

# QUALITATIVE FACTORS: **DATA, DRIVERS & DOCUMENTATION**

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## EXECUTIVE SUMMARY

**T**he qualitative component of the allowance for loan and lease losses (ALLL) is meant to strengthen an institution's assessment of the losses inherent in its portfolio beyond those captured by the historic loss analysis. The challenge the qualitative portion of the ALLL calculation presents is that it is a highly subjective exercise, and there is limited guidance to help institutions determine what, if any, adjustments should be made. "What factors should be used"; and, "How should adjustments be supported and documented" are questions often asked when Q-factors come up in discussion.

To help institutions address the second question, this paper uses the qualitative factor examples from the 2006 Interagency Policy Statement to develop a prep kit focused on data and drivers that may be used to help simplify the review process and make adjustments more consistent and transparent. The data and drivers addressed here are not meant to be comprehensive and will not fit every institution's needs. The aim is to help institutions by highlighting key considerations and data that could be considered to evaluate and justify adjustments to qualitative risk factors.

# Q FACTORS INTRODUCTION

Qualitative factors are commonly used to adjust the historical loss rate for each homogeneous pool in the ASC 450 (FAS 5) analysis. The aim is to account for risk inherent in the portfolio but not already accounted for by the historical loss rate. The historical loss rate is a representation of past loss experience that helps guide future expectations, while the qualitative adjustment is an opportunity to refine expectations of repayment based on management’s unique knowledge of the portfolio. Reference Figure 1 below to see how Q-factors fit into an institution’s ASC 450 analysis.

**Figure 1:** Historical Loss Rate + Qualitative Reserve = Adjusted Historical Loss Rate

Loan Type Code	Total Loan Balance	Historical Loss Rate	Historical Loss Reserve	Qualitative Adjustments	Qualitative Reserve Adjustment	Adjusted Historical Loss Rate	Total Reserve
Land Development	5,000,000	3.5320%	176,600	0.1200%	6,000	3.6520%	182,600

The 2006 Interagency Policy Statement notes, “The loan loss allowance should take into consideration all available information existing as of the financial statement date, including environmental factors such as industry, geographical, economic, and political factors.”<sup>1</sup> Although guidance grants a considerable amount of leeway in making qualitative adjustments, the 2006 Interagency Policy Statement provided a great deal of direction in terms of the specific factors institutions should consider when making adjustments.

## Q FACTORS **INTRODUCTION** (CONT.)

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‘The nine factors,’ as they are commonly referred to, are the closest thing to a ‘safe bet’ institutions have when trying to limit potential regulatory criticism related to qualitative adjustments. This does not mean institutions cannot or should not expand beyond ‘the nine’ to include additional factors. Additional factors should indeed be used if they more accurately reflect the probable and estimable losses inherent within the portfolio. The most pressing challenge institutions face is how to make adjustments effectively to those factors and how to substantiate those adjustments with objective supporting data.

# ASSESSING Q-FACTOR ADJUSTMENTS

## RESOURCE:

[www.ALLL.com](http://www.ALLL.com)

The destination website  
for the ALLL

To simplify the process and provide a solid framework institutions can use to develop and strengthen their ALLL methodology, this paper reviews the recommended qualitative factors from the 2006 Interagency Policy Statement and the key underlying drivers gleaned from Philadelphia Federal Reserve's Sharon Wells' key work, *Qualitative Factors and the Allowance for Loan and Lease Losses in Community Banks*. Her work focuses on the challenges institutions face working with qualitative factors. By building upon Wells' extensive list of potential drivers, adjustments to qualitative factors can be made more consistent, transparent and data-driven.

