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### INTRODUCTION

Accounting for a bank merger or acquisition begins with determining the fair value of the acquired bank's equity, assets, and liabilities. Using this information, the acquirer records the acquisition at fair value, including any goodwill, or in rare circumstances, a bargain purchase.

Fair value of equity estimates are based on recent similar transactions, bank stock prices, and the use of discounted cash flow analyses.

Techniques used to estimate the fair value of assets vary by the type of asset. Fair value estimates for loans are derived using discounted cash flow analyses.

Liability fair values are calculated using discounted cash flow analyses. Non-maturity deposits are recorded at par. The related CDI is estimated using a discounted cash flow analysis.

The ongoing accounting involves amortization of purchase discounts, accretion of purchase premiums, and accounting for loans acquired with deteriorated credit quality.

#### **KEY TAKEAWAY**

Wilary Winn offers a complete set of merger-related valuation and accounting services, including determinations of fair value, true-ups of accretion, goodwill impairment testing, and accounting for loans with deteriorated credit quality.

#### HOW CAN WE HELP YOU?

Founded in 2003, Wilary Winn LLC and its sister company, Wilary Winn Risk Management LLC, provide independent, objective, fee-based advice to nearly 600 financial institutions located across the country.

#### We provide the following services:

#### **CECL & ALM**

Holistic solutions to measure, monitor and mitigate interest rate, liquidity, and credit risk on an integrated basis.

#### **MERGERS & ACQUISITIONS**

Independent, fee-based determinations of fair value for mergers and acquisitions.

#### **VALUATION OF LOAN SERVICING**

Comprehensive and cost-effective valuations of servicing arising from the sale of residential mortgage, SBA 7(a), auto, home equity and commercial loans.

#### **ADDITIONAL SERVICES**

Services to support our CECL, ALM, Fair Value and Loan Servicing product offerings.



## Accounting for Bank Acquisitions

Beginning in 2009, the fair value method must be used to account for business combinations. The accounting is detailed FAS ASC 805 *Business Combinations*. As of the acquisition date, an acquirer must record the assets, liabilities and equity of the institution it is acquiring at fair value. 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 ASC 820 *Fair Value Measurements and Disclosures*.

Wilary Winn notes that the business combination accounting rules can apply to a transaction that is not a full acquisition, including branch acquisitions, purchase and assumption agreements, etc.

Determining whether a financial institution has acquired a business or has consummated an asset purchase is a critical first step because:

- Goodwill is recognized in a business combination, but not in an asset acquisition;
- Acquisition costs are generally expensed as incurred by the buyer in a business combination, while the same costs are considered part of the acquisition cost in an asset acquisition; and
- Assets acquired and liabilities assumed in a business combination are measured at fair value, while
  assets acquired and liabilities assumed in an asset acquisition are measured by allocating the total
  cost of the net assets based on the fair values of the individual assets acquired and liabilities assumed.

Wilary Winn has performed over 250 merger and acquisition fair value engagements under the new business combination accounting rules. We have provided advice on numerous types of transactions including cash/stock deals, mergers of mutual entities, and FDIC-assisted transactions. Our focus in this white paper is on accounting for business combinations and 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. We begin with accounting requirements on Day One – the opening journal entry. We then discuss the rules for Day Two – the ongoing accounting.

## Day One Accounting

The first step a bank should take upon acquiring the assets of another financial institution is to determine whether it has acquired a business. We note that under FAS ASC 805, a business combination occurs when a buyer obtains control of a business through a transaction or other event. A "business" includes inputs and processes that are at least capable of producing outputs. However, a business need not include all of the inputs or processes that the seller used in operating the business if market participants are capable of acquiring the business and continuing to produce outputs, for example, by integrating the business with their own inputs and processes.<sup>1</sup>

When a financial institution enters into a transaction to combine with another entire institution, the result is clearly a business combination. Wilary Winn believes that the acquisition of a bank branch also meets the definition of a business combination because the branch has inputs, processes, and can produce outputs. On the other hand, an acquisition of a loan portfolio would not meet the definition of a business.

<sup>&</sup>lt;sup>1</sup> FAS ASC 805-10-55-5



Determining whether sufficient inputs and processes have been acquired can require considerable judgment and we encourage acquirers to discuss the accounting implications of an acquisition with their external accountants and primary regulators.

Once it has determined it has entered into a business combination, the acquiring bank must undertake several steps to ensure it has the information it needs to properly record the transaction.

#### It must determine the:

- Fair value of the consideration transferred;
- Fair value of the acquired bank's financial assets and liabilities;
- Fair value of the acquired banks non-financial assets and liabilities;
- Fair value of any intangible assets the most common being the core deposit intangible;
- Fair value of the tradename; and
- Amount of goodwill/bargain purchase gain resulting from the transaction.

#### FAIR VALUE OF THE CONSIDERATION TRANSFERRED

Wilary Winn employs three basic approaches to determine the fair value of the consideration provided to the seller – income, guideline transaction and market.

#### **INCOME APPROACH**

The income approach determines the value of a business or business ownership interest using one or more methods that convert anticipated benefits into a present single amount. The application of the income approach establishes value by methods that discount or capitalize earnings and/or cash flow, by a discount or capitalization rate that reflects market rate of return expectations, market conditions, and the relative risk of the investment. To determine the estimated value of the 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, Wilary Winn 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, to ensure comparability, we base our analysis on future earnings.

To determine the estimated value of the entity using an income approach, Wilary Winn estimates future earnings by developing ten-year pro-forma balance sheets and income statements using a fundamental analysis. We then develop an estimate for the entity's lifetime earnings – "the residual" using a Gordon growth model. We discount the resulting estimated cash flows back to the valuation date at a discount rate determined through the use of a Capital Asset Pricing Model ("CAPM") approach. See below for an example.



		Pro	ojected Stat	Abc Bar tement of I		Expense					
For the Period Ending	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Total Interest Income	17,931,936	19,143,504	21,099,703	23,626,459	26,660,572	30,285,701	34,482,237	39,233,998	44,477,558	47,307,430	
Total Interest Expense	2,492,177	2,867,982	3,699,755	4,958,089	6,604,773	8,483,830	10,373,253	12,139,335	14,158,850	15,413,230	
Net Interest Income	15,439,758	16,275,523	17,399,948	18,668,370	20,055,799	21,801,871	24,108,985	27,094,662	30,318,708	31,894,200	Ī
Total Non-interest Income	1,629,292	1,757,800	1,847,978	1,941,708	2,038,671	2,140,611	2,249,884	2,367,107	2,492,647	2,569,727	
Total Non-Interest Expense	11,692,749	12,229,988	13,071,307	13,976,219	14,949,741	15,997,294	17,124,739	18,338,412	19,645,164	21,052,405	
Net Operating Income	5,376,301	5,803,335	6,176,619	6,633,859	7,144,729	7,945,188	9,234,130	11,123,357	13,166,190	13,411,522	Ī
Realized Gain on Securities Provision for Loan and Lease Losses	605 214,212	605 794,770	605 1,058,011	605 1,313,039	605 1,464,006	605 1,603,131	605 1,665,311	605 1,803,027	605 1,931,822	605 1,879,366	
Pretax net Income	5,162,694	5,009,170	5,119,213	5,321,425	5,681,329	6,342,662	7,569,424	9,320,935	11,234,973	11,532,761	Ī
Income Taxes	1,090,151	1,057,733	1,080,970	1,123,669	1,199,666	1,339,312	1,598,355	1,968,202	2,372,369	2,435,250	I
Net Income (Loss)	4,072,543	3,951,437	4,038,243	4,197,757	4,481,663	5,003,350	5,971,070	7,352,733	8,862,604	9,097,511	
								Year 10 Earnings Cap 97,965,691	NPV @ 12.20% 61,528,952	Book Equity 40,227,581	

In the example above, using a final year growth rate of 2.15% we calculated a residual value of the acquired bank of \$98.0M. After discounting the estimated 10 years of earnings and the residual back to the valuation date at a rate of 12.20%, we derive a total value of \$61.5M or 1.53 times the acquired bank's book value of \$40.2M.

#### **GUIDELINE TRANSACTION APPROACH**

Under the guideline transaction approach, business appraisers seek to identify actual transactions of similar businesses sold. When using this approach, Wilary Winn obtains transaction information, including price-to-tangible book value, for recent acquisitions of banks with similar business operations, profitability, and size located in similar geographic areas to the acquirer. To calculate an adjusted market price to book value, we use the median price-to-tangible book value from our pool of deal results and adjust for differences in profitability.

