loan loss provision

The key metrics we consider as we develop our pro-formas are:

*Capital Adequacy*

- Net worth

*Profitability*

- Return on assets
- Return on equity
- Earning assets to total assets
- Non-interest expense to total assets
- Efficiency ratio
- Assets to employee ratio

*Asset Quality*

- Non-current loans to total loans
- Loan loss reserve to total loans
- Provision for loan loss to total loans
- Loan loss reserve to non-performing loans
- Net charge-offs to total loans

*Liquidity*

- Loan to deposit ratio
- Loan to total assets ratio
- Investments to total assets ratio

WW Risk Management notes that a portion of the future earnings are often required to be held in the organization in order for the organization to maintain adequate capital as it grows. This portion would not be available to dividend out, and therefore, we exclude this portion from the present value calculation of future earnings.

Our final steps under the income estimation approach are to discount these earnings back to the valuation date and to estimate the value of the residual. WW Risk Management uses a Capital Asset Pricing Model ("CAPM") approach in order to determine the discount rate to use in our income approaches. We generally rely on the *Duff & Phelps Valuation Handbook Industry* C*ost of Capital*. We note that the Duff & Phelps cost of capital is based on after-tax cash flows. WW Risk Management uses the after-tax cash flow discount rate because credit unions do not pay income taxes and have, as an industry, passed this benefit on to their members by offering lower rates on loans and higher rates on deposits than their commercial banking competitors. Thus, we believe the earnings themselves reflect the tax effect and that the use of an after-tax discount rate is appropriate.

Market Approaches

In addition to the Income Approach, we utilize two market approaches – Guideline Transaction and Market Value. Under the Guideline Transaction approach, we obtain deal results and financial information for recent bank acquisitions of similar size and in similar geographic areas to credit union we are valuing. To obtain our estimate of value, we use the median price to tangible book value from our pool of deal results and adjust for differences in profitability.

WW Risk Management bases the market approach on market values of publicly traded community banks. To estimate the equity value of the credit union, we identify the price to earnings and price to book ratios for banks with similar asset size in the same geographic area. We then adjust for differences in return, growth, and a market control premium.

Finally, we reconcile the valuation estimates derived under the three methods and determine the overall fair value of the acquired credit union. We note that we weight the income approach the highest, as we believe this method is most representative of the entity value. The capital in excess of the 7% required by the NCUA to be "well capitalized" of $8,223,000 is removed from the projections, as we do not believe a market participant would pay a premium for this excess capital. The excess capital is added back dollar-for-dollar to the value derived from the three approaches, as shown in Appendix B. ***The overall fair value estimate is the amount of equity that can be recorded on Day One. See the $29,198,000 in the example valuation summary attached as Appendix B.***

## Fair Value of Financial Assets and Liabilities

The financial assets and liabilities consist primarily of loans, investments and shares. Accrued interest receivable, accounts receivable, accrued interest payable and accounts payable are also considered to be financial assets or liabilities.

Investments

Investments generally consist of certificates of deposits and "vanilla" bonds. To determine the value of a CD, WW Risk Management discounts the expected cash flows using an estimated market interest rate over its expected remaining life. We can generally identify a price for the bonds using Bloomberg or another pricing service. We occasionally encounter illiquid securities, which we value using discounted cash flows.

Accounts Receivable and Payable

WW Risk Management generally values the short-term accruals, accounts receivable and accounts payable at book value, because we believe the present value effect is immaterial.

Shares

The fair value of the share accounts is dependent on whether they are time or non-time deposits. The non-time share deposits are recorded at book value. The value of the non-time deposits is reflected in the "core deposit intangible". The valuation of intangible assets is discussed beginning on page 8.

WW Risk Management estimates the value of time deposits in a manner similar to the one we use for certificate of deposit investments.

Loans

WW Risk Management believes determining the fair value of the loans is one of the most complex undertakings under the purchase accounting rules. The marketplace for seasoned loans is not active. As a result, valuation experts generally value the loans using a discounted cash flow analysis. Two approaches are permissible under GAAP[1]. One approach is to discount the contractual cash flows at an "all in" estimated market discount rate, which by its nature includes a credit spread. The other approach is to develop a "best estimate of expected cash flows" and discount the amounts back to the valuation date at an appropriate discount rate. We estimate the value of the loans based on their contractual interest rate and their probable lifetime credit losses, by performing a discounted cash flow analysis using a proprietary valuation model. The valuation is performed at the loan level for all loans secured by real estate and at the cohort level for all other loans, and is based on the objective attributes of the loans in the portfolio (i.e., the

[1] FAS ASC 820-10-55-4

rate of interest on the loan, the original term of the loan, the current term of the loan, etc.) and current statistical performance variables used in the marketplace. Our analysis is based on the contractually specified amounts of principal and interest to be received, ***modified by our estimates*** of prepayment, default and loss severity to be experienced prospectively. Our prepayment, default and loss severity assumptions are applied at the loan or cohort level based on the characteristics of the loan (type of loan – new car, FICO – prime, non-prime, sub-prime, etc.).

We generally use the "all in" market interest rates to discount the expected cash flows for loans with FICO scores above 720, as our estimated credit loss estimates for these loans are generally quite modest. In other words, our best estimate cash flows are very similar to the contractual cash flows, implying that the amount of credit spread included in the discount rate is also quite modest. On the other hand, for loans with scores below 720, we use the buildup method to develop our discount rate. We begin with an appropriate risk free rate based on the term of the loan (adjusted for amortization, voluntary, and involuntary prepayments), and add a spread for uncertainty and liquidity. Because we are using expected cash flows net of credit losses, our discount rates for loans with FICOs under 720 do not include a credit spread. WW Risk Management believes including the credit spread in the discount rate for these loans with lower credit quality would be "double counting".

The book value of the loans is thus adjusted for an interest rate differential (discount rate valuation allowance) and the present value of expected credit losses (credit valuation allowance). **Due to the estimated fair value of the loans including the estimated credit losses, the allowance for loan losses is recorded at zero on day one**. See the adjustments to loans in the example loan summary attached as Appendix C – the interest rate premium – $102,380 in total and the credit loss discounts – $1,188,864 in total. See the Day Two accounting section of this white paper for more details.

Prepaid Expenses

The treatment of prepaid expenses is another item that is less straightforward than one would imagine. One has to consider whether the prepaid item would have benefit to market participants. For example, a multi-year prepaid contract that cannot be used after the merger would have no "fair value" and would be recorded at zero in the Day One journal entry.

Accrued Liabilities

WW Risk Management recognizes that prior to the change in the accounting rules, many acquiring organizations had the acquired credit union accrue the costs of the merger on its book prior to the merger so the expenses would not flow through the income statement of the combined entity. This is another significant change under the new rules**. In general, the costs of**

**the merger and any restructuring costs should flow through the income statement of the acquiring credit union[2].** The theory is that if the party that receives the primary benefit is the buyer or the combined entity, the cost should run through its income statement. In our experience, the types of costs that can be accrued as part of the merger are quite limited. An example would be a compensation arrangement that was in place before the merger was contemplated, and that just happens to be triggered as a result of the merger. The required payout can be accrued on the acquired credit union's books as of the merger date. By way of contrast, a payout negotiated as part of the merger should run through the income statement of the acquiring credit union.

The acquiring credit union should also ensure that the acquired credit union has properly accrued its expenses. In other words, the organization should ensure that the acquired credit union does not have any unrecorded liabilities.

### Fair Value of Non-Financial Assets and Liabilities

The most significant non-financial assets are generally land and buildings. We generally require our clients to obtain commercial real estate appraisals if these assets are material.

Real estate leases are another item that must be evaluated in a merger. If the lease price is less than market rate, then an asset should be recorded. On the other hand, if the lease price is over the market rate, a liability should be recorded. We calculate these items by discounting the difference in cash flows back over the remainder of the lease term to the valuation date at the acquired credit union's estimated cost of capital.

### Intangible Assets

The value of intangible assets should be recorded as well in the Day One journal entry. **Recognition of an intangible asset requires that the asset be separable or have a contractual or legal benefit.**

The most common intangible assets in a credit union merger are:

- Mortgage servicing rights
- Core deposit intangible
- Member relationships
- Value of the acquired credit union's trade name

[2] FAS ASC 805-10-25-23

*Mortgage Servicing Rights*

Mortgage servicing rights are the rights to service a loan that has been sold into the secondary market in exchange for a fee. The market for bulk sales of mortgage servicing rights is quite limited. As a result, the value of mortgage servicing rights is generally determined via a discounted cash flow analysis. The most sensitive input in the valuation is the assumption regarding the rate at which the loans will prepay.

*Core Deposit Intangible*

The premise underlying the core deposit intangible asset is that a rational buyer would be willing to pay a premium to obtain a group of core deposit accounts that are less expensive than the buyer's marginal cost of funds. WW Risk Management believes the core deposit intangible benefit depends on the type of account. For example, share drafts accounts have very different economics and behavior than high rate money market shares. To calculate the estimated fair value of the core deposit intangible, we first segment the accounts by type. Next, we estimate the likely decay, average life, and terminal economic life. The rate paid on the deposit, the non-interest income generated, and the non-interest expense incurred also affect the value of the core deposit intangible. WW Risk Management estimates the value of the core deposit intangible through a discounted cash flow analysis.

*Member Relationships*

WW Risk Management believes that the value of the member relationships is imbedded in the overall value of the entity and the core deposit intangible. We believe it would be quite difficult to separately determine the value of member relationships in terms of the ability to cross sell loans or shares at lower cost, or higher rates of penetration, and therefore, have generally not seen such items recorded.

*Acquired Credit Union's Trade Name*

A trade name can have value based on how widely it is recognized. If the brand is well known and the acquiring credit union intends to continue to utilize it, the trade name has value. Trade names can also have a defensive value. That is, it can have value even though the acquiring credit union plans to retire the name. For example, imagine the value to Pepsi of having the rights to the Coca-Cola brand name.

*Goodwill or Bargain Purchase*

On Day One, the acquiring credit union records the overall fair value of the acquired credit union, the fair value of the assets acquired and liabilities assumed and the fair value of any intangible assets. **The amount required to balance the Day One journal entry is Goodwill or a Bargain Purchase. WW Risk Management believes a merger transaction will generally**

**result in goodwill, as opposed to a bargain purchase gain.** In fact, GAAP requires the acquiring credit union to "double check" its work before recording a bargain purchase[3].

The resulting goodwill can be amortized as it was under the old rules. Alternatively, it can remain on the balance at recorded value subject to annual impairment testing, the details of which are contained later in this white paper.

See Appendix B for an example comparing the fair value of the balance sheet to the book value at the merger date. Appendix D shows how to record the acquisition on Day One, including the accounts used to adjust book value to fair value.

See Appendix D for an example of the Day One journal entry to record the merger.

**WW Risk Management further notes that GAAP allows the acquiring credit union to true up the Day One journal entry for up to 12 months after the merger date to reflect new information that would have affected the valuation amounts had they been known[4].**

**We note that the "new" information is relative to the acquisition date only. The adjustment is designed to reflect information that existed as of the valuation date that was not known at the time. It is not intended to reflect changes in facts and circumstances as of the valuation date. Instead, it is designed to reflect a clarification of facts that existed as of the valuation date. For example, if a loan at the valuation date was a modified loan and was not disclosed as such, an adjustment would be appropriate. On other hand, if the acquired credit union obtained an appraisal for a branch location at the acquisition and due to changes in market conditions, the value of the branch was less 11 months later, an adjustment would not be appropriate.**

## REGULATORY REPORTING – 5300 CALL REPORT

For regulatory reporting purposes, the acquiring credit union does not include the equity acquired in the merger (the overall fair value of the acquired credit union – the $29,198,000 in our example included as Appendix B). Instead, it reports the acquired credit union's retained earnings as of the valuation date – the $24,799,000 in our example attached as Appendix B. **Thus, for regulatory capital purposes, the acquiring credit union is able to count the acquired credit union's book equity.** For GAAP purposes, the equity acquired in the merger is reported in the Equity Section on line 33. The amount on line 33 is not carried over to the PCA

[3] FAS ASC 805-30-25-4
[4] FAS ASC 805-10-25-13

Net Worth Calculation Worksheet. Instead, the acquired credit union's retained earnings are reported on line 7b of the Worksheet. [5] See Appendix D for more details.

We further note that in the case of involuntary, regulatory-assisted mutual to mutual credit union combinations, the amount of regulatory capital flowing to the acquiring credit union is zero. In other words, the acquired credit union's retained earnings as of the valuation date do not count toward regulatory capital.

Finally, in our experience, the external auditors will specifically perform a review as of the acquisition date to ensure that the amount of regulatory capital reported is in accordance with GAAP. For example, they will ensure that all liabilities that should have been recorded have been recorded and the allowance for loan losses has been calculated properly in accordance with GAAP.