To gain a comprehensive view of how environmental factors may impact the portfolio, it is helpful to break the recommended factors down into those that are internally-driven and those that are externally-driven. Changes within the institution and the loan portfolio influence internal factors. Reporting and documentation produced internally is going to drive any adjustments to these factors. Internal factors include:

- |   |
|---|
| • Changes in lending policies and procedures, including changes in underwriting standards and collection, charge-off, and recovery practices not considered elsewhere in estimating credit losses |
| • Changes in the nature and volume of the portfolio and in the terms of loans   |
| • Changes in the experience, ability and depth of lending management and other relevant staff   |
| • Changes in the volume and severity of past due loans, the volume of non-accrual loans, and the volume and severity of adversely classified loans  |
| • Changes in the quality of the institution's loan review system  |
| • The existence and effect of any concentration of credit, and changes in the level of such concentrations  |

# ASSESSING Q-FACTOR ADJUSTMENTS (CONT.)

Conditions originating outside the institution influence external factors. Adjustments to external factors will be dependent on data sourced from various organizations and agencies. Examples could include the Federal Reserve, Bureau of Economic Analysis, Bureau of Labor Statistics, and US Census Bureau. External factors include:

- |  |
|--|
| <ul style="list-style-type: none"><li>• Changes in international, national, regional and local economic and business conditions and developments that affect the collectability of the portfolio, including the condition of various market segments</li></ul> |
| <ul style="list-style-type: none"><li>• Changes in the value of underlying collateral for collateral-dependent loans</li></ul>   |
| <ul style="list-style-type: none"><li>• The effect of other external factors such as competition and legal and regulatory requirements on the level of estimated credit losses in the institution's existing portfolio</li></ul>                               |

While the data and drivers evaluated in the following pages are not meant to serve as a comprehensive list, they should provide a good starting point, or frame of reference, for institutions to build upon and modify in a manner that strengthens their existing methodology.

# INTERNAL FACTORS AND DATA POINTS

## 1. Changes in lending policies and procedures

**Considerations:** Have lending policies and procedures changed in a way that will affect the collectability of the portfolio, not considered elsewhere? Have there been changes to underwriting standards and collection or charge-off and recovery practices?

**Supporting data:** Trends in Debt Coverage Ratios (e.g. debt service coverage ratio, debt to income) and LTV (especially the percentage of loans that fall outside your target measures); percent renewed with policy exceptions

## 2. Changes in the nature/volume of the portfolio

**Considerations:** Has the nature or volume of the portfolio changed in a way that would affect risk? Has lending commenced or ramped up in new or riskier markets?

**Supporting data:** Number of new products introduced and percentage of the portfolio; Peer bank loss history, or other proxies, for new lending areas where there is no historical loss experience; Loan growth; Concentration stress test results (maturity analysis, vintage analysis)

## 3. Changes in management and other relevant staff

**Considerations:** Has there been any turnover among lending management or other relevant staff? What is the trend of average tenure among lending management/staff? Have training or professional development programs



# INTERNAL FACTORS AND DATA POINTS (CONT.)

**Supporting data:** Turnover rates; Average tenure of lending management; Number of new positions; Percentage with performance considered good or better; Change in percentage of staff with at least 3 years' experience

## 4. Changes in the volume and severity of past due loans

**Considerations:** For past due, nonaccrual and substandard (or worse) or watch list loans; has the trend improved or worsened?

**Supporting data:** Nonaccrual loans/total loans; Past due loans/total loans; Number or percentage of TDRs

	6/30/2015	3/31/2015	12/31/2014	9/30/2014
Nonaccrual Loans to Total Loans	0.38	0.3	0.34	0.28
Loans 30-89 Days Past Due to Total Loans	2.25	2.1	1.95	1.8
Loans 90+ Days Past Due to Total Loans	0.25	0.19	0.19	0.13

## 5. Changes in loan review

**Considerations:** Has the scope (e.g., portfolios, lenders) of the review or experience of the review team changed?

**Supporting data:** Number and trend of documented deficiencies and exceptions; Number and trend of any inconsistencies discovered in assignment of ratings; Frequency of reviews; Average tenure of review team and staff levels

# INTERNAL FACTORS AND DATA POINTS (CONT.)

## 6. The existence and effect of any concentrations of credit

**Considerations:** What concentrations exist and warrant additional analysis (related to impact to capital) e.g., loan types, geographical areas, specific industries?