In the example below, we derived a median deal value to tangible book ratio of 171.91. We then adjust the bank's specific performance to the industry by increasing the ROAA multiple from 0.96 to 1.07 (1.02 divided by 0.96). We adjust for efficiency similarly. We derive an average deal value to tangible book ratio of 0.92 which is the simple average of the ROAA multiple of 1.07 and the efficiency multiple of 0.77. Finally, we derive an adjusted deal value to tangible book ratio of 158.39 by multiplying the 0.92 by the industry deal value to tangible book ratio of 171.91. Finally, we multiply the adjusted deal value to tangible book ratio by the acquired bank's capital, resulting in an enterprise value of \$63.7M.

Buyer Name / Target Name	Transaction Date  10/31/2017 1/1/2018 6/19/2017 8/14/2017 7/31/2017	Assets 436,886 429,309 353,066 413,700 459,416	Equity / Assets 7.79% 3.82% 9.92% 9.11% 9.86%	Loans / Deposits 65.93% 59.65% 96.36% 87.44% 80.86%	NPA / Assets 6.15% 5.27% 0.65% 1.85% 2.79%	*LTM ROAA 1.25 0.48 1.16 0.85 1.06	69.45 56.01 67.91	Deal Value / Tangible Book 165.24 184.53 147.70 178.58 195.14
Acquirer Bank 6/Target Bank 6  Median	3/5/2018	434,797	10.88%	69.65% 75.26%	1.41% 2.32%	0.69	28.30	155.65 171.91
Abc Bank Abc Bank Financial Ratios Multiple (minimum of zero) Abc Bank Adjusted Price to Book Va *Most recent Last Twelve Month period		420,317	9.90%	95.20%	2.12%	1.02 1.07		0.92



#### MARKET VALUE APPROACH

Business appraisers also often use the guideline public company method to estimate fair value. Under this approach, Wilary Winn obtains financial information on the publicly traded banks with similar business operations, profitability, and size located in similar geographic areas to the acquirer. To estimate an adjusted market price-to-book value, we identify the median price- to-earnings and price-to-book ratios from our selected pool of publicly traded banks and then adjust for differences in return, growth, and a market control premium.

In the example below, we derived a median price to tangible book ratio of 1.07, which after adjusting for a control premium of 1.30 equals 1.40. We adjust the bank's specific performance to the industry by increasing the ROAA multiple from 0.96 to 1.19 (1.15 divided by 0.96). We adjust for growth similarly. We derive an average tangible book ratio of 1.16 which is the simple average of ROAA multiple of 1.19 and the growth rate multiple of 1.14. Finally, we derive an adjusted price to tangible book ratio of 1.63 by multiplying the 1.16 by the market control premium of 1.40. Finally, we multiply the adjusted price to tangible book ratio by the acquired bank's capital, resulting in a market value of \$65.4M.

					March 31	, 2018	December :	31, 2017
Company Name	State	Total Assets (in thousands)	5 Yr Average ROAA	5 Yr Average Growth	P/E Ratio - Trailing 4 Quarters	Price to Book Value	P/E Ratio - Trailing 4 Quarters	Price to Book Value
Bank 1	WI	1,215,281	1.15	5.00	12.33	1.49	13.26	1.60
Bank 2	WI	597,089	0.12	6.42	NM	0.44	NM	0.54
Bank 3	WI	909,557	1.09	7.88	11.54	1.15	10.71	1.14
Bank 4	OH	637,202	0.91	1.77	10.78	1.15	11.14	1.20
Bank 5	IN	591,979	1.13	3.11	13.39	1.54	10.95	1.20
Bank 6	OH	1,009,068	1.02	3.04	12.03	1.07	12.01	1.08
Bank 7	IL	1,092,000	0.82	5.34	8.38	0.89	8.62	0.88
Bank 8	OH	760,770	1.04	8.60	8.89	1.08	8.77	1.06
Bank 9	IN	1,055,616	0.91	2.20	11.16	1.04	11.85	1.10
Bank 10	OH	732,882	0.97	2.18	9.26	1.00	9.56	1.05
Bank 11	WI	1,244,035	0.96	16.36	15.86	1.74	12.37	1.42
Bank 12	WI	765,167	0.90	2.89	9.04	1.06	9.16	1.07
		837,362	0.96	4.06	11.16	1.07	10.95	1.09
Average Market Contro	ol Premiu	m				1.30		
Price to Book Value ad	justed for	Control Premium	1			1.40		
Abc Bank								
Abc Bank Weighted Av	erage RO	AA or Growth	1.15	4.62				
Multiple			1.19	1.14		1.16		
Abc Bank Adjusted Pri	ce to Bool	k Value				1.63		

As a final step, we compare and analyze the valuation results we derived under the three methods to reach an overall estimate of fair value.

From the example transaction above, after weighting the three approaches, we derive an overall value of the acquired bank of \$63.0M or 1.57 times the acquired bank's book equity.



	Base		Weighted
	Value	Weighting	Value
Overall Value of Abc Bank - Income Projected	61,528,952	50%	30,764,476
Overall Value of Abc Bank - Guideline Transaction	63,715,410	25%	15,928,853
Overall Value of Abc Bank - Market Valuation	65,373,193	25%	16,343,298
Overall Value of Abc Bank - Total Wtd Avg		100%	63,036,627
Book Value of Equity			40,227,581
Overall Price to Book Value			1.57

Our overall valuation results serve as a market comparison when the acquirer is paying cash. However, when a bank is acquiring another financial institution using its own stock, the valuation approaches are integral to properly accounting for the transaction.

#### FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES

The financial assets acquired and liabilities assumed typically consist of investments, loans, and deposits. Accrued interest receivable, accounts receivable, accrued interest payable and accounts payable are also considered to be financial assets or liabilities.

#### **INVESTMENTS**

The investments acquired generally consist of "vanilla" bonds and certificates of deposits. We can usually identify a price for the bonds using Bloomberg or another pricing service. We occasionally encounter illiquid securities, which we value using discounted cash flows. To determine the value of a CD, Wilary Winn discounts the expected life of asset cash flows using an estimated market interest rate.

#### **LOANS**

Wilary Winn believes determining the fair value of the loans is one of the most complex undertakings under the purchase accounting rules because 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 GAAP². The first 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 – net of the credit spread. We employ the second method. We begin with contractual cash flows per the loan agreement (e.g., interest rate, amortization term, payment, and loan term). We then modify the contractual cash flows based on our estimates the rates of prepayment, default and loss severity to be experienced prospectively. We discount the resulting expected cash flows back to the valuation date using a proprietary valuation model.

The valuation is performed at the loan level for commercial and residential real estate loans, at the cohort level for other types of loans, and is based on the objective attributes of the loan and current statistical performance variables used in the marketplace. Our prepayment, default and loss severity assumptions are applied based on the characteristics of the loan (type of loan – CRE vs. C&I, risk ranking – pass vs. substandard, etc.).

<sup>&</sup>lt;sup>2</sup> FAS ASC 820-10-55-4



We derive our expected prepayments using a conditional repayment rate (CRR), which is the annual amount of expected voluntary payoffs as a percentage of the principal amount outstanding at the beginning of the year. We model our defaults using a conditional default rate (CDR), which is the annual amount of expected defaults as a percentage of the principal amount outstanding at the beginning of the year. Finally, our loss severity is equal to the liquidated principal balance minus any recovered amount divided by the principal balance. The combination of the CDR and loss severity derives our future lifetime loss assumptions.

For larger loans such as those collateralized by commercial real estate, we rely on our client's estimates of expected credit losses or reserve percentages – especially loans with lower credit quality. In our experience, banks typically review these loans in detail as part of their credit risk management and we rely on loss estimates from such reviews for our estimates.

The rates that we use to discount the modified contractual cash flows vary. We generally use the "all in" market interest rates to discount the expected cash flows for loans with a low risk ranking, 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. In determining the industry standard offered loan rates on commercial loans, we first obtain region specific Federal Home Loan Bank advance rates by term. We then typically add a spread to the advance rates based on the structure of the loan and the region where our client operates. We also benchmark market rates of return provided by the Federal Reserve's E.2 Survey of Terms of Business Lending reports. The reports provide average loan rates by loan risk level, term of the loan, and size of institution. On multi-family loans, we examine pricing spreads on Freddie Mac multifamily securities. Finally, we survey pricing schedules and market rate surveys provided by our clients and other lenders to determine market rates by loan type within our client's operating area.