*Goodwill and Bargain Purchase Gains*

Any goodwill recognized in a business combination is recorded on line 31.b of the Statement of Financial Condition. Any gain recognized from a bargain purchase should be reported on line 16 of the Statement of Income/Expense.

WW Risk Management notes that any assistance provided by the NCUA is recorded as a reduction of goodwill. Assistance would result in a bargain purchase only if the amount of the assistance exceeded the goodwill and the gain would be only the excess amount. We further note that the amount of bargain purchase gain must be deducted from the combined entity's retained earnings when calculating regulatory capital. We note that this reduction is subject to a floor of zero. In other words, if the bargain purchase is greater than acquired credit union's net worth, the acquiring credit union would reduce regulatory capital by the amount of acquired credit union's retained earnings only.[6]

We further note that the amount of goodwill, subject to certain phase-in provisions, will not count toward risk-based regulatory net worth when the rule becomes effective on January 1, 2019.

*Delinquency Status of Purchased Loans and Other Financial Assets*

The delinquency status of purchased loans and other purchased financial assets must be determined in accordance with the contractual repayment terms for the purposes of reporting on

[5] 12 CFR Part 702.2 (f) (3)
[6] 12 CFR Part 702.2 (f) (3)

delinquency schedule of the 5300. The delinquent loan should be reported at its recorded amount and not at its contractual balance due.[7]

*Nonaccrual Status of Purchased Impaired Loans*
Normal nonaccrual parameters apply to purchased impaired loans.

## DAY TWO ACCOUNTING

Many find the Day One Accounting to be relatively complex. The ongoing accounting for the recorded premiums and discounts is also quite complex. The following is a quick summary for the items other than loans, followed by a detailed description of the required ongoing accounting for the acquired loans.

The premiums or discounts for the investments acquired are amortized or accreted into income over the estimated life of the investment as an adjustment to interest income. Premiums reduce interest income, whereas discounts have the opposite effect.

The premiums or discounts on the acquired time deposits are amortized or accreted into expense over the estimated life of the liability as an adjustment to interest expense. Premiums reduce interest expense, whereas discounts increase interest expense.

Mortgage servicing rights acquired in the merger are generally amortized on a level-yield basis over the estimated life of the loans. The amortization is recorded as a reduction to servicing income. We note that mortgage servicing rights can also be measured and reported on an ongoing basis at fair value, with the change in fair value running through the income statement. This fair value accounting is generally used by large institutions, which have generally hedged the portfolio against interest rate risk.

The core deposit intangible is amortized on a level-yield over the estimated lives of the non-time deposits. The expense should be recorded as a reduction to non-interest income.

The fair value of the fixed assets acquired becomes the basis for depreciation. The fixed assets should be depreciated over their estimated remaining lives, which can be longer or shorter than the term used to calculate depreciation before the acquisition.

The most complex ongoing accounting relates to the acquired loans. The required accounting centers on two questions.

[7] Interagency Supervisory Guidance on Bargain Purchases and FDIC- and NCUA-Assisted Transactions – June 7, 2010

1. Do I account for the loans at based on their *contractual* cash flows, or
2. Do I account for loans based on their *expected* cash flows

*Contractual Cash Flows*
If the acquiring credit union expects to receive all of the contractually specified principal and interest payments from an acquired loan, then the loan should be accounted for in accordance with ASC 310-20. That is, the interest rate discount or premium (interest rate valuation allowance) should be amortized or accreted into income on a level-yield over the expected life of the loan. Under this method, the acquiring credit union establishes a *post-acquisition* allowance for loan losses to record credit losses on acquired loans.

WW Risk Management believes that the acquiring credit union can account for the acquired loans with the highest credit quality (FICOs over 720, reasonable LTVs) using this methodology. We note that our estimated credit losses for these types of loans are generally quite nominal and that we use an adjusted market discount rate to estimate fair value. Thus, the valuation approach and the accounting are consistent. The acquiring credit union amortizes the interest rate valuation allowance and the relatively modest credit valuation allowance into income over the expected life of the loan.

*Expected Cash Flows*
On the other hand, loans acquired with "deteriorated credit quality" must be accounted for under ASC 310-30 (pre-codified Statement of Position 03-3 *Accounting for Certain Loans or Debt Securities Acquired in a Transfer*).

### Which loans fall within the scope of ASC 310-30?

Acquired loans that meet the following two criteria must be accounted for pursuant to ASC 310-30:

1. There must be evidence of deterioration in credit quality ***subsequent to origination.***
2. It must be probable that the acquirer will be unable to collect all contractually required payments from the borrower.

The determination of whether acquired loans are to be accounted for under ASC 310-30 must be made at the acquisition date on a loan-by-loan basis, and loans cannot transition between ASC 310-30 and ASC 310-20 subsequent to the acquisition date.

*Requirement 1 – Did the deterioration in credit quality occur subsequent to origination?*
At first glance, this determination may appear simple. One can review the loan's performance and underlying attributes to determine whether credit concerns exist. Factors to consider are the borrower's credit score, sources and uses of cash, payment history, and debt-to-income levels. However, to qualify for accounting under ASC 310-30, this deterioration in credit quality must have occurred subsequent to origination. Accordingly, a loan that was of lower credit quality from time of its origination may or may not fall into the ASC 310-30 bucket. If the loan has continued to perform based on its contractual terms, then chances are good that deterioration in credit quality did not occur subsequent to acquisition.

To eligible for ASC 310-30, the credit conditions would have had to have worsened – the credit score fell, the loan to value ratio increased, etc.

*Requirement 2 – Is it probable that the acquirer will be unable to collect all contractually required payments from the borrower?*
WW Risk Management believes that if the fair value of the loan includes a credit valuation allowance, it is clear that the acquirer will not receive of the contractually required payments from the borrower. We further believe that high FICO, low loan to value loans will generally not have a significant credit valuation allowance and would thus fail this requirement, whereas the remainder of the portfolio would likely meet this requirement.

***Thus, loans with credit valuation allowances clearly meet Requirement 2, but may not meet Requirement 1. Fortunately, GAAP permits the acquiring credit union to elect to account for the loans at the group level, thus avoiding the tedious scope determination required under Requirement 1[8].***

WW Risk Management thus recommends that the acquiring credit union make two accounting elections for loans that have credit valuation allowances which are material.

1. Account for the acquired loans at the group level.
2. Elect to the treat the group level asset in accordance with ASC 310-30.

We believe this dramatically simplifies the ongoing accounting, ***provided that you can differentiate between the fair value adjustments for the interest rate differential and the expected credit losses.***

[8] AICPA Depository Institutions Expert Panel Letter to SEC December 18, 2009

WW Risk Management believes that the acquiring credit union could also elect to include loans with the highest credit quality as it forms the loan groups. For example, an acquiring credit union could elect to account for all of the first lien residential mortgage loans acquired as a group based on expected cash flows versus accounting for the loans with the highest credit quality using contractual cash flows. We note that the loans should be grouped based on similar characteristics – residential first lien, residential second lien, new direct auto, used indirect auto, etc.

WW Risk Management further notes that it is "worth the effort" to determine whether to account for relatively large member business loans at the loan level and go through the process of determining whether the particular loan should be accounted for under ASC 310-20 or ASC 310-30.

We note that GAAP does not allow loans with revolving terms to be accounted for under ASC 310-30 because of the uncertainty of future advances and repayments[9]. In our experience, the acquiring credit union amortizes the discount rate valuation allowance *and* the credit valuation allowance straight-line over the remaining term of the loan as of the acquisition date of the loan. If it becomes apparent over time that the present value of the cash flows are less than the book value of the loan, then the acquiring credit union should increase its allowance for loan losses by the amount of the shortfall.

### Recognizing income under ASC 310-30

Under ASC 310-30, the expected cash flows that exceed the initial investment in the loan (its fair value on Day One) represent the "accretable yield," which is recognized as interest income on a level-yield basis over the life of the loan. Appendix C compares the book values to the fair values by loan group and details the interest rate and credit reductions. Using the Used Vehicle – Direct loans as an example, the interest rate difference is $65,348 and the credit only difference is $127,337. The book value is $12,500,000, and based on the interest rate and credit reductions, the fair value is $12,307,315. Under ASC 310-30, the acquiring credit union would accrete the $12,307,315 fair value at a rate of 3.8%. Actual interest and principal received would be accounted for as a reduction of the fair value carrying amount of the loan.

In our experience, our client's core accounting systems cannot accommodate the precise accounting required under ASC 310-30. In response, we separately identify the present value of the difference between the expected cash flows at the coupon rate and the expected cash flows at the market rate of interest. This is the interest rate premium (discount rate valuation allowance) or the $65,348 in our used direct vehicle loan example. We advise our clients to amortize the discount rate valuation allowance into income using sum of the years' digits amortization (which

[9] ASC 310-30-15-2 (f)

closely resembles level-yield amortization). Since the discount rate valuation allowance is based on the *difference* between the rate on the portfolio and the overall market interest rate, our clients can continue to record the contractual interest income as received and continue to rely on their core system to provide the loan-by-loan accounting. The result very closely approximates the precise accounting required under ASC 310-30. Appendix E compares accreting the discount rate valuation allowance using the sum-of-the years' digits method and recording the contractual cash flows as received to the required accretion required ASC 310-30 for the used direct vehicle loans in our example. The schedule shows that the interest income recorded would be slightly higher than the interest income recorded under the exact ASC 310-30 accounting for the first 36 months and then is slightly less for the next 10 months. Our clients have found in practice that the simplicity of this amortization method outweighs the modest differences produced, as compared to the cumbersome reporting required using a precise implementation of the standards.

WW Risk Management strongly recommends that this simplified approach not be used to account for large member business loans with significant credit valuation allowances. We recommend that such loans be accounted for at the loan-level in accordance with the precise tenets of FAS ASC 310-30. For more information, please see our white paper *FAS ASC 310-30 Loan Accounting.*

WW Risk Management further notes that the difference between the cash flows expected at acquisition and the total contractual cash flows is the nonaccretable difference. The nonaccretable difference is the undiscounted principal and interest that will not be received due to prepayment and default assumptions. In our used direct loan example, the amount is $442,016. We note that the total contractual cash flows must be disclosed only once and need not be tracked going forward.

Finally, we note that examples of templates used to amortize/accrete the fair value adjustments for all of the accounts, including the loan adjustments are attached as Appendix F.

### Changes in estimates of cash flows under ASC 310-30

The acquiring credit union must periodically compare the actual cash flows received to the expected cash flows on Day One and reassess the remaining cash flows expected to be collected. If the new total expected cash flows exceed the initial estimate, then the acquiring credit union should increase the rate of accretion. In essence, the fair value of the loan has increased, but the increase can only be recognized prospectively through an increased yield. If the expected cash flows have decreased, then the acquiring credit union should record an allowance for loan losses.

Because the allowance for loan losses is initially recorded at zero with expected credit losses reflected in the credit loss valuation allowance, the tracking and reporting of credit losses is more

complex under the new rules. Some organizations have charged foreclosure losses directly against the credit loss valuation allowance. In our experience, the NCUA prefers to see losses run through the allowance for loan losses and related provision accounts. In this case, WW Risk Management recommends that foreclosure losses be recorded through the three following journal entries. In our example, we assume a foreclosure loss of $100.

| | | |
|---|---|---|
| Allowance for loan losses | 100 | |
| Loan receivable | | 100 |
| | | |
| Provision for loan losses | 100 | |
| Allowance for loan losses | | 100 |
| | | |
| Credit reserve valuation allowance | 100 | |
| Other non-interest income | | 100 |

The net effect of these entries with regard to profit and loss is zero. However, the actual foreclosure losses incurred are easier to track because they run through the standard accounts. We note that the final credit should run through other non-interest income, not interest income, because the entry is designed to offset the provision expense and is not meant to reflect an adjustment to the prospective yield.

We further recommend that the acquiring credit union allocate the carrying amount of the foreclosed loan based on the individual loan's relative initial fair value. This method mirrors traditional loan accounting and is consistent with the requirements of ASC 310-30. Under this method, a gain or loss would be recognized for the difference between the allocated carrying amount of the loan and the fair value of the collateral obtained in foreclosure. When allocating costs while removing loans from the pool, the accounting principle that should be adhered to is that the yield on the remaining pool should not be disturbed by the removal. That is, the yield on the remaining pool of loans should neither increase nor decrease as a direct result of removing a loan from the pool.

Finally, if the actual cash flows for the loan group differ significantly from the cash flows expected at inception, WW Risk Management recommends that the steps in the Day One valuation be repeated at the new assessment date and that new rates of accretion be calculated or that the allowance for loan losses be increased or decreased depending on whether the new cash flows have increased or decreased.

### Other Rules Related to the Grouped Loans

WW Risk Management notes that the integrity of the pool should be maintained throughout its life. Thus, loans should not be added to the pool, nor should loans be removed absent events such as foreclosures, write-offs, or sales of the loan[10].

We also believe that the acquiring credit union should not apply troubled debt restructuring accounting and disclosure guidance to loans included in a pooled asset under ASC 310-30[11].