**Supporting data:** Concentration reports (concentration percentage of portfolio by loan type, geographic area, and industry – current balance, total commitment and percentage of risk based capital); Concentration stress test results, as shown in Figure 2.

**Figure 2:** Concentration Stress Test Results

Concentration Name : CRE-OFFICE > 250K							
Summary Values							
Risk Based Capital (RBC): \$ 67,474,000							
Concentration Commitment as a Percent of RBC: 50.24%							
Total Potential Impairment: \$2,303,539							
Total Balance: \$33,898,930							
Debt Service Coverage Ratio				Loan To Value			
Target DSCR: 1.25				Target LTV: 80%			
Average Original DSCR: 1.47				Average Original LTV: 71%			
Average Scenario DSCR: 1.18				Average Scenario LTV: 88%			
Percent of Loans Outside Target DSCR: 65%				Percent of Loans Outside Target LTV: 71%			
Loans Outside of Target DSCR as a Percent of RBC: 39%				Loans Outside of Target LTV as a Percent of RBC: 46%			
Stress Test Loan Results							
Loan Number	Actual Cash Flow	Actual Debt Service	Actual DSCR	Actual Collateral	Actual LTV	Actual Rating	Potential Impairment
Balance	Stressed Cash Flow	Stressed Debt Service	Stressed DSCR	Stressed Collateral	Stressed LTV	Stressed Rating	
479037200-50	(\$118,000)	\$636,024	-0.19	\$10,000,000	83%	3B	
\$8,271,203	(\$118,000)	\$636,024	-0.19	\$8,000,000	103%	3C	\$1,071,203
479048700-50	\$500,000	\$336,132	1.49	\$6,262,500	74%	1B	
\$4,629,320	\$399,800	\$336,132	1.19	\$5,010,000	92%	2C	\$120,320
479024000-50	\$400,000	\$298,044	1.34	\$5,000,000	77%	1B	
\$3,868,292	\$320,000	\$298,044	1.07	\$4,000,000	97%	2C	\$268,292
479050300-50	\$300,000	\$266,184	1.13	\$3,800,000	88%	2C	
\$3,358,612	\$239,200	\$266,184	0.90	\$3,040,000	110%	3C	\$622,612
479042700-50	\$250,000	\$168,624	1.48	\$3,125,000	76%	1B	
\$2,361,390	\$200,000	\$168,624	1.19	\$2,500,000	94%	2C	\$111,390
479039900-50	\$500,000	\$146,100	3.42	\$2,500,000	80%	1B	
\$1,997,764	\$460,000	\$146,100	3.15	\$2,000,000	100%	1C	\$0
479044700-50	\$450,000	\$320,000	1.41	\$1,875,000	102%	1C	\$0

# EXTERNAL FACTORS AND DATA POINTS

## 7. Changes in economic and business conditions

**Considerations:** Are macro/national economic factors improving or deteriorating? What about regional/local factors?

**Supporting data:** GDP, CPI/PPI, National unemployment, Consumer confidence; State/MSA/County unemployment trends; Industry-specific employment; Housing starts

## 8. Changes in collateral

**Considerations:** What is the general valuation environment? Are prices trending up or down? Has your process for determining collateral values improved?

**Supporting data:** Occupancy/rent rates; Number/Percentage of real estate-secured loans with LTV > 70%; Percentage of cash/CD-secured and unsecured loans in the portfolio; Percentage of appraisals more than 2 years old

## 9. The effect of other external factors

**Considerations:** Has the competitive landscape changed and, if so, what changes has it prompted at your institution (have you taken on additional risk)? Have new laws or regulatory changes affected collectability?