For loans with high-risk rankings (watch-list, substandard, etc.), 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, liquidity, and increased costs to service. Because we are using expected cash flows net of credit losses, our discount rates for loans with high risk rankings do not include a credit spread. Wilary Winn 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).

Because the estimated fair value of the loans includes estimated credit losses, GAAP requires the allowance for loan losses to be recorded at zero on day one.

See the adjustments to loans in the example loan summary attached as Appendix C – the interest rate differential – \$1,309,051 in total and the credit loss discounts – \$2,777,849 in total. See the Day Two accounting section of this white paper for more details.

#### ACCOUNTS RECEIVABLE AND PAYABLE

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

#### 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 acquisition would have no "fair value" and would be recorded at zero in the Day One journal entry.



#### **DEPOSITS**

The fair value of the deposit accounts is dependent on whether they are time or non-time deposits. The non-time 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 the next page.

Wilary Winn estimates the value of time deposits in a manner similar to the one we use for certificate of deposit investments.

#### **ACCRUED LIABILITIES**

Wilary Winn recognizes that prior to the change in the accounting rules, many acquiring organizations had the acquired bank accrue the costs of the acquisition on its book prior to the acquisition 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 acquisition and any restructuring costs should flow through the income statement of the acquiring bank<sup>3</sup>.

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 acquisition are quite limited. An example would be a compensation arrangement that was in place before the acquisition was contemplated, and that just happens to be triggered as a result of the acquisition. The required payout can be accrued on the acquired bank's books as of the acquisition date. By way of contrast, a payout negotiated as part of the acquisition should run through the income statement of the acquiring bank.

The acquiring bank should also ensure that the acquired bank has properly accrued its expenses. In other words, the organization should ensure that the acquired bank 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 an acquisition. 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 bank'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 bank acquisition are:

Core deposit intangible

<sup>&</sup>lt;sup>3</sup> FAS ASC 805-10-25-23



- Customer relationships
- Value of the acquired bank's trade name
- Mortgage servicing rights

#### **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. Wilary Winn believes the core deposit intangible benefit depends on the type of account. For example, demand deposit accounts have very different economics and behavior than high rate money market deposits. 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. Wilary Winn estimates the value of the core deposit intangible through a discounted cash flow analysis.

#### **CUSTOMER RELATIONSHIPS**

Wilary Winn believes that the value of the customer relationships is imbedded in the purchase price of the institution. We believe it would be quite difficult to separately determine the value of customer relationships in terms of the ability to cross sell loans or deposits at lower cost, or higher rates of penetration, and therefore, have generally not seen such items recorded.

#### **ACQUIRED BANK'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 bank 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 bank plans to retire the name. For example, imagine the value to Pepsi of having the rights to the Coca-Cola brand name.

#### 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.

#### **INCOME TAXES**

The discussion regarding income taxes which follows is a brief summary of information contained in RSM's **A Guide to Business Combinations – Third Edition June 2016**. We thank them for allowing us to reference it in this white paper and encourage those who want more detail to consult the RSM guide or contact your tax practitioner.

For income tax purposes, business combinations are considered taxable or nontaxable. Asset acquisitions are taxable to seller. Nontaxable transactions take two forms. A transaction could be nontaxable because the financial institution is an S-Corporation or, in the case of C Corporation, the buyer purchases stock – a "stock acquisition". A stock acquisition can be turned into a taxable event if the buyer and seller elect to treat it as such under Section 338 of the U.S. Income Tax Code – a "338 Election".

The required accounting for income taxes in a business combination are set for in FAS ASC 805-740 which differs from the fair value determinations we have discussed thus far. The first difference is that deferred tax assets and liabilities are measured on an undiscounted basis. In addition, to be recognized, the deferred tax asset must be more than 50 percent likely of being realized.



Taxable transactions will have few temporary differences between book and tax as the basis for most assets and liabilities will be the same. Nontaxable transactions often result in several temporary differences. The tax bases of the assets and liabilities of the target will be the same post-acquisition as they were prior to the acquisition (carryover basis), while the book values will be based on fair value.

#### GOODWILL OR BARGAIN PURCHASE

On Day One, the acquiring bank records 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.

In our experience, acquisitions often result in goodwill. If the acquiring bank is privately held, it can elect to account for the resulting goodwill in one of two ways. The bank can amortize the goodwill straight-line over a period not to exceed 10 years. Otherwise, it can elect not to amortize the goodwill and instead assess it for impairment. The assessment must be made at least annually. Publicly traded banks must use the impairment assessment method.

In our experience with acquisitions involving bank holding companies, we typically see the acquired goodwill recorded at the level of the transaction. For example, if the bank holding companies merge and the consideration transferred is at the bank holding company level, we would generally see the goodwill recorded on the bank holding company's balance sheet. However, we note that entities can elect to apply pushdown accounting to its reporting entities subsequent to the acquisition in accordance with FAS ASC 805-50-15-10.

See Appendix B1 & B2 for an example comparing the fair value of the balance sheets of a subsidiary bank and the bank holding company to the book values at the acquisition date. Additionally, the goodwill and bargain purchase calculation is included on these appendices. Appendix D shows how to record the acquisition on Day One, including the accounts used to adjust book value to fair value at the bank and bank holding company level.

Wilary Winn further notes that GAAP allows the acquiring bank to true up the Day One journal entry for up to 12 months after the acquisition date to reflect new information that would have affected the valuation amounts had they been known<sup>4</sup>.

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 bank 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.

<sup>&</sup>lt;sup>4</sup> FAS ASC 805-10-25-13



## 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 acquisition 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.

- 1. Do I account for the loans 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 bank 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 FAS 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 bank establishes a *post-acquisition* allowance for loan losses to record credit losses on acquired loans.

Wilary Winn believes that the acquiring bank can account for the acquired loans with the highest credit quality (low risk-rated, reasonable LTVs/DCSRs) 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 bank amortizes the interest rate valuation allowance and the relatively modest credit valuation allowance into income over the expected life of the loan.

The loan fair value adjustments may be accounted for using various methods. The first method is amortizing/accreting the fair value adjustments at the loan category level based on the remaining terms of the categories. We note that examples of templates used to amortize/accrete the fair value adjustments for all of the accounts under this pooling method are attached as Appendix F. Another method would be at the loan level. Based on the sophistication of our clients' core systems, many institutions elect to input



the credit and discount marks into the core system and amortize/accrete the individual fair value adjustments based on the speed of cash flows received.

#### **EXPECTED CASH FLOWS**

On the other hand, loans acquired with "deteriorated credit quality" must be accounted for under FAS 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 FAS 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 FAS ASC 310-30 must be made at the acquisition date on a loan-by-loan basis, and loans cannot transition between FAS ASC 310-30 and FAS 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 risk ranking, debt service coverage ratio, borrower's credit score, sources and uses of cash, payment history, and debt-to-income levels. However, to qualify for accounting under FAS 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 FAS 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 be eligible for FAS ASC 310-30, the credit conditions would have had to have worsened – the risk ranking increased, 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?

Wilary Winn believes that if the fair value of the loan includes a credit valuation allowance, it is clear that the acquirer will not receive all of the contractually required payments from the borrower. We further believe that low risk rated, high FICO, and/or 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. Wilary Winn recommends that the acquiring bank review large credit impaired loans acquired at the loan level to determine if the loans meet the FAS ASC 310-30 accounting requirements. For smaller homogenous loans such as residential real estate loans, we note that GAAP permits the



acquiring bank to elect to account for the loans at the group level, thus avoiding the tedious scope determination required under Requirement 15.

Wilary Winn thus recommends that the acquiring bank make two accounting elections for groups of homogenous small balance 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 FAS 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.

Wilary Winn believes that the acquiring bank could also elect to include loans with the highest credit quality as it forms the loan groups. For example, an acquiring bank 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, commercial real estate, consumer, etc.

We note that GAAP does not allow loans with revolving terms to be accounted for under FAS ASC 310-30 because of the uncertainty of future advances and repayments<sup>6</sup>. In our experience, the acquiring bank 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 bank should increase its allowance for loan losses by the amount of the shortfall.