## ACCOUNTING FOR GOODWILL

As we indicated earlier, the goodwill recorded in a merger transaction can be amortized or the carrying amount can remain on the balance sheet subject to annual impairment testing.

If a credit union elects to amortize the goodwill, the amount can be amortized over a period not to exceed 10 years. ***WW Risk Management cautions that in order to use this method, the credit union must make an irrevocable accounting election. The election affects the existing goodwill, as well as any additional goodwill acquired in the future[12].***

If the credit union does not make the election to amortize the goodwill, it is subject to annual impairment testing. The process begins by determining the entity to be assessed. Perhaps counter-intuitively, the goodwill test is nearly always performed at the combined entity level instead of at the level of the acquired credit union. The test would be performed at the acquired credit union level only if it were deemed to be a separate operating segment or a component of a separate operating segment. An entity must have all of the following characteristics to be deemed a separate operating segment[13]:

- It engages in business activities from which it may earn revenue and incur expenses;
- Its *discrete financial information* is available; and
- Its operating results are *regularly reviewed* by the chief operating decision maker ("CODM") to make decisions about *resources to be allocated* to the segment and assess its performance.

WW Risk Management believes it would be rare for an acquired credit union to be considered to be a separate operating segment. This implies that the branches of the acquired credit union would have separate pricing, separate asset liability management, etc. We further believe that

[10] FAS ASC 310-30-40-1
[11] FAS ASC 310-40-15-11
[12] FAS ASC 350-20-35-62
[13] FAS ASC 280-10-50-1

over time members will migrate from the acquired credit union's branches to the acquiring credit union's branches and vice versa, further clouding the distinction.

The assessment for goodwill impairment can be qualitative or quantitative.

*Qualitative Testing*
A credit union may assess qualitative factors to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of the reporting unit is less than its carrying amount, including goodwill. In evaluating performing, the qualitative test the guidance requires an entity to assess relevant events and circumstances. Examples of such events and circumstances include the following[14]:

- *Macroeconomic conditions,* such as deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets.

- *Industry and market considerations,* such as a deterioration in the environment in which an entity operates, an increased competitive environment, a decline (both absolute and relative to its peers) in market-dependent multiples or metrics, a change in the market for an entity's products or services, or a regulatory or political development.

- *Cost factors,* such as increases in raw materials, labor, or other costs that have a negative effect on earnings.

- *Overall financial performance,* such as negative or declining cash flows or a decline in actual or planned revenue or earnings.

- *Other relevant entity-specific events,* such as changes in management, key personnel, strategy, or customers; contemplation of bankruptcy; or litigation.

- *Events affecting a reporting unit,* such as a change in the carrying amount of its net assets, a more-likely-than-not expectation of selling or disposing all, or a portion of, a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit.

[14] ASC 350-20-35-3C

*Quantitative Testing*

If after assessing the totality of events or circumstances described in the paragraphs above, a credit union determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the credit union must perform the first step of the two-step goodwill impairment test.

Step One is to determine whether the fair value of the combined entity exceeds its book value using the income and market approaches described at the beginning of this white paper. If the fair value of the combined entity exceeds the book value, the goodwill is not impaired[15]. If the combined entity fails Step One, it means the credit union must measure the impairment loss in accordance with Step Two.

In Step Two, the credit union compares the carrying amount of the reporting unit goodwill to the implied fair value of that goodwill, and recognize an impairment loss equal to that excess. The loss recognized cannot exceed the carrying amount of goodwill[16].

## CONCLUSION

While the initial and ongoing required accounting can be complex, WW Risk Management does not believe the rules should deter transactions that otherwise make sense. We have worked with our clients, their external auditors and the regulators to ensure our clients have the information and knowledge they need to successfully undertake these transactions. We hope you have found this white paper to be informative and useful.

[15] FAS ASC 350-20-35-4

[16] FAS ASC 350-20-35-11

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Mr. Winn has more than twenty-five years of executive level financial experience and has served as a management consultant for the most recent seventeen years. Mr. Winn co-founded Wilary Winn in the summer of 2003 and his primary responsibility is to set the firm's strategic direction. Since inception, Wilary Winn has grown rapidly and currently has more than 425 financial institution clients located in 49 states and the District of Columbia, including 30 of the top 100 credit unions and 47 publicly traded banks.

Mr. Winn is a nationally recognized expert regarding the accounting and regulatory rules related to fair value, and has recently led seminars on the subject for many of the country's largest public accounting firms, the AICPA, the FDIC, the FFIEC and the NCUA.

During his earlier career, Mr. Winn twice served as Chief Financial Officer of mortgage companies in which he was the key financial decision maker. In addition, Mr. Winn helped the companies grow through successful acquisitions and held the key managerial role in the sale of Knutson Mortgage Company to a Fortune 500 company. Mr. Winn began his career as a practicing CPA for Arthur Young & Company - now Ernst & Young.

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Mr. Mohomed joined the firm in December of 2010 after graduating from Minnesota State University, Mankato with a Masters of Business Administration. Prior to obtaining his MBA, he graduated Summa Cum Laude from Minnesota State University, Mankato, with bachelors' degrees in accounting and economics.

Mr. Mohomed is a Certified Public Accountant and specializes in determining fair value of structured fixed income securities, distressed loans, and consults on derivatives. Amin leads Wilary Winn analysts on valuations and stress-testing of more than 400 Non-Agency Mortgage-Backed Securities and valuations of both Pooled Trust Preferred CDOs (TruP) and Single Issue Trust Preferred Securities. Wilary Winn is one of the country’s leading providers of fair value of illiquid financial instruments.

In connection with the work with Trust Preferred Securities, Amin and his team perform detailed ratio analysis and review on approximately 1,000 financial institutions.

Mr. Mohomed uses his expertise to also lead Wilary Winn analysts on valuations of troubled debt restructuring and Purchased Credit Impaired (ASC 310-30) loan portfolios. He uses his background to research and disseminate accounting guidance and best practices to the firm and clients. In addition, Mr. Mohomed performs a variety of engagements related to interest rate derivatives including consulting, valuation, effectiveness testing, and derivative accounting, as well as performing various other statistical analyses.

Mr. Mohomed is a member of the American Institute of Certified Public Accountants and the Minnesota Society of CPAs.

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Ms. Hartman joined the firm in January of 2014 after graduating from the University of Wisconsin – Green Bay with a bachelor's degree in finance and a minor in accounting. Ms. Hartman leads a team of analysts on fair value engagements, including mergers and acquisitions, specializing in credit union mergers. Katie and her team have advised on numerous mergers, ranging in asset size from less than $10 million to nearly $2 billion. The mergers have included organizations of varying financial conditions, from troubled institutions going through regulator-facilitated mergers to well performing strategic mergers of equals. She is an expert on business combination accounting, consulting clients on accounting implication at the acquisition date and the ongoing treatment of merger related accounts.

Additionally, Ms. Hartman also plays an integral role in the firm's asset liability management (ALM) business line. She leads Wilary Winn analysts on quarterly ALM analyses, consulting clients on many organizational risks, including interest rate, credit, liquidity, and concentration risk. Furthermore, Katie performs personalized scenarios to give clients the analytics necessary to make the well informed strategic decisions.

## About Wilary Winn Risk Management

Founded in 2003, Wilary Winn Risk Management, LLC and its sister company, Wilary Winn provide independent, fee-based advice to more than 425 financial institutions located across the country. Our services include:

- Asset Liability Management Advice
- Concentration Risk, Capital Stress Testing, and CECL Analyses
- Valuation of Illiquid Financial Instruments
- Fair Value Estimates

*Asset Liability Management*
Using the knowledge gained in our other business lines, we provide comprehensive ALM Management services.

- Ongoing Asset Liability Measurement and Reporting
- ALM Model Validation
- Non-Maturity Shares Sensitivity Analysis
- Derivatives Valuation and Accounting

*Concentration Risk, Capital Stress Testing, and CECL*
We offer robust, statistically-based estimates of potential credit losses for residential real estate and consumer loans. Our analyses include:

- Concentration risk and capital stress testing analyses, which we believe represent the most powerful use of our analytical models.

- Calculations of the allowance for loan losses in full accordance with the Current Expected Credit Loss (CECL) model.

*Fair Value Estimates*

We estimate fair value by discounting expected cash flows, net of credit losses. This provides the most accurate estimates and facilitates our clients' ongoing accounting. Our services include:

- Mergers and Acquisitions for Credit Unions – We are the leading provider of fair value advice and have performed over 200 merger related valuation engagements under the new "purchase accounting" rules.

- Goodwill Impairment Testing – We provide qualitative and quantitative tests of goodwill impairment.

- Accounting for Loans with Deteriorated Credit Quality – We offer a comprehensive and cost-effective solution to the complexities arising from accounting for loans under ASC FAS 310-30.

- Troubled Debt Restructurings – Our TDR valuations are based on best estimate discounted cash flows, including expected credit losses in full accordance with GAAP.

*Valuation of Illiquid Financial Instruments*

We are one of the country's leading providers of fair value of illiquid financial instruments. Our valuations are based on discounted cash flows. Our services include valuation of:

- Non-Agency MBS – We provide OTTI analyses and estimates of fair value of more than 400 CUSIPs per quarter.

- Mortgage Servicing Rights – We value more than 200 MSR portfolios per year, ranging in size from $4 million to over $4 billion, and totaling over $60 billion.

- Mortgage Banking Derivatives – We help our clients to value and account for the derivatives that arise from mortgage banking activities, including IRLCs and forward loan sales commitments.

- Commercial Loan Servicing Rights – We value servicing rights that arise from loan sale participations, the sales of multi-family housing loans to the GSEs, and the sales of the guaranteed portion of SBA loans.

| Issue | Previous Requirement | New Requirement |
|---|---|---|
| | | |
| Definition of a business | Business had to have inputs, processes and outputs | Business does not have to outputs thus expanded scope |
| Combination of mutual entities including credit unions | Pooling of Interests | Purchase accounting |
| Allowance for loan and lease losses | Recorded at appropriate amount – book value if correct | Recorded at zero – fair value includes reduction related to credit losses |
| Assets acquired and liabilities assumed | Record at book value | Record at estimated fair value |
| Restructuring Costs – involuntary severance, contract termination, etc. | Generally recognized as a liability in connection with the merger | Generally an expense to the combined entity |
| Adjustments to fair value estimates within one year measurement period | Recognize prospectively | Make changes retroactive to the acquisition |
| Non-contractual asset or liability contingencies | Account for under FAS 5 – probable and measurable | Record if “more likely than not” |
| Assets that acquirer does not intend to use | Generally assigned limited or no value | Record at fair value – highest and best use |
| Bargain Purchase | Extraordinary when fair value of assets (after reduction of certain long term assets to zero) exceeded consideration given | Bargain purchase if fair assets assumed exceeds fair value of liabilities assumed and consideration given |
| Goodwill | Amortized | Subject to annual impairment testing |

Wilary Winn Risk Management LLC

# XYZ Credit Union
## Assets & Liabilities as of *date*

| | Balance | Coupon | Market Price | Remaining Term in Months | Estimated Fair Value % | Estimated Fair Value $ | Difference |
|---|---|---|---|---|---|---|---|
| **ASSETS** | | | | | | | |
| Cash | 24,000,000 | | | | 100.0% | 24,000,000 | - |
| Available for Sale Securities | 11,000,000 | | | | 98.0% | 10,780,000 | (220,000) |
| Deposits in Commercial Banks, S&Ls, Savings Banks | 3,000,000 | 1.2% | 0.9% | 12.9 | 100.2% | 3,006,000 | 6,000 |
| Total Membership and Paid In Capital | 1,000,000 | | | | 100.0% | 1,000,000 | - |
| All Other Investments | 400,000 | | | | 126.0% | 504,000 | 104,000 |
| Total Loans and Leases | 181,075,000 | | | | 99.4% | 179,988,516 | (1,086,484) |
| Total Loans and Leases - Loss Allowance | (1,000,000) | | | | 0.0% | - | 1,000,000 |
| Land and Building | 7,500,000 | | | | 109.0% | 8,175,000 | 675,000 |
| Other Fixed Assets | 500,000 | | | | 100.0% | 500,000 | - |
| NCUA Share Insurance Capitalization Deposit | 2,000,000 | | | | 100.0% | 2,000,000 | - |
| Accrued Interest on Loans | 300,000 | | | | 100.0% | 300,000 | - |
| Accrued Interest on Investments | 25,000 | | | | 100.0% | 25,000 | - |
| All Other Assets | 7,000,000 | | | | 100.0% | 7,000,000 | - |
| Total Assets | 236,800,000 | | | | 100.2% | 237,278,516 | 478,516 |
| | | | | | | | |
| **LIABILITIES** | | | | | | | |
| Accrued Dividends & Interest Payable on Shares & Deposit | 1,000 | | | | 100.0% | 1,000 | - |
| Accounts Payable and Other Liabilities | 3,000,000 | | | | 100.0% | 3,000,000 | - |
| Share Drafts | 38,000,000 | | | | 100.0% | 38,000,000 | - |
| Regular Shares | 60,000,000 | | | | 100.0% | 60,000,000 | - |
| Money Market Shares | 63,000,000 | | | | 100.0% | 63,000,000 | - |
| IRA/KEOGH Accounts without Defined Maturities | 5,000,000 | | | | 100.0% | 5,000,000 | - |
| All Other Shares | 6,000,000 | | | | 100.0% | 6,000,000 | - |
| Share Certificates | 25,000,000 | 1.1% | 0.7% | 12.9 | 100.5% | 25,125,000 | 125,000 |
| IRA/KEOGH Certificates | 12,000,000 | 1.2% | 0.8% | 16.9 | 100.5% | 12,060,000 | 60,000 |
| Total Liabilities | 212,001,000 | | | | 100.1% | 212,186,000 | 185,000 |
| | | | | | | | |
| **EQUITY** | 24,799,000 | | | | | 25,092,516 | 293,516 |

