90 Day Note

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Getting the Most Value from Your Information Security Risk Assessment

By: Mike Detrow, CISSP, Senior Consultant and Manager of IT

Just like technology, we have seen information security risk assessments evolve over time. Initially, risk assessments were focused on the core system as the main repository of customer data, as well as paper documents and PCs. However, financial institutions continue to use new technologies to store or process customer data, such as the cloud and mobile devices. Risk assessments must evolve along with technology to ensure that the threats and vulnerabilities associated with each information asset are properly identified and mitigated.

Many financial institutions began the risk assessment process with threat-based risk assessments, but have now moved to asset-based risk assessments or a hybrid of the two types. We do however still see some financial institutions using only a threat-based risk assessment. The use of a threat-based risk assessment alone does not provide the same value as the use of an asset-based risk assessment. This article will describe the differences between the two types of risk assessments and the benefits of using an asset-based risk assessment.

Threat-Based Risk Assessment

A threat-based risk assessment starts with the identification of a threat, such as "Inadequate Logical Access Controls." An inherent risk rating is assigned, mitigating controls are identified, and a residual risk rating is then assigned. Does this threat only apply to the core system or does it also apply to files stored on the file server which also contain customer data? Are the mitigating controls the same for all of the institution's information systems or are there different controls for the core system and the file server? During a review of a threat-based risk assessment, it can be difficult for directors, auditors, and examiners to verify that all of the institution's information assets were evaluated during the risk assessment process. It can also be difficult for the information security officer to update a threat-based risk assessment when a new information asset is introduced into the institution's environment.

Asset-Based Risk Assessment

In contrast, an asset-based risk assessment fixes these problems by identifying the specific threats/vulnerabilities and mitigating controls that are applicable to each information asset.

The asset-based risk assessment development process consists of the following steps:

1. Obtain an inventory of all of the assets that store or process non-public information. (Assets may include, but are not limited to, paper documents, servers, workstations, network devices, removable storage devices, and software applications.)
2. Classify the data that the asset stores or processes.
3. Identify threats and vulnerabilities.
4. Identify the likelihood of occurrence and impact rating for each threat and vulnerability.
5. Assign an inherent risk rating.

(continued on next page)

Inside This Issue:

Follow

6. Identify the controls in place to mitigate each threat and vulnerability.
7. Assign a residual risk rating based on the mitigating controls.
8. If the residual risk rating exceeds the institution's risk appetite, identify additional mitigating controls to implement.

During the risk assessment development process, it is important to ensure that enough time is spent identifying all of the reasonably foreseeable threats for each asset. Otherwise, the effectiveness of the selected mitigating controls will not be properly evaluated.

Some examples of reasonably foreseeable threats include:

- Unauthorized Physical Access
- Unauthorized Logical Access
- Man-made/Environmental/Natural Disaster
- User Error
- Social Engineering
- Malicious Code
- Hardware Failure
- Service Provider Issues

Some examples of mitigating controls include:

- Antivirus
- Data Backup
- Encryption
- End of Life Management
- Asset Disposal Procedures
- Multifactor Authentication
- Physical Security
- Environmental Controls
- Firewalls
- Patch Management
- Policies
- Monitoring Procedures
- Vendor Management

The image below identifies the typical format for an asset-based risk assessment.

Media/ Asset	Data Classification	Threats / Vulnerabilities	Likelihood of Occurrence	Impact Rating	Inherent Risk	Current Mitigating Controls	Residual Risk	Recommended Mitigating Controls / Control Enhancements	Anticipated Residual Risk After Control Enhancements

Benefits of an Asset-Based Risk Assessment

- **Provides a more detailed view of the institution's environment.** By identifying each asset that stores or processes non-public information, directors and outsiders can gain significant visibility into the complexity of the institution's environment, including vendor-hosted assets.
- **Clearly documents the assets that were evaluated.** Directors, auditors, and examiners can easily see that each of the institution's assets was considered.
- **Includes a lower risk for errors.** By assessing the threats/vulnerabilities and mitigating controls associated with each specific asset, there is less of a chance that assumptions will be made about the mitigating controls for a specific asset.
- **Is easier to update.** If a new asset is introduced into the institution's environment, a new line item is created in the risk assessment to identify the threats/vulnerabilities and mitigating controls associated with the new asset. In addition, if a threat intelligence source identifies a new threat, it is relatively simple to identify which asset(s) the threat applies to and to document the implementation of new mitigating controls.
- **Assists with audit scoping.** Rather than performing a full-scope IT audit each year, management can focus audits on the highest risk assets or most critical controls.