#### **RECOGNIZING INCOME UNDER FAS ASC 310-30**

Wilary Winn strongly recommends that large commercial loans with significant credit valuation allowances 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.

For small balance homogenous loans, we recommend that the acquiring bank consider a simplified approach. Under FAS 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. Using a real estate loan as an example, the interest rate difference on the loan is \$26,997 and the credit only difference on the loan is \$8,104. The book value is \$400,000, and based on the interest rate and credit reductions, the fair value is \$364,899. Under ASC 310-30, the acquiring bank would accrete the \$364,899 fair value at a rate of 5.5%. 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 \$26,997 in our real estate loan example. We advise our clients to amortize the discount rate valuation allowance into income using sum

<sup>&</sup>lt;sup>5</sup> AICPA Depository Institutions Expert Panel Letter to SEC December 18, 2009

<sup>&</sup>lt;sup>6</sup> ASC 310-30-15-2 (f)



of the years' digits amortization (which 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 FAS 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 FAS ASC 310-30 for the real estate loan in our example. The schedule shows that the interest income recorded would be slightly higher than the interest income recorded under the exact FAS ASC 310-30 accounting for the first 60 months and then is slightly less for the next 220 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.

Wilary Winn 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 real estate loan example, the amount is \$126,899. We note that the total contractual cash flows must be disclosed only once and need not be tracked going forward.

#### CHANGES IN ESTIMATES OF CASH FLOWS UNDER FAS ASC 310-30

The acquiring bank 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 bank 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 bank 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 FDIC prefers to see losses run through the allowance for loan losses and related provision accounts. In this case, Wilary Winn 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 Loan receivable	100	100
Provision for loan losses Allowance for loan losses	100	100
Credit reserve valuation allowance Other non-interest income	100	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 bank 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 FAS 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, Wilary Winn 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

Wilary Winn 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<sup>7</sup>.

We also believe that the acquiring bank should not apply troubled debt restructuring accounting and disclosure guidance to loans included in a pooled asset under FAS ASC 310-308.

### CECL and Purchased Credit Deteriorated ("PCD") Assets

The current expected credit loss standard will affect acquisition accounting. Similar to the current standard, the new CECL standard requires also loans to be valued at fair value for the purposes of a merger or an acquisition and be accounted for under FAS ASC 310-20 or FAS ASC 310-30. The main difference arises for loans accounted for under FAS ASC 310-20 (loans without significant credit deterioration since origination). Lifetime credit losses on these loans should be recorded in the acquiring institution's Allowance for Loan Losses at the time of the merger. Higher risk loans that have not experienced credit deterioration since origination will be most affected by this provision. For example, let's say that a financial institution acquires of group of loans with lower FICOs collateralized by manufactured housing. The fair value of the loans would reflect a significant discount form par – let's use 80 percent. On day one, the acquiring institution will record an increase to its existing ALLL to reflect the expected lifetime losses on these loans. Meanwhile the 20 percent acquisition discount will be accreted into income over the expected life of the loans.

On the other hand, for loans accounted for under FAS ASC 310-30, lifetime credit losses will be reflected in the fair value difference and, therefore, do not have to be recorded in the institution's Allowance for Loan Losses at the time of the merger. We believe financial institutions will therefore have an incentive to account for loans with higher risk under FAS ASC 310-30. We note that FASB renamed loans classified under FAS ASC 310-30 as Purchased Credit Deteriorated loans. To be classified as a Purchased Credit Deteriorated loan, FASB states that "acquired individual financial assets (or acquired groups of financial assets with similar risk characteristics) that, as of the date of acquisition, have experienced a more-than-insignificant deterioration in credit quality since origination, as determined by an acquirer's assessment." In order to meet the definition of more-than-insignificant deterioration in credit quality, we believe that an institution should establish uniform criteria for scoping in PCD loans. This criterion can consist of various credit quality factors such as a certain point fall in risk rating, a certain fall in debt service coverage ratio, or a certain point decrease in FICO score or loans that are 90+ days delinquent.

<sup>&</sup>lt;sup>7</sup> FAS ASC 310-30-40-1

<sup>8</sup> FAS ASC 310-40-15-11



The specifics for PCD assets are as follows:

- At acquisition, a financial institution will estimate and record an allowance for credit loss, which is then added to the purchase price.
- Favorable and unfavorable changes in expected credit related cash flows will run through the allowance and credit loss expense.
- Existing ASC 310-30 loans will be considered PCD loans upon adoption of the new standard and the amount non-accretable yield at adoption will be the initial allowance for credit loss.
- Non-credit premium or discount will be accounted for based on the effective yield after the gross-up for the allowance.

### Conclusion

While the initial and ongoing required accounting can be complex, Wilary Winn 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.



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



## Abc Bank Assets & Liabilities as of *Date*

	Book Balance	Coupon	Market Pricing	Remaining Term in Months	Estimated Fair Value %	Estimated Fair Value \$	Difference
ASSETS			. 8				
Cash	275,478				100.0%	275,478	
Due from Banks	26,363,690				100.0%	26,363,690	_
AFS Securities	50,499,914				100.0%	50,499,914	_
AFS Securities - Discount	(527,425)				191.7%	(1,010,938)	(483,513)
Certificates of Deposit	(027,120)				-	(1,010,750)	(100,010
Other Securities - AFS	_				_	_	_
Mkt Value Adj. for all AFS	_				_	_	_
Fed Funds Sold	_				_	_	_
FHLB Stock	373,859				100.0%	373,859	_
Loans Held for Sale	373,037				100.070	-	_
Loans and Leases	145,663,974				97.2%	141,577,073	(4,086,901)
Loans and Leases - Loss Allowance	(2,243,079)				0.0%	-	2,243,079
Bank Premises	1,455,017				144.7%	2,105,529	650,512
Other Fixed Assets	122,286				129.0%	157,699	35,413
Other Real Estate Owned	1,993,094				100.0%	1,993,094	-
Accrued Interest on Loans	310,209				100.0%	310,209	_
Accrued Interest on Investments	173,569				100.0%	173,569	_
Other Assets	3,912,968				100.0%	3,912,968	_
Total Assets	228,373,554				99.6%	226,732,145	(1,641,409)
LIABILITIES	16065				120.001	15055	
Accrued Interest Payable	46,366				100.0%	46,366	-
Accounts Payable and Other Liabilities	585,692				100.0%	585,692	-
FHLB Borrowings	-				-	-	-
Demand Deposits	27,819,255				100.0%	27,819,255	-
All Now & ATS Accounts	16,557,662				100.0%	16,557,662	-
Money Market Deposit Accounts	98,268,394				100.0%	98,268,394	-
Escrow and Miscellaneous Accounts	78,127	4 = 0.1	0.404	4	100.0%	78,127	-
IRA Accounts	976,457	1.7%	0.4%		101.3%	988,834	12,377
Certificate of Deposit Accounts	58,474,577	1.4%	0.4%	14.2	101.3%	59,212,211	737,634
•					100.0%	178,234	_
Income Tax	178,234				100.070	170,234	
•	178,234 202,984,764				100.4%	203,734,775	750,011



## Abc Bank Holding Company Assets & Liabilities as of *Date*

	Book Balance	Estimated Fair Value %	Estimated Fair Value \$	Difference
ASSETS				
Cash	99,044	100.0%	99,044	-
Abc Bank Holding Company Trust I Common Securities	110,000	100.0%	110,000	-
Abc Bank	25,388,790	90.6%	22,997,370	(2,391,420)
AFS Securities - Discount	1,084	100.0%	1,084	-
Deferred Taxes	367,953	100.0%	367,953	-
Total Assets	25,966,871	90.8%	23,575,451	(2,391,420)
LIABILITIES Abc Bank Holding Company Trust I Abc Bank Holding Company Trust I Common Securities Taxes Payable Accrued Interest and Expenses	3,500,000 110,000 (690,864) 45,203	83.6% 100.0% 100.0% 100.0%	2,925,150 110,000 (690,864) 45,203	(574,850)
Total Liabilities	2,964,339	80.6%	2,389,489	(574,850)
EQUITY	23,002,532		21,185,962	(1,816,570)
	Considerati	on Transferred	28,707,600	
	Fair Value of A	Assets Acquired	23,575,451	
	Fair Value of Liab	•	(2,389,489)	
	Value o	f Core Deposits	1,800,505	
	Goodwill (Bar	gain Purchase)	5,721,133	