# EXTERNAL FACTORS AND DATA POINTS (CONT.)

**Supporting data:** Competition may impact underwriting standards and result in marginal debt coverage ratios or weaker LTVs; Regulatory impact on borrowers can potentially be measured with updated financials (e.g., additional health care costs will flow to the bottom line and impact repayment); Changes in lending prompted by external factors may be tied to additional concentration risk (*concentration reports*)

# OTHER QUALITATIVE FACTORS?

## *Should additional qualitative factors be used?*

Absolutely, if it allows you to demonstrate and account for the unique risks in the portfolio and make your ALLL model more robust. For example, it may be practical to add a factor that allows an institution to address dependence on a specific industry, e.g. coal or oil/gas. Similarly, concentrated lending in the Native American community may be heavily influenced by tribal news and could warrant the use of an additional qualitative factor.

The objective is to identify the risk factors that have the potential to influence the collectability of the portfolio. As with the recommended qualitative factors, it is important to develop key drivers which can be examined and clearly documented as adjustments are warranted.

# PRESENTING YOUR ADJUSTMENTS

The presentation of your qualitative factor adjustments is critical. It is important to demonstrate consistency and transparency. As Sharon Wells notes, “If the process is too random, subjective or if the changes in values do not keep pace with the impact of increased risk, then institutions will find the ALLL to be inadequate and potentially directionally inconsistent.”<sup>2</sup>

**Figure 3: Qualitative Scoring Matrix**

Risk Factor	Change from Prior Period	Prior Adjustment	Current Adjustment	Overall Adjustment
The existence and effect of any concentrations of credit and changes in the levels of such concentrations.	Slight Improvement ▼	0.2000%	-0.0400%	0.1600%
Changes in lending policies and procedures, including changes in underwriting standards and collections, charge offs, and recovery	Moderate Improvement ▼	0.2500%	-0.0800%	0.1700%
The effect of other external factors (ie competition, legal and regulatory requirements) on the level of estimated credit losses.	Moderate Improvement ▼	0.1200%	-0.0800%	0.0400%
Changes in the nature and volume of the portfolio and terms of loans.	Slight Decline ▼	0.1400%	0.0400%	0.1800%
Changes in the experience, depth, and ability of lending management.	Same ▼	0.0900%	0.0000%	0.0900%
Changes in the volume and severity of past due loans and other similar conditions.	Same ▼	0.0500%	0.0000%	0.0500%
Changes in the quality of the organization's loan review system.	Same ▼	0.0200%	0.0000%	0.0200%
Changes in the value of underlying collateral for collateral dependent loans.	Decline ▼	0.1000%	0.1200%	0.2200%
Changes in international, national, regional, and local conditions.	Moderate Improvement ▼	0.1400%	-0.0800%	0.0600%
		1.1100%	-0.1200%	0.9900%

Clearly document the data and drivers you use to evaluate adjustments to the qualitative factors. Use a qualitative scoring matrix to strengthen your framework and ensure directional consistency. Once your adjustments are made, make sure to add your comments and cite the data or drivers used to support the adjustments. Your comments can be concise, but it is better to paint color around any numeric adjustments and shed light on your thinking rather than just display your supporting data. These efforts will make your process more consistent and transparent.

# THE FUTURE OF Q-FACTORS

## RESOURCE:

[FASB's CECL Model  
Prep Kit](#)

Qualitative factors are not going away anytime soon. The much-expected transition from the Incurred Loss Model to the Expected Loss Model will bring about a lot of change to the ALLL; however, qualitative factors are anticipated to remain intact and serve a continued key role. In fact, the role is likely to expand as institutions wrestle with added forward-looking adjustments. In 'Guidance on Accounting for Expected Credit Losses, the Basel Committee on Banking Supervision's (BCBS) consultative document outlining key principles institutions must consider to transition to an expected loss model, the BCBS noted:

*"A robust and sound methodology for assessing credit risk and measuring the level of allowances will [...] document the inputs, data and assumptions used in the allowance estimation process [...], how the life of an exposure or portfolio is determined [...], the historical time period over which loss experience is evaluated, and any qualitative adjustments. Examples of factors that may require qualitative adjustments are the existence of concentrations of credit risk and changes in the level of such concentrations, increased usage of loan modifications, changes in expectations of macroeconomic trends and conditions, and/or the effects of changes in the underwriting standards and lending policies [...]."*<sup>3</sup>

Given that qualitative factors will be with us for the foreseeable future, improving the analysis with concrete data and drivers will strengthen the current allowance methodology and pay future dividends as the demands of forecasting macroeconomic trends and conditions enter into the equation for calculating the ALLL.