41 YEARS 1978 - 2019

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Conclusion

While it may take some time to transition from a threat-based risk assessment to an asset-based risk assessment, the data obtained from an asset-based risk assessment will generally be more valuable to the institution by providing better visibility of current control deficiencies, simplification of updates, and more focused audits.

For more information on this article, or to find out more information on how Young & Associates, Inc. can assist your financial institution, contact Mike Detrow at mdetrow@younginc.com or 330.422.3447. ❑

Avoid Getting Swept Away in the Flood of Enforcement Actions

By: William J. Showalter, CRCM, CRP, Senior Consultant

We seem to be in a bit of a lull in flood insurance rule enforcement by the financial institution regulators. There were only 15 enforcement actions with civil money penalties (CMP) totaling $523,961 in 2018. So far this year, we have had only two such enforcement actions, with total CMPs of $10,550. But, we probably should not expect this trend to continue, especially with all the flooding events we have seen recently, including our unfortunate neighbors along the Missouri River. These events tend to get the attention of Congress and the supervisory agencies.

Keep in mind that enforcement of many rules, including those involving flood insurance, seem to run in cycles. After another apparent lull in flood insurance enforcement actions a couple years ago, the Federal Reserve Board (FRB) issued an Order for a Civil Money Penalty in late May 2017 against SunTrust Bank for $1,501,000 to enforce requirements of the regulations implementing the National Flood Insurance Act. This is thought to be the largest CMP for flood insurance shortcomings. Coupled with 11 other much smaller enforcement actions by the FRB, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC), the total civil money penalties assessed for flood insurance rule violations by mid-year 2017 totaled nearly $1.8 million – and by the end of that year, we had seen 29 enforcement actions with a total of nearly $2.8 million in CMPs.

Background

The original National Flood Insurance Act was passed in 1968, and established the National Flood Insurance Program (NFIP). The Flood Disaster Protection Act of 1974 (FDPA) was enacted to strengthen the NFIP by involving lending institutions in the insurance process.

The NFIP was developed as a way to reduce federal expenditures related to disasters caused by flooding. The program consists of floodplain management plans that affected communities must implement and a flood insurance program to protect properties in flood hazard areas. The intent of the NFIP is to reduce federal outlays for disaster assistance by making those who choose to develop properties in flood-prone areas bear some cost to protect against the flood risks involved, rather than allowing them to rely solely on federal aid.

Part of the NFIP is a system of requirements and restrictions on federal assistance of all kinds to flood-prone areas. This assistance ranges from direct federal lending to loan guarantees, to insurance for deposit accounts. The latter is the connection for many mortgage lenders with the NFIP.

The National Flood Insurance Reform Act of 1994 (NFIRA) comprehensively revised the two federal flood statutes – the NFIA and FDPA – and required federal supervisory agencies to revise their flood insurance regulations. The objective of the changes was to increase compliance with flood insurance requirements and participation in the NFIP, and to decrease the financial burden on the federal government, taxpayers, and flood victims.

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41 YEARS 1978 - 2019

The NFIRA authorizes the regulators to impose civil money penalties when a pattern or practice of violations under the NFIA is found. The act requires that civil money penalties be imposed of up to $350 for each violation in such cases. The civil money penalty cap was increased significantly by the Biggert-Waters Flood Insurance Reform Act of 2012, enacted July 6, 2012. The former $350 per violation maximum was raised to $2,000 per violation. Lenders should remember that there can be multiple violations for each covered loan.

Consent Orders

The regulators charged that the financial institutions targeted by the 15 enforcement actions last year were engaged in patterns or practices of violations of various provisions of the flood insurance regulations. Most of the orders give us at least some picture of the violations found by regulatory personnel. These violations of flood insurance rules include failures to:

- Provide notice about availability of and requirement for flood insurance
- Provide timely notice about availability of and requirement for flood insurance
- Require flood insurance coverage
- Require adequate flood insurance coverage
- Maintain flood insurance (allowing it to lapse)
- Escrow premiums (when other property costs are escrowed)
- Comply with force placement requirements
- Provide notice regarding lapse and force-placed coverage
- Provide timely notice regarding lapse and force-placed coverage
- Obtain force-placed coverage

Avoiding Problems

What can you do to keep your bank or thrift off the ever-growing list of financial institutions being hit with flood insurance enforcement actions? One important way is to establish an effective flood insurance compliance program and make sure that lending staff follows it. Hold them accountable for failures.