#### Abc Bank Loan Valuation as of *Date*

	Principal	# of	Avg Risk	Δνσ	Current	Lifetime			Avg						Risk-Free	Discount 1	Total	Fair	Fair		Credit Only	Discount Rate
	Balance		Ranking		WAC		Age	WAM		CPR %	CRR %	CDR %	Severity%		Rate	Spread	Rate	Value %	Value \$	Difference	Difference	Difference
Firsts - Closed-end loans 1-4 family	6,697,046	54	3	65%	4.7%	4.7%	46	79	3.3	13.5%	13.2%	0.3%	9.9%	0.1%	4.4%	1.2%	5.6%	98.3%	6,586,092	(110,954)	(7,828)	(103,126)
Juniors - Closed-end loans 1-4 family	1,208,779	6	5	120%	4.5%	4.5%	32	65	2.6	20.6%	4.9%	15.7%	28.5%	11.5%	7.8%	5.0%	12.7%	73.3%	885,478	(323,301)	(138,615)	(184,686)
Revolving, open-end loans 1-4 family	509,578	6	3	48%	4.6%	4.8%	4	19	0.9	20.2%	17.5%	2.6%	9.8%	0.1%	3.7%	1.5%	5.2%	100.0%	509,533	(46)	(286)	241
1-4 family residential construction loans	1,361,400	6	4	n/a	4.9%	4.9%	7	5	0.4	6.1%	6.0%	0.1%	41.9%	0.0%	3.9%	0.9%	4.8%	100.0%	1,361,578	178	(388)	566
Owner-occupied - nonfarm nonresidential	50,283,802	84	3	n/a	4.4%	4.5%	50	49	2.7	9.0%	7.3%	1.7%	41.9%	1.1%	3.3%	1.6%	4.9%	98.3%	49,406,835	(876,967)	(547,210)	(329,757)
Other construction loans	7,941,128	28	4	n/a	4.4%	4.5%	22	29	1.8	9.2%	6.9%	2.2%	97.4%	3.0%	3.0%	1.9%	4.8%	96.8%	7,690,663	(250,465)	(236,474)	(13,991)
Other - nonfarm nonresidential	42,114,055	55	3	n/a	4.4%	4.5%	56	33	1.9	9.5%	7.2%	2.2%	55.5%	1.7%	3.5%	1.7%	5.1%	97.9%	41,216,104	(897,951)	(705,314)	(192,638)
Secured by multifamily (5 or more)	8,752,793	13	3	n/a	4.3%	4.3%	51	35	2.1	14.6%	14.5%	0.1%	26.3%	0.0%	3.9%	0.4%	4.3%	99.7%	8,728,262	(24,531)	(4,019)	(20,512)
Commercial and industrial loans	20,560,042	131	4	n/a	4.2%	4.4%	16	32	1.5	13.0%	7.1%	5.9%	76.7%	5.5%	2.3%	3.4%	5.8%	92.9%	19,092,455	(1,467,587)	(1,135,297)	(332,290)
Obligations of states and political subdivisions	6,170,351	8	3	n/a	2.5%	2.6%	22	79	3.5	8.2%	8.2%	0.0%	41.9%	0.0%	2.7%	0.8%	3.5%	97.8%	6,035,029	(135,322)	(2,419)	(132,903)
Other loans	65,000	1	2	n/a	3.5%	3.7%	1	12	1.0	10.0%	10.0%	0.0%	0.0%	0.0%	0.8%	2.8%	3.6%	100.1%	65,045	45	-	45
Total	145,663,974	392	3	62%	4.3%	4.4%	43	42	2.2	10.3%	8.0%	2.4%	56.8%	1.9%	3.3%	1.8%	5.1%	97.2%	141,577,073	(4,086,901)	(2,777,849)	(1,309,051)

<sup>\*</sup> The LTV on shown here on the loans in second position is the combined loan to value.



## Journal Entries to Adjust Acquired's Book Value (GAAP)

	D.111	Carlla	No. C. and and
Category	Debit	Credit	Net Summary
Investments			
AFS Securities - Discount	-	483,513	(483,513)
<u>Loans</u>			
Credit Adjustment			
Firsts - Closed-end loans 1-4 family	-	7,828	
Juniors - Closed-end loans 1-4 family	-	138,615	
Revolving, open-end loans 1-4 family	-	286	
1-4 family residential construction loans	-	388	
Owner-occupied - nonfarm nonresidential	-	547,210	
Other construction loans	-	236,474	
Other - nonfarm nonresidential	-	705,314	
Secured by multifamily (5 or more)	-	4,019	
Commercial and industrial loans	-	1,135,297	
Obligations of states and political subdivisions	-	2,419	(2,777,849)
Discount Rate Adjustment			
Firsts - Closed-end loans 1-4 family	-	103,126	
Juniors - Closed-end loans 1-4 family	-	184,686	
Revolving, open-end loans 1-4 family	241	-	
1-4 family residential construction loans	566	-	
Owner-occupied - nonfarm nonresidential	-	329,757	
Other construction loans	-	13,991	
Other - nonfarm nonresidential	-	192,638	
Secured by multifamily (5 or more)	-	20,512	
Commercial and industrial loans	-	332,290	
Obligations of states and political subdivisions	-	132,903	
Other Loans	45	, -	(1,309,051)
Loans and Leases - Loss Allowance	2,243,079	_	2,243,079
	, ,		, ,
Fixed Assets	CEO E40		
Bank Premises	650,512	-	(05.005
Other Fixed Assets	35,413	-	685,925
<u>Deposits</u>			
IRA Accounts	-	12,377	
Certificate of Deposit Accounts	-	737,634	(750,011)
Acquired Bank Holding Company	2,391,420	_	2,391,420
Acquired Bank Holding Company	2,371, <del>1</del> 20	-	2,371,420
	5,321,276	5,321,276	0



## Acquired Bank Holding Company Journal Entries to Adjust Acquired's Book Value (GAAP)

Category	Debit	Credit	Net Summary
Purchase Price (Consideration Given)		28,707,600	(28,707,600)
<u>Assets</u>		0.004.400	(0.004.400)
Acquired Bank	1 000 505	2,391,420	(2,391,420)
Core Deposit Intangible <u>Liabilities</u>	1,800,505	-	1,800,505
Abc Bank Holding Company Trust I	574,850	-	574,850
Equity (removal of existing equity accounts)	23,002,532		23,002,532
Goodwill Bargain Purchase	5,721,133	-	5,721,133
	31,099,020	31,099,020	-