| | Base Value | Weighting | Weighted Value |
|---|---|---|---|
| Overall Value of XYZ Credit Union - Income Projected | 21,500,000 | 75% | 16,125,000 |
| Overall Value of XYZ Credit Union - Guideline Transaction | 19,000,000 | 15% | 2,850,000 |
| Overall Value of XYZ Credit Union - Market Valuation | 20,000,000 | 10% | 2,000,000 |
| Overall Value of XYZ Credit Union - Total Wtd Avg | | 100% | 20,975,000 |
| Excess Capital Value Dollar-for-Dollar | | | 8,223,000 |
| Estimated Value of the Franchise | | | 29,198,000 |
| | | | |
| Value of Assets and Liabilities | | | 25,092,516 |
| Value of Core Deposits | | | 2,500,000 |
| Total Liquidation Value of the Entity | | | 27,592,516 |
| | | | |
| Total Estimated Value of the Entity (Max of Income and Market Valuations or Liquidation Value) | | | 29,198,000 |
| | | | |
| Value of Financial Assets and Liabilities | | | 16,417,516 |
| Value of Non-Financial Assets and Liabilities | | | 8,675,000 |
| Value of Core Deposits | | | 2,500,000 |
| Goodwill (Bargain Purchase) | | | 1,605,484 |

Wilary Winn Risk Management LLC

XYZ Credit Union
Loan Valuation as of *date*

| | Principal Balance | # of Loans | Avg FICO | Avg LTV* | 60+ DQ% | Current WAC | Lifetime WAC | Age | WAM | Avg Life | CPR % | CRR % | CDR % | Severity% | Future Loss % | Risk-Free Discount Rate | Discount Spread | Total Discount Rate | Fair Value % | Fair Value $ | Difference | Credit Only Difference[1] | Discount Rate Difference[2] | Contractual Cash Flows | Non-Accretable Credit Losses | Non-Accretable Lost Interest | Total Non-Accretable Cash Flows |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fixed Rate Mortgage | 36,000,000 | 326 | 738 | 50% | 0.0% | 4.0% | 4.0% | 36 | 163 | 4.0 | 13.6% | 12.8% | 0.8% | 10.6% | 0.4% | 3.2% | 0.1% | 3.3% | 101.6% | 36,586,955 | 586,955 | (135,755) | 722,710 | 47,587,079 | 135,755 | 5,668,727 | 5,804,481 |
| Home Equity 2nd | 10,000,000 | 322 | 740 | 60% | 0.0% | 5.4% | 5.4% | 29 | 88 | 1.9 | 28.3% | 27.8% | 0.5% | 22.6% | 0.3% | 5.5% | 0.4% | 5.9% | 99.1% | 9,912,094 | (87,906) | (25,689) | (62,218) | 11,929,719 | 25,689 | 1,188,641 | 1,214,330 |
| HELOC 1st | 200,000 | 1 | 791 | 100% | 0.0% | 4.5% | 4.5% | 2 | 11 | 0.9 | 20.9% | 20.8% | 0.1% | 15.3% | 0.0% | 3.6% | 0.8% | 4.4% | 100.1% | 200,246 | 246 | (31) | 277 | 229,114 | 31 | 146 | 177 |
| HELOC 2nd | 11,000,000 | 427 | 750 | 54% | 0.6% | 4.5% | 4.6% | 54 | 200 | 2.6 | 20.1% | 19.5% | 0.5% | 47.8% | 0.6% | 3.9% | 0.8% | 4.7% | 99.4% | 10,932,946 | (67,054) | (61,908) | (5,146) | 13,222,644 | 61,908 | 812,268 | 874,176 |
| MBL - RE Secured - Fixed | 15,000,000 | 93 | 759 | n/a | 0.0% | 4.8% | 4.8% | 29 | 83 | 3.5 | 16.7% | 11.8% | 4.8% | 11.2% | 1.3% | 4.5% | 0.0% | 4.5% | 98.8% | 14,820,330 | (179,670) | (197,768) | 18,098 | 22,339,442 | 197,768 | 4,621,938 | 4,819,707 |
| MBL - RE Secured - Adjust. | 6,000,000 | 34 | 728 | n/a | 0.0% | 4.8% | 4.1% | 32 | 106 | 4.0 | 14.9% | 11.8% | 3.0% | 10.0% | 0.9% | 1.4% | 2.4% | 3.8% | 99.4% | 5,964,933 | (35,067) | (56,961) | 21,894 | 9,283,668 | 56,961 | 2,108,161 | 2,165,122 |
| New Vehicle - Direct | 1,500,000 | 69 | 737 | n/a | 0.0% | 3.1% | 3.1% | 19 | 49 | 1.5 | 24.1% | 23.6% | 0.5% | 39.0% | 0.3% | 3.1% | 0.3% | 3.4% | 99.3% | 1,489,380 | (10,620) | (4,452) | (6,168) | 1,599,856 | 4,452 | 28,477 | 32,929 |
| Used Vehicle - Direct | 12,500,000 | 1,091 | 707 | n/a | 0.1% | 3.5% | 3.5% | 14 | 53 | 1.6 | 25.0% | 23.4% | 1.6% | 39.8% | 1.0% | 3.0% | 0.8% | 3.8% | 98.5% | 12,307,315 | (192,685) | (127,337) | (65,348) | 13,509,212 | 127,337 | 314,679 | 442,016 |
| New Vehicle - Indirect | 4,000,000 | 264 | 691 | n/a | 1.4% | 4.4% | 4.4% | 17 | 53 | 1.6 | 25.1% | 23.0% | 2.1% | 42.6% | 1.3% | 4.3% | 0.9% | 5.2% | 97.4% | 3,895,155 | (104,845) | (52,599) | (52,246) | 4,406,586 | 52,599 | 126,573 | 179,171 |
| Used Vehicle - Indirect | 18,500,000 | 1,637 | 684 | n/a | 0.6% | 5.7% | 5.7% | 14 | 52 | 1.6 | 25.7% | 22.5% | 3.2% | 42.2% | 2.2% | 5.1% | 1.2% | 6.3% | 96.8% | 17,900,864 | (599,136) | (401,609) | (197,526) | 20,934,228 | 401,609 | 768,125 | 1,169,734 |
| Motorcycle | 350,000 | 41 | 728 | n/a | 0.0% | 4.7% | 4.7% | 16 | 46 | 1.4 | 27.3% | 27.2% | 0.1% | 35.0% | 0.0% | 7.1% | 1.1% | 8.3% | 95.4% | 333,919 | (16,081) | (91) | (15,989) | 363,141 | 91 | 8,738 | 8,829 |
| RV | 850,000 | 92 | 750 | n/a | 0.0% | 7.2% | 7.2% | 17 | 58 | 1.7 | 23.7% | 23.6% | 0.2% | 61.1% | 0.2% | 6.4% | 0.4% | 6.8% | 100.2% | 851,792 | 1,792 | (1,488) | 3,281 | 1,006,370 | 1,488 | 48,898 | 50,387 |
| Leases Receivable | 60,000,000 | 1,825 | 768 | n/a | 0.0% | 3.5% | 3.5% | 14 | 28 | 2.0 | 4.0% | 4.0% | 0.0% | 0.0% | 0.0% | 3.3% | 0.3% | 3.6% | 99.7% | 59,805,143 | (194,857) | - | (194,857) | 67,710,246 | - | 3,908,343 | 3,908,343 |
| MBL - Other Secured | 60,000 | 2 | n/a | n/a | 0.0% | 5.1% | 5.1% | 15 | 44 | 1.4 | 25.2% | 25.2% | 0.0% | 65.0% | 0.0% | 6.4% | 0.0% | 6.4% | 98.3% | 58,990 | (1,010) | (1) | (1,010) | 67,064 | 1 | 1,612 | 1,612 |
| MBL - Unsecured | 55,000 | 3 | n/a | n/a | 0.0% | 9.4% | 9.4% | 74 | 67 | 1.9 | 25.2% | 25.2% | 0.1% | 100.0% | 0.1% | 10.0% | 0.0% | 10.0% | 98.9% | 54,422 | (578) | (69) | (509) | 70,768 | 69 | 5,935 | 6,005 |
| Personal LOC | 1,500,000 | 816 | 698 | n/a | 0.0% | 11.3% | 11.3% | 234 | 44 | 1.5 | 25.5% | 23.4% | 2.1% | 100.0% | 3.2% | 10.0% | 1.5% | 11.4% | 97.0% | 1,455,394 | (44,606) | (48,128) | 3,522 | 1,669,896 | 48,128 | 83,362 | 131,490 |
| Signature | 250,000 | 86 | 677 | n/a | 0.0% | 9.9% | 9.9% | 14 | 30 | 1.1 | 26.2% | 22.4% | 3.8% | 100.0% | 5.2% | 10.0% | 1.7% | 11.7% | 93.6% | 234,120 | (15,880) | (13,117) | (2,763) | 291,965 | 13,117 | 8,254 | 21,371 |
| Share Secured | 55,000 | 19 | 738 | n/a | 0.0% | 3.6% | 3.6% | 19 | 30 | 1.0 | 25.2% | 25.1% | 0.1% | 0.0% | 0.0% | 3.7% | 0.0% | 3.7% | 99.9% | 54,927 | (73) | - | (73) | 56,600 | - | 529 | 529 |
| Other Secured | 55,000 | 11 | 600 | n/a | 11.2% | 2.7% | 2.7% | 69 | 49 | 1.5 | 27.1% | 14.3% | 12.8% | 65.0% | 10.6% | 6.4% | 3.9% | 10.3% | 80.7% | 44,364 | (10,636) | (5,818) | (4,818) | 62,071 | 5,818 | 1,520 | 7,338 |
| Credit Card | 3,000,000 | 1,485 | 748 | n/a | 0.2% | 8.3% | 8.3% | n/a | 59 | 1.7 | 25.8% | 24.5% | 1.2% | 100.0% | 1.9% | 9.2% | 0.5% | 9.7% | 96.4% | 2,890,705 | (109,295) | (55,907) | (53,388) | 3,933,065 | 55,907 | 263,471 | 319,378 |
| Student Loan | 200,000 | 7 | n/a | n/a | 0.0% | 5.1% | 5.1% | 10 | 230 | 5.2 | 13.4% | 13.0% | 0.4% | 3.0% | 0.1% | 5.6% | 0.0% | 5.6% | 97.8% | 194,520 | (5,480) | (137) | (5,344) | 281,346 | 137 | 58,586 | 58,722 |
| Total | 181,075,000 | 8,651 | 741 | 38% | 0.1% | 4.3% | 4.3% | 26 | 82 | 2.5 | 14.7% | 13.4% | 1.2% | 19.1% | 0.7% | 3.8% | 0.5% | 4.3% | 99.4% | 179,988,516 | (1,086,484) | (1,188,864) | 102,380 | 220,554,079 | 1,188,864 | 20,026,982 | 21,215,846 |
| **Loan Groupings used in Journal Entries** | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Rate Mortgage | 36,000,000 | 326 | | | | | | | | | | | | | | | | | 101.6% | 36,586,955 | 586,955 | (135,755) | 722,710 | 47,587,079 | 135,755 | 5,668,727 | 5,804,481 |
| Home Equity | 10,000,000 | 322 | | | | | | | | | | | | | | | | | 99.1% | 9,912,094 | (87,906) | (25,689) | (62,218) | 11,929,719 | 25,689 | 1,188,641 | 1,214,330 |
| HELOC | 11,200,000 | 428 | | | | | | | | | | | | | | | | | 99.4% | 11,133,192 | (66,808) | (61,939) | (4,869) | 13,451,758 | 61,939 | 812,414 | 874,353 |
| Member Business Loans | 21,115,000 | 132 | | | | | | | | | | | | | | | | | 99.0% | 20,898,675 | (216,325) | (254,799) | 38,474 | 31,760,941 | 254,799 | 6,737,647 | 6,992,446 |
| Auto Loans | 36,500,000 | 3,061 | | | | | | | | | | | | | | | | | 97.5% | 35,592,715 | (907,285) | (585,997) | (321,288) | 40,449,882 | 585,997 | 1,237,853 | 1,823,850 |
| Other Consumer Loans | 66,260,000 | 4,382 | | | | | | | | | | | | | | | | | 99.4% | 65,864,885 | (395,115) | (124,686) | (270,429) | 75,374,701 | 124,686 | 4,381,700 | 4,506,386 |
| Total | 181,075,000 | 8,651 | | | | | | | | | | | | | | | | | 99.4% | 179,988,516 | (1,086,484) | (1,188,864) | 102,380 | 220,554,079 | 1,188,864 | 20,026,982 | 21,215,846 |