At a minimum, your flood insurance compliance program should:

- Ensure that there is an effective process in place for determining the flood hazard status for improved real property or mobile homes securing any loans, both consumer and commercial, whether the process be one of in-house readings of up-to-date flood maps or outsourced determinations by a professional firm that guarantees its results.
- Ensure that your institution has performed appropriate due diligence in selecting its flood hazard determination vendor and monitors its performance, and that the vendor guarantees its results and uses the current Special Flood Hazard Determination Forms (SFHDF) to document its determinations.
- Order or perform flood determinations early in the loan process. This can be done soon after the lender decides to approve the loan.
- Ensure that loan files contain complete and current SFHDF and acknowledged customer flood notices, where applicable.
- Ensure that collateral properties are insured in the proper amount before loan closing, including appropriate coverage for any senior mortgagees.
- Remain current on flood map and hazard determination changes, and stay insured throughout the life of the loan.
- Ensure that coverage is maintained for subsequent financings (increase, extension, renewal, refinancing) of the subject properties.
- Train all affected staff in their responsibilities under the bank's flood insurance compliance program, assign appropriate accountability, and enforce staff responsibilities.

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This last point is especially important. Training is the foundation for implementing and maintaining a strong flood program. Ensure that all appropriate staff is trained in the requirements of the flood insurance laws and rules that impact their jobs and provide them with refreshers periodically.

Establishing and maintaining a strong flood insurance compliance program can help your bank or thrift stay afloat during any flood of enforcement actions. For more information on this article and/or how Young & Associates, Inc. can assist you in this area, contact Bill Showalter at 330.678.0524 or wshowalter@younginc.com. ❑

Proposed Rulemaking – Changes to the Appraisal Threshold for Residential Real Estate-Related Transactions

The OCC, Federal Reserve Board, and FDIC (collectively, the agencies) jointly issued a notice of proposed rulemaking titled *Real Estate Appraisals*, dated December 7, 2018 which was published in the Federal Register for a 60-day comment period. The Appraisal NPR proposes to increase the threshold for residential real estate transactions requiring an appraisal from $250,000 to $400,000. Evaluations would still be required for transactions exempted as a result of the proposed threshold. In addition, the agencies are proposing several conforming and technical amendments to their appraisal regulations.

The agencies are proposing to define a residential real estate transaction as a real estate transaction secured by a single 1-to-4 family residential property, which is consistent with current references to appraisals for residential real estate.

The proposed rule would amend the agencies' appraisal regulations to reflect the rural residential appraisal exemption in the list of transactions that are exempt from the agencies' appraisal requirement. The amendment to this provision would be a technical change that would not alter any substantive requirement, but the proposal would require regulated institutions to obtain evaluations for transactions secured by residential property in rural areas that have been exempted from the agencies' appraisal requirement pursuant to the Economic Growth, Regulatory Relief and Consumer Protection Act, commonly known as the rural residential appraisal exemption, and would fulfill the requirement to add appraisal review to the minimum standards for an appraisal.

Evaluations

With the proposed increase in the threshold, it is expected that many institutions will now utilize internal staff to prepare evaluations for transactions that are less than $400,000, so it might be time to revisit the Interagency Appraisal and Evaluation Guidelines (Federal Register, Vol. 75, No. 237), as well as the Interagency Advisory on Use of Evaluations in Real Estate-Related Financial Transactions (FDIC, FIL 16-016). While the Guidelines state that an evaluation is not required to be completed by a state-licensed or state-certified appraiser or to comply with USPAP, the evaluation preparer should, however, be knowledgeable, competent, and independent of the transaction and the loan production function of the institution. Evaluations may be completed by a bank employee or by a third party. In smaller communities, bankers and third-party real estate professionals have access to local market information and may be qualified to prepare evaluations for an institution.

An evaluation should provide a reliable estimate of the market value of the property and, therefore, the approach or approaches used in an evaluation should be appropriate to the property being valued, and the intended use, so it may be appropriate to omit one or more of the three approaches to value. If the income approach is the primary approach for a tenant-occupied, income-producing

41 YEARS 1978 - 2019

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property, it may be appropriate to omit the sales comparison approach and the cost approach. Similarly, if the sales comparison approach is the primary approach for a single-family residence, it may be appropriate to omit the cost approach and the income approach.