Nonaccretable Accretable Difference Vield 126,899 64,883 WILARY WINN LLC Contractual Cashflows Interest Income Example - Fixed Rate Mortgage Assuming no defaults, no prepays, etc SOP 03-3 Accounting Wilary Winn Risk Management Repo Voluntary Principal Total Accretion Cashflows Payment Prepayment Interest Recoveries Cashflows Scheduled Scheduled Scheduled Discounted Discounted Beginning Cashflows Reduction of Ending Interest (Amortization) Total Variance Scheduled P &I Cashflows @ Cashflows @ Remaining Expected to Expected to Expected to Expected to Expected to Prin Interest Expected to Carrying Expected to Interest Carrying Carrying Expected to of Discount Interest Between Collected Be Collecte Be Collected e Collected Using SYD Methodologies 400,000 400,000 390,243 987 10,755 399,012 1,988 10,755 10,728 364,899 10,755 1,672 9,083 355,816 1,191 482 3.0% 1,000 10,706 3.0% 380 733 966 8 544 973 948 10.483 398 021 991 998 1 988 10 483 10 388 10 431 355.816 10 483 1.631 8 852 346 964 973 191 1 164 467 946 3.0% 371.464 8,324 10,218 993 995 1.988 10.218 10.079 346,964 10.218 8,628 338.337 191 1,139 452 397.028 10.142 1.590 3.0% 362,428 926 8,109 923 9,959 396.033 996 993 1.988 9,959 9.779 9.860 338.337 9,959 1,551 8,408 329,928 923 190 1,113 437 3.0% 353.621 907 7.900 900 9.707 395.034 998 990 1.988 9.707 9.487 9.586 329.928 9.707 1.512 8.195 321.734 900 189 1.089 423 3.0% 345,036 888 7,696 9,461 394,034 1,001 988 1,988 9,461 9,205 9,320 321,734 9,461 1,475 7,986 313,747 189 1,065 410 3.0% 336,669 869 7,498 9,221 393,031 1,003 985 1,988 9,221 8,931 9,061 313,747 9,221 1,438 7,783 305.964 854 188 1,042 396 832 7.585 3.0% 328.514 851 7.304 8.987 392.025 1.006 983 1.988 8.987 8.665 8.810 305.964 8.987 1.402 298,379 832 187 1.019 383 3.0% 320,564 7,116 8,759 391.017 1,008 980 1,988 8,759 8.406 8,565 298,379 8,759 1,368 7,392 290,987 371 10 3.0% 312,817 816 6,932 789 769 8,537 390.007 1,011 978 1,988 8,537 8,156 8,327 290.987 8,537 1,334 7,203 283.784 789 769 186 975 358 11 799 8.320 1.013 975 8.095 283.784 8.320 7.020 185 954 346 3.0% 305.265 6.752 388.993 1.988 8.320 7.912 1.301 276.764 12 782 934 3.0% 297,905 6,578 8,109 387,978 1,016 972 1,988 8,109 7,676 7,870 276,764 8,109 1,269 6,841 269,923 184 335 13 3.0% 290,732 766 6.407 730 7.903 386,960 1.018 970 1.988 7.903 7.447 7.651 269 923 7.903 1.237 6.666 263,257 730 184 914 324 14 15 3.0% 283.740 750 6.241 7,702 7,507 385.939 1.021 967 1.988 7,702 7.225 7.438 263.257 7.702 1.207 6.496 256.761 183 894 313 734 1,023 965 7,507 7,231 7,507 1,177 6,330 250,432 875 3.0% 276,926 6,080 692 675 384,916 1,988 7,009 256,761 692 675 182 719 7,316 16 3.0% 270.285 5,922 383.890 1,026 962 1.988 7,316 6.800 7.029 250.432 7,316 1.148 6,168 244.264 182 856 292 17 18 657 7.130 6.833 657 3.0% 263.812 704 5.769 382.861 1.028 960 1.988 7.130 6.596 244.264 7.130 1.120 6.010 238.254 181 838 281 3.0% 257,504 689 5,619 6,948 381.830 1,031 957 1,988 6,948 6,399 6,643 238,254 6,948 1,092 5,856 232,397 640 180 820 272 6,771 6,771 6,599 6,458 5,706 5,560 19 20 3.0% 251.356 675 5.473 623 380.797 1,034 955 1.988 6.208 232.397 6,771 1.065 226.691 623 180 803 262 253 245,365 661 5,331 379,761 1,036 952 1,988 6,022 226,691 6,599 1,039 221,131 179 786 770 754 3.0% 607 591 21 3.0% 239,525 647 5,192 6,431 378,722 1,039 949 1,988 6,431 5,842 6,102 221,131 6,431 1,014 5,417 215,714 178 244 22 3.0% 233 835 634 5.057 576 6.267 377 680 1.041 947 1 988 6.267 5 667 5 932 215 714 6.267 989 5.278 210 436 576 178 235 23 620 6,107 1,044 6,107 964 5,142 738 3.0% 228,289 4,926 376,637 944 1,988 5,497 5,766 210,436 6,107 205,294 177 226 24 25 222,884 607 4,797 5,951 375,590 1,047 942 1,988 5,951 5,333 5,951 941 5,010 200,284 546 532 723 218 3.0% 546 532 5,605 205,294 3.0% 217.080 595 4.672 324 315 6,123 374.541 1.049 939 1.988 6.123 5.461 5.752 200.284 6.123 918 5.205 195.079 176 708 210 26 3.0% 211,423 582 4,551 5,967 373,489 1,052 936 1,988 5,967 5,298 5,592 195,079 5,967 894 5,072 190,006 175 693 201 27 28 3.0% 205,911 570 558 4,432 307 299 5,814 372,435 1,054 934 1,988 5,814 5,139 5,435 190.006 5,814 871 4,943 185 063 505 174 174 679 192 5.665 1.057 5.665 4.817 492 665 3.0% 200.540 4.316 492 371.378 931 1.988 4.985 5.283 185.063 5.665 848 180.246 183 29 30 31 5,521 5,379 5,242 3.0% 195,306 4,204 292 370,318 1,060 928 1,988 5,521 4,835 5,135 180,246 5,521 826 4,694 175,551 479 173 652 174 4,094 1,062 5,379 4,690 4,549 4,575 639 626 3.0% 190.206 535 524 284 277 369.255 926 923 1,988 4,991 175.551 5,379 805 784 170 976 172 171 454 454 158 3.0% 185,235 368,190 1,988 4,851 170,976 5,242 166,518 270 763 613 32 3.0% 180,392 3,882 5,107 367.123 1,068 920 1,988 5,107 4,412 4,715 166.518 5,107 4,344 162.174 171 33 3.0% 175,673 502 3.781 431 263 4.977 366.052 1.070 918 1 988 4.977 4 280 4 583 162 174 4 977 743 4.233 157 941 431 170 601 142 171.075 256 4.151 724 34 492 3.682 419 4.849 364.979 1.073 915 1.988 4.454 157.941 4.849 4.125 153.816 169 589 135 3.0% 4.849 419 35 36 37 482 3,585 408 398 4,725 363,904 1,988 4,725 705 577 566 166,594 153,816 3.0% 162,228 472 3.491 243 4.603 362.825 1.078 910 1.988 4.603 3.905 4.208 149.796 4.603 687 3.917 145.879 398 168 121 237 167 555 157.974 462 387 907 145.879 669 3.817 3.0% 3.400 4.485 361.744 1.081 1.988 4.485 3.787 4.090 4.485 142.062 387 114 38 3.0% 153,829 452 3,311 377 230 4,370 360,660 1,084 904 1,988 4,370 3,673 3,975 142,062 4,370 651 3,719 138,343 377 167 544 107 3,624 3,531 39 40 3.0% 149.790 443 3.224 367 358 224 219 4.258 359.574 1.086 902 1.988 4.258 3.562 3.863 138.343 4.258 634 617 134.720 367 166 533 523 101 433 3,139 358 165 145,855 358,485 1,089 1,988 4,149 3,455 3,754 3.0% 4,149 899 134,720 4,149 131,188 41 3.0% 142,021 424 3,056 348 213 4,042 357,393 1,092 896 1,988 4,042 3,351 3,649 131,188 4,042 601 3,441 127,748 348 165 513 3,938 3,837 1,095 1,097 42 43 3.0% 138.285 415 407 2,976 339 330 207 202 356,298 893 1.988 3.938 3.250 3,546 127.748 3,938 586 570 3,352 124.396 339 330 164 163 503 493 83 77 2,898 3,837 3,837 3.0% 134,645 355,201 891 1,988 3,152 3,446 124,396 3,266 121,129 44 45 197 555 321 3.0% 131,099 2,821 3,738 354.101 1,100 888 1,988 3,738 3,057 3,349 121.129 3,738 3,183 117.946 163 484 3,642 3,548 3.0% 127 644 390 2 747 313 192 187 352 998 1 103 885 1 988 3.642 2 964 3.255 117 946 3 642 541 526 3.101 114 846 313 162 475 66 46 382 3,548 3,021 3.0% 124,278 2,674 351,892 1.106 882 1,988 2,875 3,163 114,846 3,548 111.824 161 466 60 305 305 182 177 173 47 48 374 2,604 3,456 350,784 1,108 1,988 3,456 2,788 3,074 111,824 3,456 513 2,944 108,881 457 55 50 3.0% 117.804 366 2.535 289 3.367 349.672 1.111 877 1.988 3.367 2.703 2.987 108.881 3.367 499 2.868 106.013 289 160 449 49 358 486 3.0% 114.691 2.468 281 3.280 348.558 1.114 874 1.988 3.280 2.622 2.902 106.013 3.280 2.794 103.218 281 159 440 46 50 51 3.0% 111,658 351 2,403 168 164 3,195 347,442 1,117 871 1,988 3,195 2,542 2,820 103.218 3,195 473 2,722 100.496 274 158 432 41 344 267 3.113 2.741 461 2.652 267 158 424 3.0% 108,704 2.339 346.322 1.120 869 1.988 3.113 2.465 100.496 3.113 97.844 36 52 53 105,826 336 2,277 260 159 155 1,988 3,032 448 2,584 260 157 417 32 3.0% 3,032 345,200 1,122 866 2,391 2,663 97,844 3,032 95,260 253 3.0% 103,022 329 2,217 253 2,954 344,075 1,125 863 1,988 2,954 2,318 2.588 95.260 2,954 437 2,517 92,742 156 409 54 55 3.0% 100.291 323 2.158 246 151 2.878 342,947 1.128 860 1.988 2.878 2.248 2.515 92,742 2.878 425 2.453 90.290 246 156 402 23 316 147 414 394 3.0% 97,630 2,101 2,803 341,816 1,131 857 1,988 2,803 2,180 2,443 90,290 2,803 2,389 87,900 155 56 3.0% 95.038 309 2.045 233 143 2,731 340 682 1.134 855 1 988 2,731 2.114 2.374 87 900 2.731 403 2.328 85 573 233 154 387 15 57 58 2.307 339.546 1.988 85.573 392 83.305 154 381 3.0% 92.512 303 1.991 140 2.660 1.136 852 2.660 2.050 2.660 2.268 3.0% 90,053 1,938 2,591 849 1,988 2,591 1,987 2,242 2,591 382 2,209 374 338,407 153 59 60 3.0% 87.657 290 1.886 215 132 2.524 337 264 1.142 846 1.988 2.524 1.927 2.178 81 096 2.524 372 2.152 78,944 215 152 367 1.836 129 2.458 1.145 843 1.988 1.868 2.116 2.458 2.096 361 364,899