[1] Credit Only Difference is referred to as the Credit Valuation Allowance

[2] Discount Rate Difference is referred to as the Discount Rate Valuation Allowance

For definitions of column headers, please see Appendix G

Wilary Winn Risk Management LLC

**ABC Credit Union acquires**
**XYZ Credit Union**
**Journal Entries for ABC CU to adjust XYZ CU's Book Value (GAAP)**

| | Debit | Credit | Net Summary | 5300 Reference | 5300 Acct Code |
|---|---|---|---|---|---|
| Investments | | | | | |
| Available for Sale Securities | - | 220,000 | | | |
| Deposits in Commercial Banks, S&Ls, Savings Banks | 6,000 | - | | | |
| All Other Investments | 104,000 | - | (110,000) | | |
| Loans | | | | | |
| Credit Adjustment | | | | | |
| Fixed Rate Mortgage | - | 135,755 | | | |
| Home Equity | - | 25,689 | | | |
| HELOC | - | 61,939 | | | |
| Member Business Loans | - | 254,799 | | | |
| Auto Loans | - | 585,997 | | | |
| Other Consumer Loans | - | 124,686 | (1,188,864) | | |
| Discount Rate Adjustment | | | | | |
| Fixed Rate Mortgage | 722,710 | - | | | |
| Home Equity | - | 62,218 | | | |
| HELOC | 277 | 5,146 | | | |
| Member Business Loans | 39,992 | 1,518 | | | |
| Auto Loans | - | 321,288 | | | |
| Other Consumer Loans | 6,803 | 277,232 | 102,380 | | |
| Total Loans and Leases - Loss Allowance | 1,000,000 | - | 1,000,000 | | |
| Fixed Assets | | | | | |
| Land and Building | 675,000 | - | 675,000 | | |
| Other Assets | | | | | |
| Core Deposit Intangible | 2,500,000 | - | 2,500,000 | Page 2, Line 31 a. | 009D1 |
| Shares/Deposits | | | | | |
| Share Certificates | - | 125,000 | | | |
| IRA/KEOGH Certificates | - | 60,000 | (185,000) | | |
| Equity | | | | | |
| Equity (removal of existing equity accounts) | 24,799,000 | | | | |
| Equity (record equity acquired in merger) | | 29,198,000 | | Page 4, Line 35 | 658A |
| | | | (4,399,000) | | |
| Goodwill | 1,605,484 | - | 1,605,484 | Page 2, Line 31 b. | 009D2 |
| Bargain Purchase | - | - | - | Page 5, Line 17 | 431 |
| | 31,459,266 | 31,459,266 | - | | |

| | | | |
|---|---|---|---|
| **GAAP** | | | |
| Acquirer's Equity before OCI Adjustment (Xyz CU Pre-Merger Equity) | 60,000,000 | | |
| Plus: Acquirer's OCI Adjustment | (500,000) | | |
| Total GAAP Equity | 59,500,000 | | |
| Plus: Equity Acquired in Merger | 29,198,000 | | |
| Plus: Bargain Purchase Gain | - | | |
| Acquirer's Post-Merger GAAP Equity | 88,698,000 | | |
| **PCA Net Worth Merger Entries (Regulatory Only, Non-GAAP)** | | | |
| Acquirer's Regulatory Net Worth After Merger | 88,698,000 | | |
| Less: OCI Adjustment | (500,000) | | |
| Less: Equity Acquired in Merger | 29,198,000 | Page 4, Line 35 | 658A |
| Plus: Adjustments to Retained Earnings through Business Combinations | 24,799,000 | Page 11, Line 7 b. | 1004B |
| Equity for PCA Net Worth Calculation | 84,799,000 | | |