## RELATED ARTICLE:

[Guidance on Accounting  
for Expected Credit  
Losses](#)

# THE FUTURE OF Q-FACTORS (CONT.)

## WHITEPAPER:

### [Backtesting: Measuring the Effectiveness of ALLL Methodologies](#)

The importance of backtesting qualitative factor adjustments will perhaps become even more prevalent as we move into the expected loss era.

Institutions should be able to evaluate the trend in adjustments made to qualitative factors over time and see a similar trend when comparing the underlying historical data, or drivers, used to make the qualitative factor adjustments.

If, for example, an institution relies solely on the local unemployment rate to determine adjustments to the qualitative factor for changes in economic and business conditions, a similar trend should exist between the overall qualitative adjustment and the trend in unemployment.

If there is no change in the unemployment rate over the time period evaluated, there should not be a change in the qualitative factor either.

If there is a difference in the trends, other data must be present and defensible to drive the qualitative adjustment.



# CONCLUSION

There is no perfect set of data drivers that will fit the needs of every institution. For many institutions, however, selecting a few data drivers for each q-factor, which can be routinely analyzed and documented, will help to simplify the process.

Furthermore, added focus on key data drivers along with proper documentation will go a long way to support consistency and transparency in the reserve calculation. Ultimately, extra emphasis on the data underlying risk factor adjustments will strengthen an institution's assessment of the losses inherent in the portfolio. This, in turn, will better prepare the institution for evolving regulation that may place even more weight on qualitative adjustments moving forward.

# ENDNOTES

<sup>1</sup>“Interagency Policy Statement on the Allowance for Loan and Lease Losses” *FDIC, OCC, FED.* 2006

<https://www.fdic.gov/news/news/financial/2006/fil06105a.pdf>

<sup>2</sup>“Qualitative Factors and the Allowance for Loan and Lease Losses in Community Banks” *Sharon Wells, Examiner; Trevor Gaskins, CPA, Assistant Examiner.* 2010

<https://www.philadelphiafed.org/bank-resources/publications/src-insights/2010/fourth-quarter/qualitative-factors.cfm>

<sup>3</sup>“Guidance on Accounting for Expected Credit Losses” *Basel Committee on Banking Supervision.* February 2015

<http://www.bis.org/bcbs/publ/d311.pdf>

# ABOUT SAGEWORKS & THE AUTHOR

[Sageworks](#) is a financial information company that works with financial institutions, accountants and private-company executives across North America to collect and interpret financial information. Sageworks provides a web-based suite of solutions to streamline credit analysis, risk rating, [portfolio stress testing](#), loan administration and the ALLL calculation.

## **Sageworks ALLL**

[Sageworks ALLL](#) is an automated solution for calculating and documenting the allowance calculation. It helps bankers automate their ALLL process and add consistency to their methodology, making it defensible to auditors and examiners. To find out more, visit [www.sageworksanalyst.com](http://www.sageworksanalyst.com).



**Aaron Lenhart** is a risk management consultant at Sageworks, where he serves as a specialist in assisting financial institutions with accurately interpreting and applying federal accounting guidance. Aaron's primary focus is the allowance for loan and lease losses (ALLL). Prior to joining Sageworks, Aaron served as a consultant for Wellington Financial Group. Aaron earned his bachelor's degree from the University of Virginia and his MBA from UNC's Kenan-Flagler Business School.