> WW RM Fair Value

91.2% 98.0%



<u>Month</u>		Closed-end	1-4 family residential constructio n loans	Owner- occupied - nonfarm nonresidential	Other constructio n loans	<u>Other -</u> nonfarm nonresidential	Secured by multifamily (5 or more)	Commercial and industrial loans	Obligations of states and political subdivisions	Other loans	Total Loans	_AFS_ Securities	Total Income	<u>Core</u> Deposit Intangible	Certificate of Deposit Accounts	IRA. Accounts	Trust Preferred Expense	Total Expense	<u>Net</u>
Credit Adjustment Interest Rate Adjustment Fair Value Adjustment SYD Amortization (mos)	7,828 103,126 110,954 91	138,615 184,686 323,301 70	388 (566) (178) 12	547,210 329,757 876,967 70	236,474 13,991 250,465 26	705,314 192,638 897,951 55	4,019 20,512 24,531 102	1,135,297 332,290 1,467,587 30	2,419 132,903 135,322 89	(45) (45) 12	2,777,849 1,309,051 4,086,901	1,010,938 206	5,097,838	1,800,505 66	(737,634) 14	(12,377) 11	574,850	1,625,344	3,472,494
1 2	2,412 2,386	9,107 8,977	(27) (25)	24,703 24,350	18,553 17,839	32,070 31,487	476 472	94,683 91,527	3,007 2,973	(7) (6)	184,977 179,979	9,768 9,720	194,745 189,699	53,746 52,932	(98,351) (91,326)	(2,063) (1,875)	6,423 6,387	(40,245) (33,883)	234,989 223,582
3 4 5	2,359 2,333 2,306	8,847 8,717 8,587	(23) (21) (18)	23,997 23,645 23,292	17,126 16,412 15,699	30,904 30,320 29,737	467 462 458	88,371 85,215 82,059	2,940 2,906 2,872	(6) (5) (5)	174,981 169,984 164.986	9,673 9,625 9,578	184,654 179,609 174,564	52,118 51,303 50,489	(84,301) (77,276) (70,251)	(1,688) (1,500) (1,313)	6,351 6,315 6,279	(27,520) (21,158) (14,796)	212,17- 200,76 189,36
6 7	2,280 2,253	8,457 8,326	(16) (14)	22,939 22,586	14,985 14,271	29,154 28,571	453 448	78,903 75,746	2,838 2,804	(4)	159,988 154,990	9,530 9,483	169,518 164,473	49,675 48,860	(63,226) (56,201)	(1,125)	6,242 6,206	(8,434) (2,072)	177,95 166,54
8 9	2,227 2,200	8,196 8,066	(11) (9)	22,233 21,880	13,558 12,844	27,988 27,405	444 439	72,590 69,434	2,771 2,737	(3) (2)	149,992 144,994	9,436 9,388	159,428 154,382	48,046 47,232	(49,176) (42,150)	(750) (563)	6,170 6,134	4,291 10,653	155,13 143,73
10 11	2,173 2,147	7,936 7,806	(7) (5)	21,527 21,174	12,131 11,417	26,822 26,239	434 430	66,278 63,122	2,703 2,669	(2) (1)	139,996 134,999	9,341 9,293	149,337 144,292	46,417 45,603	(35,125) (28,100)	(375) (188)	6,098 6,062	17,015 23,377	132,32 120,91
12 13	2,120 2,094	7,676 7,546	(2)	20,821 20,468	10,704 9,990	25,656 25,073	425 420	59,966 56,810	2,635 2,602	(1)	130,001 125,003	9,246 9,199	139,247 134,201	44,789 43,974	(21,075) (14,050)	-	6,026 5,990	29,739 35,914	109,50 98,28
14 15	2,067 2,041	7,416 7,286	-	20,116 19,763	9,276 8,563	24,490 23,906	416 411	53,654 50,498	2,568 2,534	-	120,002 115,001	9,151 9,104	129,153 124,105	43,160 42,346	(7,025)	-	5,954 5,918	42,089 48,263	87,06 75,84
16 17	2,014 1,988	7,156 7,025	-	19,410 19,057	7,849 7,136	23,323 22,740	406 402	47,342 44,185	2,500 2,467	-	110,001	9,056 9,009	119,057 114,009	41,531 40,717	- :		5,882 5,846	47,413 46,563	71,64 67,44
18 19 20	1,961 1,935 1,908	6,895 6,765 6.635	-	18,704 18,351 17,998	6,422 5,709 4,995	22,157 21,574 20,991	397 392 388	41,029 37,873 34,717	2,433 2,399 2,365	-	99,999 94,998 89,998	8,961 8,914 8,867	108,961 103,912 98,864	39,903 39,088 38,274	-	-	5,809 5,773 5,737	45,712 44,862 44.011	63,24 59,05 54.85
21 22	1,882 1,855	6,505 6,375	-	17,645 17,292	4,281 3,568	20,408 19,825	383 378	31,561 28,405	2,331 2,298		84,997 79,996	8,819 8,772	93,816 88,768	37,460 36,645	-	-	5,701 5,665	43,161 42,310	50,65 46,45
23 24	1,829 1,802	6,245 6,115		16,939 16,586	2,854 2,141	19,242 18,659	374 369	25,249 22,093	2,264 2,230		74,995 69,995	8,724 8,677	83,720 78,672	35,831 35,017	-	-	5,629 5,593	41,460 40,610	42,26 38,06
25 26	1,776 1,749	5,985 5,855	-	16,234 15,881	1,427 714	18,076 17,493	364 360	18,937 15,781	2,196 2,162		64,994 59,993	8,630 8.582	73,624 68,575	34,202 33,388	-	-	5,557 5,521	39,759 38,909	33,86 29,66
27 28	1,723 1,696	5,724 5,594	-	15,528 15,175	-	16,909 16,326	355 350	12,624 9,468	2,129 2.095	-	54,993 50,705	8,535 8,487	63,527 59,193	32,574 31,759	-	-	5,485 5,449	38,058 37,208	25,46 21,98
29 30	1,670 1,643	5,464 5,334	-	14,822 14,469	-	15,743 15,160	346 341	6,312 3,156	2,061 2,027	:	46,418 42,131	8,440 8,392	54,858 50,524	30,945 30,131	-	:	5,413 5,376	36,357 35,507	18,50 15,01
31 32	1,617 1,590	5,204 5,074	-	14,116 13,763	-	14,577 13,994	336 332	-	1,994 1,960	:	37,844 36,713	8,345 8,298	46,189 45,011	29,316 28,502	-	:	5,340 5,304	34,657 33,806	11,53 11,20
33 34	1,564 1,537	4,944 4,814	-	13,410 13,057	-	13,411 12,828	327 322	-	1,926 1,892	:	35,582 34,451	8,250 8,203	43,832 42,654	27,688 26,873	-	:	5,268 5,232	32,956 32,105	10,87 10,54
35 36	1,511 1,484	4,684 4,554	-	12,705 12,352	-	12,245 11,662	318 313	-	1,858 1,825	-	33,320 32,189	8,155 8,108	41,475 40,297	26,059 25,245	-		5,196 5,160	31,255 30,404	10,22 9,89
37 38	1,458 1,431	4,423 4,293	-	11,999 11,646		11,079 10,496	308 304		1,791 1,757		31,058 29,927	8,061 8,013	39,118 37,940	24,430 23,616			5,124 5,088	29,554 28,704	9,56 9,23
39 40	1,405 1,378	4,163 4,033	-	11,293 10,940	-	9,912 9,329	299 294	-	1,723 1,689	-	28,796 27,664	7,966 7,918	36,761 35,583	22,802 21,987	-		5,052 5,016	27,853 27,003	8,90 8,58