Wilary Winn Risk Management LLC

**Interest Income Example - Used Vehicle - Direct**

Nonaccretable Difference: 442,016
Accretable Yield: 759,881

| | | | | | | | | Contractual Cashflows Assuming no defaults, no prepays, etc. | | | | | | | SOP 03-3 Accounting | | | | | Wilary Winn Risk Management | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Month | WAC | Remaining Balance | Principal Payment Expected to Be Collected | Voluntary Prepayment Expected to Be Collected | Interest Expected to Be Collected | Repo Principal Recoveries Expected to Be Collected | Total Cashflows Expected to Be Collected | Scheduled Balance | Scheduled Prin Payment | Scheduled Interest Payment | Scheduled P &I Payment | Cashflows Expected to Be Collected | Discounted Cashflows @ 3.8% | Discounted Cashflows @ 3.5% | Beginning Carrying Amount | Total Cashflows Expected to Be Collected | Interest Income | Reduction of Carrying Amount | Ending Carrying Amount | Interest Expected to Be Collected | Accretion (Amortization) of Discount Using SYD | Total Interest Income | Variance Between Methodologies |
| 0 | | 12,500,000 | | | | | | 12,500,000 | | | | | | | | | | | | | | | |
| 1 | 3.5% | 12,011,930 | 218,139 | 269,931 | 36,409 | - | 524,479 | 12,281,568 | 218,432 | 36,458 | 254,891 | 524,479 | 522,823 | 522,954 | 12,307,315 | 524,479 | 38,973 | 485,506 | 11,821,810 | 36,409 | 2,126 | 38,535 | 438 |
| 2 | 3.5% | 11,539,325 | 213,673 | 258,933 | 34,939 | - | 507,545 | 12,062,498 | 219,070 | 35,821 | 254,891 | 507,545 | 504,345 | 504,597 | 11,821,810 | 507,545 | 37,436 | 470,109 | 11,351,701 | 34,939 | 2,086 | 37,024 | 411 |
| 3 | 3.5% | 11,081,738 | 209,299 | 248,288 | 33,515 | - | 491,102 | 11,842,789 | 219,709 | 35,182 | 254,891 | 491,102 | 486,466 | 486,829 | 11,351,701 | 491,102 | 35,947 | 455,155 | 10,896,546 | 33,515 | 2,046 | 35,561 | 386 |
| 4 | 3.5% | 10,638,740 | 205,014 | 237,985 | 32,137 | - | 475,136 | 11,622,440 | 220,349 | 34,541 | 254,891 | 475,136 | 469,165 | 469,633 | 10,896,546 | 475,136 | 34,506 | 440,631 | 10,455,916 | 32,137 | 2,005 | 34,143 | 363 |
| 5 | 3.5% | 10,209,908 | 200,816 | 228,015 | 30,804 | - | 459,636 | 11,401,448 | 220,992 | 33,899 | 254,891 | 459,636 | 452,427 | 452,991 | 10,455,916 | 459,636 | 33,110 | 426,525 | 10,029,390 | 30,804 | 1,965 | 32,769 | 341 |
| 6 | 3.5% | 9,794,834 | 196,705 | 218,369 | 29,514 | - | 444,587 | 11,179,812 | 221,637 | 33,254 | 254,891 | 444,587 | 436,233 | 436,886 | 10,029,390 | 444,587 | 31,760 | 412,827 | 9,616,563 | 29,514 | 1,925 | 31,439 | 321 |
| 7 | 3.5% | 9,393,121 | 192,678 | 209,035 | 28,265 | - | 429,978 | 10,957,529 | 222,283 | 32,608 | 254,891 | 429,978 | 420,567 | 421,301 | 9,616,563 | 429,978 | 30,452 | 399,526 | 9,217,037 | 28,265 | 1,885 | 30,150 | 302 |
| 8 | 3.5% | 9,004,381 | 188,733 | 200,007 | 27,057 | - | 415,797 | 10,734,597 | 222,931 | 31,959 | 254,891 | 415,797 | 405,412 | 406,221 | 9,217,037 | 415,797 | 29,187 | 386,609 | 8,830,428 | 27,057 | 1,845 | 28,902 | 285 |
| 9 | 3.5% | 8,628,238 | 184,869 | 191,274 | 25,888 | - | 402,031 | 10,511,016 | 223,582 | 31,309 | 254,891 | 402,031 | 390,752 | 391,630 | 8,830,428 | 402,031 | 27,963 | 374,068 | 8,456,360 | 25,888 | 1,805 | 27,693 | 270 |
| 10 | 3.5% | 8,264,326 | 181,084 | 182,827 | 24,758 | - | 388,670 | 10,286,782 | 224,234 | 30,657 | 254,891 | 388,670 | 376,573 | 377,513 | 8,456,360 | 388,670 | 26,778 | 361,891 | 8,094,469 | 24,758 | 1,765 | 26,523 | 256 |
| 11 | 3.5% | 7,912,290 | 177,377 | 174,660 | 23,665 | - | 375,701 | 10,061,894 | 224,888 | 30,003 | 254,891 | 375,701 | 362,860 | 363,856 | 8,094,469 | 375,701 | 25,632 | 350,069 | 7,744,400 | 23,665 | 1,725 | 25,389 | 243 |
| 12 | 3.5% | 7,571,781 | 173,746 | 166,763 | 22,607 | - | 363,116 | 9,836,351 | 225,544 | 29,347 | 254,891 | 363,116 | 349,597 | 350,644 | 7,744,400 | 363,116 | 24,524 | 338,592 | 7,405,808 | 22,607 | 1,685 | 24,292 | 232 |
| 13 | 3.5% | 7,242,465 | 170,188 | 159,128 | 21,585 | - | 350,902 | 9,610,149 | 226,201 | 28,689 | 254,891 | 350,902 | 336,771 | 337,864 | 7,405,808 | 350,902 | 23,452 | 327,450 | 7,078,358 | 21,585 | 1,644 | 23,230 | 222 |
| 14 | 3.5% | 6,924,013 | 166,704 | 151,748 | 20,597 | - | 339,049 | 9,383,288 | 226,861 | 28,030 | 254,891 | 339,049 | 324,369 | 325,503 | 7,078,358 | 339,049 | 22,415 | 316,634 | 6,761,724 | 20,597 | 1,604 | 22,201 | 213 |
| 15 | 3.5% | 6,616,106 | 163,291 | 144,615 | 19,642 | - | 327,548 | 9,155,765 | 227,523 | 27,368 | 254,891 | 327,548 | 312,377 | 313,547 | 6,761,724 | 327,548 | 21,412 | 306,136 | 6,455,588 | 19,642 | 1,564 | 21,206 | 206 |
| 16 | 3.5% | 6,318,436 | 159,948 | 137,722 | 18,718 | - | 316,389 | 8,927,579 | 228,186 | 26,704 | 254,891 | 316,389 | 300,782 | 301,984 | 6,455,588 | 316,389 | 20,443 | 295,946 | 6,159,642 | 18,718 | 1,524 | 20,243 | 200 |
| 17 | 3.5% | 6,030,700 | 156,673 | 131,062 | 17,826 | - | 305,562 | 8,698,727 | 228,852 | 26,039 | 254,891 | 305,562 | 289,572 | 290,802 | 6,159,642 | 305,562 | 19,506 | 286,057 | 5,873,585 | 17,826 | 1,484 | 19,310 | 195 |
| 18 | 3.5% | 5,752,605 | 153,466 | 124,628 | 16,964 | - | 295,059 | 8,469,207 | 229,520 | 25,371 | 254,891 | 295,059 | 278,736 | 279,989 | 5,873,585 | 295,059 | 18,600 | 276,459 | 5,597,126 | 16,964 | 1,444 | 18,408 | 192 |
| 19 | 3.5% | 5,483,868 | 150,324 | 118,413 | 16,131 | - | 284,869 | 8,239,018 | 230,189 | 24,702 | 254,891 | 284,869 | 268,260 | 269,534 | 5,597,126 | 284,869 | 17,724 | 267,145 | 5,329,981 | 16,131 | 1,404 | 17,535 | 189 |
| 20 | 3.5% | 5,224,210 | 147,246 | 112,411 | 15,327 | - | 274,985 | 8,008,158 | 230,860 | 24,030 | 254,891 | 274,985 | 258,135 | 259,425 | 5,329,981 | 274,985 | 16,878 | 258,106 | 5,071,875 | 15,327 | 1,364 | 16,691 | 188 |
| 21 | 3.5% | 4,973,363 | 144,232 | 106,615 | 14,550 | - | 265,397 | 7,776,624 | 231,534 | 23,357 | 254,891 | 265,397 | 248,348 | 249,652 | 5,071,875 | 265,397 | 16,061 | 249,336 | 4,822,539 | 14,550 | 1,324 | 15,874 | 187 |
| 22 | 3.5% | 4,731,064 | 141,279 | 101,020 | 13,800 | - | 256,098 | 7,544,415 | 232,209 | 22,682 | 254,891 | 256,098 | 238,891 | 240,204 | 4,822,539 | 256,098 | 15,271 | 240,827 | 4,581,711 | 13,800 | 1,283 | 15,083 | 188 |
| 23 | 3.5% | 4,497,060 | 138,387 | 95,618 | 13,076 | - | 247,080 | 7,311,529 | 232,886 | 22,005 | 254,891 | 247,080 | 229,751 | 231,072 | 4,581,711 | 247,080 | 14,509 | 232,571 | 4,349,140 | 13,076 | 1,243 | 14,319 | 190 |
| 24 | 3.5% | 4,271,102 | 135,553 | 90,405 | 12,376 | - | 238,335 | 7,077,964 | 233,565 | 21,325 | 254,891 | 238,335 | 220,919 | 222,244 | 4,349,140 | 238,335 | 13,772 | 224,562 | 4,124,578 | 12,376 | 1,203 | 13,580 | 193 |
| 25 | 3.5% | 4,036,159 | 132,778 | 85,374 | 11,702 | 10,115 | 239,969 | 6,843,717 | 234,247 | 20,644 | 254,891 | 239,969 | 221,732 | 223,118 | 4,124,578 | 239,969 | 13,061 | 226,908 | 3,897,670 | 11,702 | 1,163 | 12,865 | 196 |
| 26 | 3.5% | 3,809,467 | 130,060 | 80,521 | 11,051 | 9,706 | 231,337 | 6,608,787 | 234,930 | 19,961 | 254,891 | 231,337 | 213,081 | 214,467 | 3,897,670 | 231,337 | 12,343 | 218,995 | 3,678,675 | 11,051 | 1,123 | 12,174 | 169 |
| 27 | 3.5% | 3,590,775 | 127,397 | 75,839 | 10,422 | 9,311 | 222,969 | 6,373,172 | 235,615 | 19,276 | 254,891 | 222,969 | 204,725 | 206,108 | 3,678,675 | 222,969 | 11,649 | 211,320 | 3,467,355 | 10,422 | 1,083 | 11,505 | 144 |
| 28 | 3.5% | 3,379,842 | 124,789 | 71,324 | 9,816 | 8,928 | 214,857 | 6,136,870 | 236,302 | 18,588 | 254,891 | 214,857 | 196,654 | 198,032 | 3,467,355 | 214,857 | 10,980 | 203,877 | 3,263,478 | 9,816 | 1,043 | 10,859 | 121 |
| 29 | 3.5% | 3,176,432 | 122,234 | 66,971 | 9,232 | 8,558 | 206,994 | 5,899,878 | 236,992 | 17,899 | 254,891 | 206,994 | 188,859 | 190,229 | 3,263,478 | 206,994 | 10,334 | 196,660 | 3,066,818 | 9,232 | 1,003 | 10,235 | 100 |
| 30 | 3.5% | 2,980,317 | 119,731 | 62,774 | 8,668 | 8,199 | 199,373 | 5,662,195 | 237,683 | 17,208 | 254,891 | 199,373 | 181,331 | 182,692 | 3,066,818 | 199,373 | 9,712 | 189,661 | 2,877,157 | 8,668 | 963 | 9,631 | 81 |
| 31 | 3.5% | 2,791,274 | 117,280 | 58,729 | 8,125 | 7,852 | 191,986 | 5,423,819 | 238,376 | 16,515 | 254,891 | 191,986 | 174,062 | 175,412 | 2,877,157 | 191,986 | 9,111 | 182,875 | 2,694,282 | 8,125 | 923 | 9,048 | 63 |