The Guidelines provide information regarding the minimum content that should be contained in an evaluation. Unlike an appraisal report that must be written in conformity with the requirements of USPAP, there is no standard format for documenting the information and analysis performed to reach a market value conclusion; but like an appraisal report, the evaluation should contain sufficient information to allow a reader to understand the analysis that was performed to support the value conclusion and the institution's decision to engage in the transaction.

Appraisal and Evaluation Reviews

The proposed rule would make a conforming amendment to the minimum requirements in the agencies' appraisal regulations to add appraisal review. The agencies propose to mirror the statutory language for this standard. As outlined in the 2010 Guidelines, which provide guidance on the review process, the agencies have long recognized that appraisal review is consistent with safe and sound banking practices.

The agencies are proposing to implement the appraisal review provision in Section 1473(e) of the Dodd-Frank Act, which amended Title XI to require that the agencies' appraisal regulations include a requirement for institutions to subject appraisals for federally related transactions to appropriate review for compliance with the Uniform Standards of Professional Appraisal Practice (USPAP). While most institutions follow the guidance, the proposed rule would implement this statutory requirement.

For more information on this article or on how Young & Associates, Inc. can assist with the appraisal review process, contact Kyle Curtis at 330.422.3445 or kcurtis@younginc.com. ❑

Capital Market Commentary

By: Stephen Clinton, President, Capital Market Securities, Inc.

Market Update – Yield Curve Garners Market Attention

The partially inverted yield curve has captured the market's attention. At the end of March, the 6-month Treasury stood at 2.44%. Longer-term rates were lower and remained below this rate until moving out over 10 years on the yield curve. The 10-year Treasury Note was at 2.41%. The 3-year Treasury was 23 basis points below the 6-month Treasury.

An inverted yield curve has historically been viewed as a reliable indicator of upcoming recessions. While the short-term side of the yield curve is mainly driven by Fed policies that reflect current economic conditions, the long-term end of the yield curve is thought to indicate bond investors' long-term views of the market. If bond investors are bullish on the economy and believe interest rates will go up, they are more willing to hold short-term bonds and hope to gain from higher yields in the future. On the flip side, if bond buyers believe the economy is heading downward and interest rates are likely moving lower, they'd prefer to hold the longer-term bonds in order to lock in the current expected higher yields.

While a yield curve inversion has preceded recent recessions, it doesn't happen immediately, and the lead time has been very inconsistent. A downturn, based upon past history, can come anywhere between one and two years after the inverted yield curve appears and the stock market usually continues to improve after the yield curve inversion occurs.

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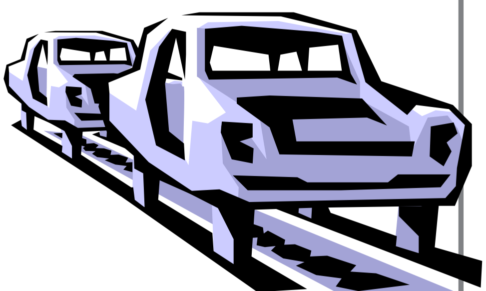