41 42	1,352 1,325	3,903 3,773	-	10,587 10,234	-	8,746 8,163	290 285	-	1,656 1,622	-	26,533 25,402	7,871 7,823	34,404 33,226	21,173 20,358	-		4,980 4,943	26,152 25,302	8,25 7,92
43 44	1,299 1,272	3,643 3,513	-	9,881 9,528	-	7,580 6,997	280 276	-	1,588 1,554	:	24,271 23,140	7,776 7,729	32,047 30,869	19,544 18,730	-	:	4,907 4,871	24,452 23,601	7,59 7,26
45 46	1,246 1,219	3,383 3,253	-	9,176 8,823	-	6,414 5,831	271 266	-	1,520 1,487	:	22,009 20,878	7,681 7,634	29,690 28,512	17,915 17,101	-		4,835 4,799	22,751 21,900	6,94 6,61
47 48	1,193 1,166	3,122 2,992	-	8,470 8,117	-	5,248 4,665	262 257	-	1,453 1,419	-	19,747 18,616	7,586 7,539	27,333 26,155	16,287 15,472	-	:	4,763 4,727	21,050 20,199	6,28 5,95
49 50	1,140 1,113	2,862 2,732	-	7,764 7,411	-	4,082 3,499	252 248	-	1,385 1,352		17,485 16,354	7,492 7,444	24,977 23,798	14,658 13,844	-	-	4,691 4,655	19,349 18,499	5,62 5,30
51 52	1,087 1,060	2,602 2,472	-	7,058 6,705		2,915 2,332	243 238		1,318 1,284	-	15,223 14,092	7,397 7,349	22,620 21,441	13,029 12,215	:	-	4,619 4,583	17,648 16,798	4,97 4,64
53 54	1,034 1,007	2,342 2,212	-	6,352 5,999	-	1,749 1,166	233 229	-	1,250 1,216	-	12,961 11,830	7,302 7,255	20,263 19,084	11,401 10,586	-	-	4,547 4,510	15,947 15,097	4,31 3,98
55 56	981 954	2,082 1,952	-	5,646 5,294	:	583	224 219		1,183 1,149		10,699 9,568	7,207 7,160	17,906 16,727	9,772 8,958	-		4,474 4,438	14,246 13,396	3,65 3,33
57 58	928 901	1,821	-	4,941 4,588	:	-	215 210		1,115 1,081	-	9,020 8,472	7,112 7,065	16,132 15,536	8,143 7,329	- :		4,402 4,366	12,546 11,695	3,58 3,84
59 60	875 848 822	1,561 1,431	-	4,235 3,882	-	-	205 201 196	- :	1,047 1,014 980	-	7,924 7,376	7,017 6,970	14,941 14,346	6,515 5,700 4.886			4,330 4,294	10,845 9,994	4,09 4,35
61 62 63	795 769	1,301 1,171 1,041	-	3,529 3,176 2,823		-	196 191 187	-	946 912	-	6,828 6,280 5,732	6,923 6,875 6,828	13,750 13,155 12,560	4,886 4,072 3,257			4,258 4,222 4,186	9,144 8,293 7,443	4,60 4,86 5,11
64 65	742 716	911 781		2,470 2,117	-	-	182 177	-	878 845		5,732 5,184 4.636	6,780 6,733	11,964 11,369	2,443 1,629	-	-	4,150 4,150 4,114	6,593 5,742	5,37 5,62
66 67	689 663	651 520		1,765 1,412	:		173 168		811 777		4,088 3,540	6,686 6,638	10,773 10,178	814			4,077 4,041	4,892 4,041	5,88 6,13
68 69	636 610	390 260		1,059 706	:	-	163 159	:	743 710	:	2,992 2,444	6,591 6,543	9,583 8,987	-	:		4,005 3,969	4,005 3,969	5,57 5,01
70 71	583 557	130	-	353	-	-	154 149	-	676 642		1,896 1,348	6,496 6,448	8,392 7,796	-	-	-	3,933 3,897	3,933 3,897	4,45 3,89
72 73	530 504	-	-	-	-	-	145 140	-	608 574		1,283 1,218	6,401 6,354	7,684 7,572	-	-	-	3,861 3,825	3,861 3,825	3,82 3,74
74 75	477 451	:	-	-	-	-	135 131	-	541 507		1,153 1,088	6,306 6,259	7,459 7,347	-	-		3,789 3,753	3,789 3,753	3,67 3,59
76 77	424 398		-	-	-	-	126 121	-	473 439	-	1,023 958	6,211 6,164	7,235 7,122	-	-	-	3,717 3,681	3,717 3,681	3,51 3,44
78 79	371 345	:	-	-	:	-	117 112	:	405 372	:	893 828	6,117 6,069	7,010 6,897	-	:		3,644 3,608	3,644 3,608	3,36 3,28
80 81	318 292		-	-		-	107 103		338 304		763 698	6,022 5,974	6,785 6,673	-			3,572 3,536	3,572 3,536	3,21 3,13
82 83	265 239		-	-		-	98 93		270 237		633 568	5,927 5,879	6,560 6,448	-			3,500 3,464	3,500 3,464	3,06 2,98
84 85	212 186	-	-	:	-	-	89 84	-	203 169		504 439	5,832 5,785	6,336 6,223	-	-	-	3,428 3,392	3,428 3,392	2,90 2,83
86 87	159 133	-	-	-	-	-	79 75	-	135 101	-	374 309	5,737 5,690	6,111 5,998	-	-	-	3,356 3,320	3,356 3,320	2,75 2,67
88 89	106 80	-	-	-	-	-	70 65	-	68 34	-	244 179	5,642 5,595	5,886 5,774	-	-	-	3,284 3,248	3,284 3,248	2,60 2,52
90 91	53 27	-	-		-	-	61 56	-	-	-	114 83	5,548 5,500	5,661 5,583	-	-	-	3,211 3,175	3,211 3,175	2,45 2,40
92 93		-	-		-	-	51 47	-	-	-	51 47	5,453 5,405	5,504 5,452	-	-	-	3,139 3,103	3,139 3,103	2,36 2,34
94 95		-	-	-	-	-	42 37	-	-	-	42 37	5,358 5,310	5,400 5,348	-	-	-	3,067 3,031	3,067 3,031	2,33 2,31
96 97		-	-	-	-	-	33 28	-	-		33 28	5,263 5,216	5,296 5,244	-	-		2,995 2,959	2,995 2,959	2,30
98 99		-	-	-	-	-	23 19	-	-		23 19	5,168 5,121	5,192 5,140	-	-		2,923 2,887	2,923 2,887	2,26
100 Total	110,954	323,301	(178)	876,967	250,465	897,951	24,531	1,467,587	135,322	(45)	14 4,086,855	5,073 1,010,938	5,087 5,097,792	1,800,505	(737,634)	(12,377)	2,851 574,850	2,851 1,625,344	3,472,449



#### 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 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 1<sup>st</sup> mortgage plus the 2<sup>nd</sup> 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.

Loss Severity expected on a loan that does go into default. This is equal to Severity %:

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.

Undiscounted Principal

Losses:

(CDR % and Severity %). This number is the total expected lifetime nominal losses on the loans. To estimate an annualized loss amount, take

The Fair Value Difference that arises only from our credit assumptions

this Undiscounted Principal Losses amount divided by the Avg Life.

Discount Rate

The Fair Value Difference that arises from our Discount Rate assumption. Difference: This amount is derived by calculating the present value of the gross cash

flows of the loans at our Discount Rate as compared to the WAC.