| 32 | 3.5% | 2,609,087 | 114,879 | 54,831 | 7,602 | 7,517 | 184,828 | 5,184,748 | 239,071 | 15,819 | 254,891 | 184,828 | 167,043 | 168,381 | 2,694,282 | 184,828 | 8,532 | 176,296 | 2,517,986 | 7,602 | 882 | 8,484 | 48 |
| 33 | 3.5% | 2,433,546 | 112,527 | 51,075 | 7,097 | 7,192 | 177,892 | 4,944,979 | 239,769 | 15,122 | 254,891 | 177,892 | 160,267 | 161,590 | 2,517,986 | 177,892 | 7,974 | 169,918 | 2,348,068 | 7,097 | 842 | 7,939 | 34 |
| 34 | 3.5% | 2,264,447 | 110,223 | 47,458 | 6,611 | 6,878 | 171,171 | 4,704,511 | 240,468 | 14,423 | 254,891 | 171,171 | 153,725 | 155,033 | 2,348,068 | 171,171 | 7,436 | 163,735 | 2,184,333 | 6,611 | 802 | 7,413 | 22 |
| 35 | 3.5% | 2,101,592 | 107,967 | 43,975 | 6,143 | 6,574 | 164,659 | 4,463,342 | 241,169 | 13,721 | 254,891 | 164,659 | 147,410 | 148,702 | 2,184,333 | 164,659 | 6,917 | 157,742 | 2,026,590 | 6,143 | 762 | 6,905 | 12 |
| 36 | 3.5% | 1,944,788 | 105,756 | 40,622 | 5,692 | 6,280 | 158,351 | 4,221,469 | 241,873 | 13,018 | 254,891 | 158,351 | 141,316 | 142,589 | 2,026,590 | 158,351 | 6,418 | 151,934 | 1,874,656 | 5,692 | 722 | 6,414 | 4 |
| 37 | 3.5% | 1,793,847 | 103,591 | 37,395 | 5,258 | 5,997 | 152,241 | 3,978,891 | 242,578 | 12,313 | 254,891 | 152,241 | 135,434 | 136,689 | 1,874,656 | 152,241 | 5,936 | 146,305 | 1,728,352 | 5,258 | 682 | 5,940 | (3) |
| 38 | 3.5% | 1,648,589 | 101,470 | 34,290 | 4,840 | 5,722 | 146,323 | 3,735,605 | 243,286 | 11,605 | 254,891 | 146,323 | 129,758 | 130,993 | 1,728,352 | 146,323 | 5,473 | 140,849 | 1,587,503 | 4,840 | 642 | 5,482 | (9) |
| 39 | 3.5% | 1,508,835 | 99,393 | 31,303 | 4,438 | 5,457 | 140,591 | 3,491,610 | 243,995 | 10,896 | 254,891 | 140,591 | 124,281 | 125,495 | 1,587,503 | 140,591 | 5,027 | 135,564 | 1,451,939 | 4,438 | 602 | 5,040 | (13) |
| 40 | 3.5% | 1,374,415 | 97,358 | 28,430 | 4,052 | 5,200 | 135,040 | 3,246,903 | 244,707 | 10,184 | 254,891 | 135,040 | 118,998 | 120,190 | 1,451,939 | 135,040 | 4,598 | 130,442 | 1,321,497 | 4,052 | 562 | 4,613 | (15) |
| 41 | 3.5% | 1,245,161 | 95,365 | 25,668 | 3,680 | 4,952 | 129,665 | 3,001,483 | 245,421 | 9,470 | 254,891 | 129,665 | 113,901 | 115,071 | 1,321,497 | 129,665 | 4,185 | 125,481 | 1,196,016 | 3,680 | 521 | 4,201 | (17) |
| 42 | 3.5% | 1,120,912 | 93,412 | 23,014 | 3,322 | 4,713 | 124,461 | 2,755,346 | 246,136 | 8,754 | 254,891 | 124,461 | 108,985 | 110,131 | 1,196,016 | 124,461 | 3,787 | 120,674 | 1,075,342 | 3,322 | 481 | 3,804 | (16) |
| 43 | 3.5% | 1,001,510 | 91,500 | 20,463 | 2,979 | 4,481 | 119,424 | 2,508,492 | 246,854 | 8,036 | 254,891 | 119,424 | 104,243 | 105,366 | 1,075,342 | 119,424 | 3,405 | 116,018 | 959,324 | 2,979 | 441 | 3,420 | (15) |
| 44 | 3.5% | 886,801 | 89,627 | 18,014 | 2,649 | 4,258 | 114,547 | 2,260,917 | 247,574 | 7,316 | 254,891 | 114,547 | 99,671 | 100,770 | 959,324 | 114,547 | 3,038 | 111,509 | 847,815 | 2,649 | 401 | 3,050 | (12) |
| 45 | 3.5% | 776,638 | 87,792 | 15,661 | 2,332 | 4,042 | 109,827 | 2,012,621 | 248,296 | 6,594 | 254,891 | 109,827 | 95,262 | 96,336 | 847,815 | 109,827 | 2,685 | 107,142 | 740,673 | 2,332 | 361 | 2,693 | (8) |
| 46 | 3.5% | 670,877 | 85,994 | 13,403 | 2,027 | 3,834 | 105,259 | 1,763,600 | 249,021 | 5,870 | 254,891 | 105,259 | 91,011 | 92,061 | 740,673 | 105,259 | 2,345 | 102,913 | 637,759 | 2,027 | 321 | 2,348 | (3) |
| 47 | 3.5% | 569,376 | 84,234 | 11,237 | 1,735 | 3,633 | 100,838 | 1,513,853 | 249,747 | 5,144 | 254,891 | 100,838 | 86,914 | 87,938 | 637,759 | 100,838 | 2,020 | 98,819 | 538,941 | 1,735 | 281 | 2,016 | 4 |
| 48 | 3.5% | 472,000 | 82,509 | 9,159 | 1,454 | 3,438 | 96,561 | 1,263,378 | 250,475 | 4,415 | 254,891 | 96,561 | 82,965 | 83,963 | 538,941 | 96,561 | 1,707 | 94,855 | 444,086 | 1,454 | 241 | 1,695 | 12 |
| 49 | 3.5% | 378,617 | 80,820 | 7,167 | 1,186 | 3,251 | 92,423 | 1,012,172 | 251,206 | 3,685 | 254,891 | 92,423 | 79,159 | 80,132 | 444,086 | 92,423 | 1,406 | 91,017 | 353,069 | 1,186 | 201 | 1,386 | 20 |
| 50 | 3.5% | 289,098 | 79,166 | 5,257 | 928 | 3,070 | 88,420 | 760,233 | 251,939 | 2,952 | 254,891 | 88,420 | 75,492 | 76,438 | 353,069 | 88,420 | 1,118 | 87,302 | 265,767 | 928 | 160 | 1,088 | 30 |
| 51 | 3.5% | 203,319 | 77,545 | 3,428 | 680 | 2,895 | 84,549 | 507,560 | 252,673 | 2,217 | 254,891 | 84,549 | 71,958 | 72,879 | 265,767 | 84,549 | 842 | 83,707 | 182,059 | 680 | 120 | 801 | 41 |
| 52 | 3.5% | 121,158 | 75,957 | 1,677 | 444 | 2,727 | 80,804 | 254,150 | 253,410 | 1,480 | 254,891 | 80,804 | 68,554 | 69,449 | 182,059 | 80,804 | 577 | 80,228 | 101,831 | 444 | 80 | 524 | 53 |
| 53 | 3.5% | 42,499 | 74,402 | 0 | 217 | 2,565 | 77,184 | - | 254,150 | 741 | 254,891 | 77,184 | 65,276 | 66,144 | 101,831 | 77,184 | 322 | 76,861 | 24,970 | 217 | 40 | 257 | 65 |
| 54 | 3.5% | - | - | 0 | 0 | 2,408 | 2,408 | - | - | - | - | 2,408 | 2,030 | 2,058 | 24,970 | 2,408 | 79 | 2,329 | 22,641 | 0 | - | 0 | 79 |
| 55 | 3.5% | - | - | - | - | 2,257 | 2,257 | - | - | - | - | 2,257 | 1,897 | 1,923 | 22,641 | 2,257 | 72 | 2,186 | 20,455 | - | - | - | 72 |
| 56 | 3.5% | - | - | - | - | 2,112 | 2,112 | - | - | - | - | 2,112 | 1,769 | 1,794 | 20,455 | 2,112 | 65 | 2,047 | 18,408 | - | - | - | 65 |
| 57 | 3.5% | - | - | - | - | 1,972 | 1,972 | - | - | - | - | 1,972 | 1,646 | 1,670 | 18,408 | 1,972 | 58 | 1,913 | 16,495 | - | - | - | 58 |
| 58 | 3.5% | - | - | - | - | 1,837 | 1,837 | - | - | - | - | 1,837 | 1,529 | 1,551 | 16,495 | 1,837 | 52 | 1,784 | 14,711 | - | - | - | 52 |
| 59 | 3.5% | - | - | - | - | 1,707 | 1,707 | - | - | - | - | 1,707 | 1,416 | 1,437 | 14,711 | 1,707 | 47 | 1,660 | 13,051 | - | - | - | 47 |
| 60 | 3.5% | - | - | - | - | 1,581 | 1,581 | - | - | - | - | 1,581 | 1,308 | 1,328 | 13,051 | 1,581 | 41 | 1,540 | 11,511 | - | - | - | 41 |
| 61 | 3.5% | - | - | - | - | 1,461 | 1,461 | - | - | - | - | 1,461 | 1,205 | 1,223 | 11,511 | 1,461 | 36 | 1,424 | 10,087 | - | - | - | 36 |
| 62 | 3.5% | - | - | - | - | 1,345 | 1,345 | - | - | - | - | 1,345 | 1,105 | 1,123 | 10,087 | 1,345 | 32 | 1,313 | 8,774 | - | - | - | 32 |
| 63 | 3.5% | - | - | - | - | 1,233 | 1,233 | - | - | - | - | 1,233 | 1,010 | 1,026 | 8,774 | 1,233 | 28 | 1,205 | 7,569 | - | - | - | 28 |
| 64 | 3.5% | - | - | - | - | 1,126 | 1,126 | - | - | - | - | 1,126 | 919 | 934 | 7,569 | 1,126 | 24 | 1,102 | 6,467 | - | - | - | 24 |
| 65 | 3.5% | - | - | - | - | 1,022 | 1,022 | - | - | - | - | 1,022 | 832 | 846 | 6,467 | 1,022 | 20 | 1,002 | 5,465 | - | - | - | 20 |
| 66 | 3.5% | - | - | - | - | 923 | 923 | - | - | - | - | 923 | 749 | 762 | 5,465 | 923 | 17 | 906 | 4,560 | - | - | - | 17 |
| 67 | 3.5% | - | - | - | - | 828 | 828 | - | - | - | - | 828 | 670 | 681 | 4,560 | 828 | 14 | 813 | 3,746 | - | - | - | 14 |
| 68 | 3.5% | - | - | - | - | 736 | 736 | - | - | - | - | 736 | 593 | 604 | 3,746 | 736 | 12 | 724 | 3,022 | - | - | - | 12 |
| 69 | 3.5% | - | - | - | - | 648 | 648 | - | - | - | - | 648 | 521 | 530 | 3,022 | 648 | 10 | 638 | 2,384 | - | - | - | 10 |
| 70 | 3.5% | - | - | - | - | 563 | 563 | - | - | - | - | 563 | 451 | 459 | 2,384 | 563 | 8 | 556 | 1,829 | - | - | - | 8 |
| 71 | 3.5% | - | - | - | - | 482 | 482 | - | - | - | - | 482 | 385 | 392 | 1,829 | 482 | 6 | 476 | 1,352 | - | - | - | 6 |
| 72 | 3.5% | - | - | - | - | 404 | 404 | - | - | - | - | 404 | 322 | 328 | 1,352 | 404 | 4 | 400 | 953 | - | - | - | 4 |
| 73 | 3.5% | - | - | - | - | 329 | 329 | - | - | - | - | 329 | 261 | 266 | 953 | 329 | 3 | 326 | 626 | - | - | - | 3 |
| 74 | 3.5% | - | - | - | - | 258 | 258 | - | - | - | - | 258 | 204 | 208 | 626 | 258 | 2 | 256 | 371 | - | - | - | 2 |
| 75 | 3.5% | - | - | - | - | 189 | 189 | - | - | - | - | 189 | 149 | 152 | 371 | 189 | 1 | 188 | 183 | - | - | - | 1 |
| 76 | 3.5% | - | - | - | - | 123 | 123 | - | - | - | - | 123 | 97 | 99 | 183 | 123 | 1 | 123 | 60 | - | - | - | 1 |
| 77 | 3.5% | - | - | - | - | 60 | 60 | - | - | - | - | 60 | 47 | 48 | 60 | 60 | 0 | 60 | (0) | - | - | - | 0 |
| 78 | 3.5% | - | - | - | - | 0 | 0 | - | - | - | - | 0 | 0 | 0 | (0) | 0 | (0) | 0 | (0) | - | - | - | (0) |
| **Total** | | | **7,095,183** | **5,084,534** | **694,533** | **192,946** | **13,067,196** | | **12,500,000** | **1,009,212** | **13,509,212** | | **12,307,315** | **12,364,711** | | **13,067,196** | **759,881** | **12,307,315** | | **694,533** | **57,396** | **751,929** | **7,952** |
| | | | | | | | | | | | | | **WW RM Fair Value** | | | | | | | | | | |
| | | | | | | | | | | | | | 98.5% | 98.9% | | | | | | | | | |

Wilary Winn Risk Management LLC

**ABC Credit Union**
**Fair Value Amortization Schedule**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Credit Adjustment** | 135,755 | 25,689 | 61,939 | 254,799 | 585,997 | 124,686 | 1,188,864 | | | | | | | |
| **Interest Rate Adjustment** | (722,710) | 62,218 | 4,869 | (38,474) | 321,288 | 270,429 | (102,380) | (6,000) | **(108,380)** | 2,500,000 | (125,000) | (60,000) | **2,315,000** | **(2,423,380)** |
| **Fair Value Adjustment** | (586,955) | 87,906 | 66,808 | 216,325 | 907,285 | 395,115 | 1,086,484 | | | | | | | |
| **SYD Amortization (mos)** | 98 | 43 | 31 | 77 | 43 | 24 | | 13 | | 60 | 13 | 17 | | |

| Month | Fixed Rate Mortgage | Home Equity | HELOC | Member Business Loans | Auto Loans | Other Consumer Loans | Total Loans | Deposits in Commercial Banks, S&Ls, Savings Banks | **Income** | Core Deposit Intangible | Share Certificates | IRA/KEOGH Certificates | **Expense** | **Net** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | | | | | | | |
| 1 | (14,600) | 2,828 | 304 | (987) | 14,604 | 21,634 | 23,784 | (857) | **22,927** | 81,967 | (17,857) | (6,667) | **57,443** | **(34,517)** |
| 2 | (14,451) | 2,762 | 294 | (974) | 14,264 | 20,733 | 22,629 | (791) | **21,838** | 80,601 | (16,484) | (6,275) | **57,843** | **(36,005)** |
| 3 | (14,302) | 2,697 | 285 | (961) | 13,925 | 19,831 | 21,474 | (725) | **20,749** | 79,235 | (15,110) | (5,882) | **58,243** | **(37,494)** |
| 4 | (14,153) | 2,631 | 275 | (948) | 13,585 | 18,930 | 20,319 | (659) | **19,660** | 77,869 | (13,736) | (5,490) | **58,642** | **(38,982)** |
| 5 | (14,004) | 2,565 | 265 | (935) | 13,245 | 18,029 | 19,165 | (593) | **18,571** | 76,503 | (12,363) | (5,098) | **59,042** | **(40,471)** |
| 6 | (13,855) | 2,499 | 255 | (922) | 12,906 | 17,127 | 18,010 | (527) | **17,482** | 75,137 | (10,989) | (4,706) | **59,442** | **(41,959)** |
| 7 | (13,706) | 2,433 | 245 | (910) | 12,566 | 16,226 | 16,855 | (462) | **16,393** | 73,770 | (9,615) | (4,314) | **59,841** | **(43,448)** |
| 8 | (13,557) | 2,368 | 236 | (897) | 12,227 | 15,324 | 15,700 | (396) | **15,304** | 72,404 | (8,242) | (3,922) | **60,241** | **(44,937)** |
| 9 | (13,408) | 2,302 | 226 | (884) | 11,887 | 14,423 | 14,545 | (330) | **14,216** | 71,038 | (6,868) | (3,529) | **60,641** | **(46,425)** |
| 10 | (13,259) | 2,236 | 216 | (871) | 11,547 | 13,521 | 13,390 | (264) | **13,127** | 69,672 | (5,495) | (3,137) | **61,040** | **(47,914)** |
| 11 | (13,110) | 2,170 | 206 | (858) | 11,208 | 12,620 | 12,235 | (198) | **12,038** | 68,306 | (4,121) | (2,745) | **61,440** | **(49,402)** |
| 12 | (12,961) | 2,105 | 196 | (846) | 10,868 | 11,719 | 11,081 | (132) | **10,949** | 66,940 | (2,747) | (2,353) | **61,840** | **(50,891)** |
| 13 | (12,812) | 2,039 | 187 | (833) | 10,528 | 10,817 | 9,926 | (66) | **9,860** | 65,574 | (1,374) | (1,961) | **62,239** | **(52,379)** |
| 14 | (12,663) | 1,973 | 177 | (820) | 10,189 | 9,916 | 8,771 | - | **8,771** | 64,208 | - | (1,569) | **62,639** | **(53,868)** |
| 15 | (12,514) | 1,907 | 167 | (807) | 9,849 | 9,014 | 7,616 | - | **7,616** | 62,842 | - | (1,176) | **61,665** | **(54,049)** |
| 16 | (12,365) | 1,842 | 157 | (794) | 9,510 | 8,113 | 6,461 | - | **6,461** | 61,475 | - | (784) | **60,691** | **(54,230)** |
| 17 | (12,216) | 1,776 | 147 | (782) | 9,170 | 7,211 | 5,306 | - | **5,306** | 60,109 | - | (392) | **59,717** | **(54,411)** |
| 18 | (12,068) | 1,710 | 137 | (769) | 8,830 | 6,310 | 4,152 | - | **4,152** | 58,743 | - | - | **58,743** | **(54,592)** |
| 19 | (11,919) | 1,644 | 128 | (756) | 8,491 | 5,409 | 2,997 | - | **2,997** | 57,377 | - | - | **57,377** | **(54,380)** |
| 20 | (11,770) | 1,578 | 118 | (743) | 8,151 | 4,507 | 1,842 | - | **1,842** | 56,011 | - | - | **56,011** | **(54,169)** |
| 21 | (11,621) | 1,513 | 108 | (730) | 7,811 | 3,606 | 687 | - | **687** | 54,645 | - | - | **54,645** | **(53,958)** |
| 22 | (11,472) | 1,447 | 98 | (717) | 7,472 | 2,704 | (468) | - | **(468)** | 53,279 | - | - | **53,279** | **(53,747)** |
| 23 | (11,323) | 1,381 | 88 | (705) | 7,132 | 1,803 | (1,623) | - | **(1,623)** | 51,913 | - | - | **51,913** | **(53,535)** |
| 24 | (11,174) | 1,315 | 79 | (692) | 6,793 | 901 | (2,778) | - | **(2,778)** | 50,546 | - | - | **50,546** | **(53,324)** |
| 25 | (11,025) | 1,250 | 69 | (679) | 6,453 | - | (3,932) | - | **(3,932)** | 49,180 | - | - | **49,180** | **(53,113)** |
| 26 | (10,876) | 1,184 | 59 | (666) | 6,113 | - | (4,186) | - | **(4,186)** | 47,814 | - | - | **47,814** | **(52,000)** |
| 27 | (10,727) | 1,118 | 49 | (653) | 5,774 | - | (4,439) | - | **(4,439)** | 46,448 | - | - | **46,448** | **(50,887)** |
| 28 | (10,578) | 1,052 | 39 | (641) | 5,434 | - | (4,693) | - | **(4,693)** | 45,082 | - | - | **45,082** | **(49,775)** |
| 29 | (10,429) | 987 | 29 | (628) | 5,094 | - | (4,946) | - | **(4,946)** | 43,716 | - | - | **43,716** | **(48,662)** |
| 30 | (10,280) | 921 | 20 | (615) | 4,755 | - | (5,200) | - | **(5,200)** | 42,350 | - | - | **42,350** | **(47,549)** |
| 31 | (10,131) | 855 | 10 | (602) | 4,415 | - | (5,453) | - | **(5,453)** | 40,984 | - | - | **40,984** | **(46,437)** |
| 32 | (9,982) | 789 | - | (589) | 4,076 | - | (5,706) | - | **(5,706)** | 39,617 | - | - | **39,617** | **(45,324)** |
| 33 | (9,833) | 723 | - | (577) | 3,736 | - | (5,950) | - | **(5,950)** | 38,251 | - | - | **38,251** | **(44,201)** |
| 34 | (9,684) | 658 | - | (564) | 3,396 | - | (6,194) | - | **(6,194)** | 36,885 | - | - | **36,885** | **(43,079)** |
| 35 | (9,535) | 592 | - | (551) | 3,057 | - | (6,437) | - | **(6,437)** | 35,519 | - | - | **35,519** | **(41,956)** |
| 36 | (9,386) | 526 | - | (538) | 2,717 | - | (6,681) | - | **(6,681)** | 34,153 | - | - | **34,153** | **(40,834)** |
| 37 | (9,237) | 460 | - | (525) | 2,377 | - | (6,924) | - | **(6,924)** | 32,787 | - | - | **32,787** | **(39,711)** |
| 38 | (9,088) | 395 | - | (512) | 2,038 | - | (7,168) | - | **(7,168)** | 31,421 | - | - | **31,421** | **(38,589)** |
| 39 | (8,939) | 329 | - | (500) | 1,698 | - | (7,412) | - | **(7,412)** | 30,055 | - | - | **30,055** | **(37,466)** |
| 40 | (8,790) | 263 | - | (487) | 1,359 | - | (7,655) | - | **(7,655)** | 28,689 | - | - | **28,689** | **(36,344)** |
| 41 | (8,641) | 197 | - | (474) | 1,019 | - | (7,899) | - | **(7,899)** | 27,322 | - | - | **27,322** | **(35,221)** |
| 42 | (8,492) | 132 | - | (461) | 679 | - | (8,142) | - | **(8,142)** | 25,956 | - | - | **25,956** | **(34,099)** |
| 43 | (8,343) | 66 | - | (448) | 340 | - | (8,386) | - | **(8,386)** | 24,590 | - | - | **24,590** | **(32,976)** |
| 44 | (8,194) | - | - | (436) | - | - | (8,630) | - | **(8,630)** | 23,224 | - | - | **23,224** | **(31,854)** |
| 45 | (8,045) | - | - | (423) | - | - | (8,468) | - | **(8,468)** | 21,858 | - | - | **21,858** | **(30,326)** |
| 46 | (7,896) | - | - | (410) | - | - | (8,306) | - | **(8,306)** | 20,492 | - | - | **20,492** | **(28,798)** |
| 47 | (7,747) | - | - | (397) | - | - | (8,144) | - | **(8,144)** | 19,126 | - | - | **19,126** | **(27,270)** |
| 48 | (7,598) | - | - | (384) | - | - | (7,982) | - | **(7,982)** | 17,760 | - | - | **17,760** | **(25,742)** |
| 49 | (7,449) | - | - | (372) | - | - | (7,821) | - | **(7,821)** | 16,393 | - | - | **16,393** | **(24,214)** |
| 50 | (7,300) | - | - | (359) | - | - | (7,659) | - | **(7,659)** | 15,027 | - | - | **15,027** | **(22,686)** |
| 51 | (7,151) | - | - | (346) | - | - | (7,497) | - | **(7,497)** | 13,661 | - | - | **13,661** | **(21,158)** |
| 52 | (7,002) | - | - | (333) | - | - | (7,335) | - | **(7,335)** | 12,295 | - | - | **12,295** | **(19,630)** |
| 53 | (6,853) | - | - | (320) | - | - | (7,173) | - | **(7,173)** | 10,929 | - | - | **10,929** | **(18,102)** |
| 54 | (6,704) | - | - | (307) | - | - | (7,012) | - | **(7,012)** | 9,563 | - | - | **9,563** | **(16,575)** |
| 55 | (6,555) | - | - | (295) | - | - | (6,850) | - | **(6,850)** | 8,197 | - | - | **8,197** | **(15,047)** |
| 56 | (6,406) | - | - | (282) | - | - | (6,688) | - | **(6,688)** | 6,831 | - | - | **6,831** | **(13,519)** |
| 57 | (6,257) | - | - | (269) | - | - | (6,526) | - | **(6,526)** | 5,464 | - | - | **5,464** | **(11,991)** |
| 58 | (6,108) | - | - | (256) | - | - | (6,364) | - | **(6,364)** | 4,098 | - | - | **4,098** | **(10,463)** |
| 59 | (5,959) | - | - | (243) | - | - | (6,203) | - | **(6,203)** | 2,732 | - | - | **2,732** | **(8,935)** |
| 60 | (5,810) | - | - | (231) | - | - | (6,041) | - | **(6,041)** | 1,366 | - | - | **1,366** | **(7,407)** |
| 61 | (5,661) | - | - | (218) | - | - | (5,879) | - | **(5,879)** | - | - | - | **-** | **(5,879)** |
| 62 | (5,512) | - | - | (205) | - | - | (5,717) | - | **(5,717)** | - | - | - | **-** | **(5,717)** |
| 63 | (5,363) | - | - | (192) | - | - | (5,556) | - | **(5,556)** | - | - | - | **-** | **(5,556)** |
| 64 | (5,214) | - | - | (179) | - | - | (5,394) | - | **(5,394)** | - | - | - | **-** | **(5,394)** |
| 65 | (5,065) | - | - | (167) | - | - | (5,232) | - | **(5,232)** | - | - | - | **-** | **(5,232)** |
| 66 | (4,916) | - | - | (154) | - | - | (5,070) | - | **(5,070)** | - | - | - | **-** | **(5,070)** |
| 67 | (4,767) | - | - | (141) | - | - | (4,908) | - | **(4,908)** | - | - | - | **-** | **(4,908)** |
| 68 | (4,618) | - | - | (128) | - | - | (4,747) | - | **(4,747)** | - | - | - | **-** | **(4,747)** |
| 69 | (4,469) | - | - | (115) | - | - | (4,585) | - | **(4,585)** | - | - | - | **-** | **(4,585)** |
| 70 | (4,320) | - | - | (102) | - | - | (4,423) | - | **(4,423)** | - | - | - | **-** | **(4,423)** |
| 71 | (4,171) | - | - | (90) | - | - | (4,261) | - | **(4,261)** | - | - | - | **-** | **(4,261)** |
| 72 | (4,023) | - | - | (77) | - | - | (4,099) | - | **(4,099)** | - | - | - | **-** | **(4,099)** |
| 73 | (3,874) | - | - | (64) | - | - | (3,938) | - | **(3,938)** | - | - | - | **-** | **(3,938)** |
| 74 | (3,725) | - | - | (51) | - | - | (3,776) | - | **(3,776)** | - | - | - | **-** | **(3,776)** |
| 75 | (3,576) | - | - | (38) | - | - | (3,614) | - | **(3,614)** | - | - | - | **-** | **(3,614)** |
| 76 | (3,427) | - | - | (26) | - | - | (3,452) | - | **(3,452)** | - | - | - | **-** | **(3,452)** |
| 77 | (3,278) | - | - | (13) | - | - | (3,290) | - | **(3,290)** | - | - | - | **-** | **(3,290)** |
| 78 | (3,129) | - | - | - | - | - | (3,129) | - | **(3,129)** | - | - | - | **-** | **(3,129)** |
| 79 | (2,980) | - | - | - | - | - | (2,980) | - | **(2,980)** | - | - | - | **-** | **(2,980)** |
| 80 | (2,831) | - | - | - | - | - | (2,831) | - | **(2,831)** | - | - | - | **-** | **(2,831)** |
| 81 | (2,682) | - | - | - | - | - | (2,682) | - | **(2,682)** | - | - | - | **-** | **(2,682)** |
| 82 | (2,533) | - | - | - | - | - | (2,533) | - | **(2,533)** | - | - | - | **-** | **(2,533)** |
| 83 | (2,384) | - | - | - | - | - | (2,384) | - | **(2,384)** | - | - | - | **-** | **(2,384)** |
| 84 | (2,235) | - | - | - | - | - | (2,235) | - | **(2,235)** | - | - | - | **-** | **(2,235)** |
| 85 | (2,086) | - | - | - | - | - | (2,086) | - | **(2,086)** | - | - | - | **-** | **(2,086)** |
| 86 | (1,937) | - | - | - | - | - | (1,937) | - | **(1,937)** | - | - | - | **-** | **(1,937)** |
| 87 | (1,788) | - | - | - | - | - | (1,788) | - | **(1,788)** | - | - | - | **-** | **(1,788)** |
| 88 | (1,639) | - | - | - | - | - | (1,639) | - | **(1,639)** | - | - | - | **-** | **(1,639)** |
| 89 | (1,490) | - | - | - | - | - | (1,490) | - | **(1,490)** | - | - | - | **-** | **(1,490)** |
| 90 | (1,341) | - | - | - | - | - | (1,341) | - | **(1,341)** | - | - | - | **-** | **(1,341)** |
| 91 | (1,192) | - | - | - | - | - | (1,192) | - | **(1,192)** | - | - | - | **-** | **(1,192)** |
| 92 | (1,043) | - | - | - | - | - | (1,043) | - | **(1,043)** | - | - | - | **-** | **(1,043)** |
| 93 | (894) | - | - | - | - | - | (894) | - | **(894)** | - | - | - | **-** | **(894)** |
| 94 | (745) | - | - | - | - | - | (745) | - | **(745)** | - | - | - | **-** | **(745)** |
| 95 | (596) | - | - | - | - | - | (596) | - | **(596)** | - | - | - | **-** | **(596)** |
| 96 | (447) | - | - | - | - | - | (447) | - | **(447)** | - | - | - | **-** | **(447)** |
| 97 | (298) | - | - | - | - | - | (298) | - | **(298)** | - | - | - | **-** | **(298)** |
| 98 | (149) | - | - | - | - | - | (149) | - | **(149)** | - | - | - | **-** | **(149)** |
| **Total** | **(722,710)** | **62,218** | **4,869** | **(38,474)** | **321,288** | **270,429** | **(102,380)** | **(6,000)** | **(108,380)** | **2,500,000** | **(125,000)** | **(60,000)** | **2,315,000** | **(2,423,380)** |

Wilary Winn Risk Management LLC

## Fair Value Loan Valuation Definitions

| | |
|---|---|
| Principal Balance: | Outstanding principal balance on the loan as of the valuation date. |
| # of Loans: | Count of loans |
| Avg FICO: | Weighted Average current FICO credit score. Weighted by balance and only loans with a valid credit score are included in the weighting. |
| Avg LTV*: | Weighted Average Loan to Value (LTV). Outstanding loan balance divided by the current appraised home value. Average is weighted by balance and only loans with a valid LTV are included in the weighting. The LTV shown here on the loans in second position is a Combined LTV which is the sum of the 1st mortgage plus the 2nd mortgage balance divided by the current appraised value. |
| WAC: | Weighted Average Coupon. This is the contractual rate of interest on the loan. |
| Age: | Number of months elapsed since the loan was originated. |
| WAM: | Weighted Average Maturity. Number of months remaining until the loan is due on the contractual loan payment schedule. |
| Avg Life: | The average number of years that the Principal Balance will remain outstanding. This calculated amount indicates how many years it will take to repay half of the outstanding Principal Balance. This calculation is dependent on the loan's scheduled amortization and our CPR% assumption. |
| CPR %: | Conditional Prepayment Rate. Annual % of expected voluntary and involuntary payoffs (defaults). CRR% plus CDR% = CPR%. CPR% compares to the PSA (Public Securities Association) standard prepayment speed and PSA of 100% equates to a 6% CPR% in month 30 and beyond. CPR% is also similar to an annualized SMM (Single Monthly Mortality) rate. A CPR% of 10% roughly indicates that 10% of the starting Principal Balance will be paid off by the end of a one year time period. |
| CRR %: | Conditional Repayment Rate. Annual amount of expected voluntary payoffs as a percentage of the principal amount outstanding at the beginning of the year. |

Appendix G

| | |
|---|---|
| CDR %: | Conditional Default Rate. Annual amount of expected defaults as a percentage of the principal amount outstanding at the beginning of the year. |
| Severity %: | Loss Severity expected on a loan that does go into default. This is equal to the liquidated Principal Balance minus any recovered amount divided by the Principal Balance. Severity % is the inverse of a recovery rate. |
| Future Loss %: | Future expected net cumulative losses expressed as a % of current Principal Balance. |
| Discount Rate: | Rate used to present value the expected gross cashflows back to the valuation date. The rate on used on the top two FICO score buckets (>719) are the observable current market rates. For FICO scores that are below 720, we have used a build-up methodology. Please see the report for more details on this methodology. |
| Fair Value %: | Fair Value dollar amount expressed as a percent of the current Principal Balance. |
| Fair Value $: | Present value of the expected future cashflows. Expected future gross cashflows are dependent on the contractual terms of the loan (interest rate, term), our repayment assumptions (CRR %), our default assumption (CDR %), and our loss Severity % assumptions. For accounting purposes, the gross cash flows are considered to be a single best estimate assumption. The gross cashflows are discounted using the Discount Rate. |
| Difference: | Fair Value $ minus Principal Balance. This difference is broken out further into a Credit Only Difference and a Discount Rate Difference. |
| Credit Only Difference: | The Fair Value Difference that arises only from our credit assumptions (CDR % and Severity %). This number is the total expected lifetime net losses discounted by the WAC on the loans. To estimate an annualized loss amount, take this Credit Only Difference amount divided by the Avg Life. |
| Discount Rate Difference: | The Fair Value Difference that arises only from our Discount Rate assumption. A positive Discount Rate Difference means that the interest rate (WAC) on the loans is higher than the current market interest rate environment. If WAC and Discount Rate were exactly the same, the Discount Rate Difference would be zero. |
| Contractual Cashflows: | The scheduled cashflows expected if the loan did not prepay or default. |
| Non-Accretable Cashflows: | The variance between the Contractual Cashflows and the total cashflows expected to collected. Total cashflows expected to be collected do take into account prepay, default, and loss assumptions. |