Recent Economic Developments

- The Fed indicated in March that it may not raise interest rates further this year. The announcement also informed that market that the process of reducing the Fed's balance sheet was coming to an end. These actions reflect the Fed's concerns about downgraded economic growth. These actions appear to be a sharp reversal from the Fed's policy of tightening that began in December 2015, and following the four rate hikes of last year. Only three months ago, two additional rate hikes were being projected for 2019.
- U.S. job growth continued a remarkable climb in March. March recorded an increase of 196,000 jobs, making the month the 102nd month in a row of increased job growth, the longest growth streak on record. Unemployment remained steady at 3.8% in March, marking the thirteenth consecutive month at or below 4%. New applicants for unemployment benefits were reported at their lowest level since 1969, further providing evidence of a tight labor market.
- Wage growth has accompanied the spectacular increase in employment. Average hourly earnings rose by 3.2% over the past 12 months, marking the eighth straight month that year-over-year wage gains were at or above 3%. Prior to 2018, nominal average hourly wage gains had not reached 3% since April 2009.
- The Consumer Price Index was up 1.5% over the past 12 months. Low inflation is another reason that the Fed can avoid raising interest rates in the near future as the economy slows. The central bank uses interest-rate increases to tamp down the pace of business and household borrowing, and thus keep the economy from overheating and inflation in check.
- Manufacturing activity in the world's two largest economies perked up in March. The U.S. Institute for Supply Management said its monthly index of manufacturing activity rose to 55.3 in March from 54.2 the previous month (numbers above 50 indicating expansion) with new orders particularly buoyant, boding well for U.S. factory output in the coming months. China's index rose to a six-month high of 50.5 in March from 49.2 in February, well above the forecasts of many economists. The outlook for Europe is bleaker. German manufacturers, the largest in Europe, showed weakness in activity. Italy is in recession, and France is also suffering.
- Consumer-sentiment readings have been mixed in recent months but broadly remain at a high level, underpinned by low unemployment and rising household incomes.
- The Case-Shiller National Home Price Index, which measures average home prices in major metropolitan areas across the nation, rose 4.3% in the year ending in January. The increase in home prices slowed for the tenth straight month in January, providing relief to buyers heading into the spring selling season. Slower price growth, along with lower mortgage rates and a growing inventory of homes for sale, are all potentially good news for home buyers this spring.
- Oil prices have moved up recently. Oil prices recently broke through $60 a barrel. The rally is a dramatic turnaround from the end of last year when oil prices tumbled to an 18-month low due to worries about over-supply and a potential global economic slowdown.
- The stock market has been highly volatile since mid-December. Bank pricing has especially been susceptible to wide swings due in part to the yield curve inversion and fears about a pending recession. We see the banking industry in a very strong position to weather these headwinds. The industry is highly capitalized, currently experiencing strong profitability not seen since the Great Recession and having strong asset quality metrics.

  The general stock market recorded double digit growth in the first quarter of 2019. Much of that increase reflects a recovery from the late December market correction. The Dow Jones Industrial Index ended March up 11.15% for the quarter while the broader Nasdaq Index was up 16.49%. The Nasdaq Bank Index ended the March quarter up 7.77%.

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41 YEARS 1978 - 2019

Interesting Tidbits

- The 4,600 U.S. banks with less than $1 billion is assets hold 6.6% of all bank assets combined, compared to 31.5% 30 years ago. Over the past 30 years, the number of such banks has declined by more than 11,000, largely due to mergers.
- There are now more $100 bills in circulation than $1 and $20 bills. Most of the $100 bills aren't even in the U.S., with an estimated 80% in circulation outside the U.S.
- Independent mortgage firms (like Quicken Loans) now originate most home loans in the U.S. Non-bank mortgage firms' market share jumped from 24% in 2008 to 54% in 2017.
- And for haters of robo-calls, since 2015 the FCC has ordered violators of the Telephone Consumer Protection Act to pay $208 million. So far, the government has collected $6,790 of that amount.

Merger and Acquisition Activity

For the first quarter of 2019, there were 52 bank and thrift announced merger transactions. This compares to 57 deals in the first quarter of 2018. The median price to tangible book for transactions involving bank sellers was 161% which is down slightly from 2018's median value of 173%.

Michael Gerbick Joins Young & Associates as Chief Operating Officer

We are pleased to announce that Michael Gerbick has joined Young & Associates, Inc. as Chief Operating Officer. Michael brings to Young & Associates, Inc. over ten years of domestic and international experience in project management, business partner integration, systems implementation, business system integration, and business process re-design. He is currently responsible for all accounting functions, identification and implementation of internal process improvements, and productivity enabling systems for Young & Associates, Inc. In addition, he can provide expertise to financial institutions in project management and systems integration.

Michael's education and experience have contributed to successfully leading projects that included diverse functional IT and consulting teams. Prior to joining Young & Associates, Inc., he was part of a cross-functional systems implementation team where he advanced from technical expert to leading global implementation projects. Michael's educational achievements include BA and MBA from Kent State University.

Michael enjoys spending time with his family, golfing and cheering on the Cleveland Cavaliers, Indians, and Browns. He currently resides in the Akron area with his wife Francesca, their two children, Angelina (3) and Chad (2), and their dog Berlin.

Please join us in welcoming Michael! ❑

Capital Planning System – Update Available 5/15/19

Assess capital adequacy in relation to your bank's overall risk and develop a customized capital plan for maintaining appropriate capital levels in all economic environments.

*Our latest update addresses the proposed Community Bank Leverage Ratio (CBLR) framework, as well as the impact that the anticipated implementation of the Current Expected Credit Loss (CECL) approach may have on the bank's capital levels. The discussion of the future risks in the report has also been updated to reflect the current environment. The proposed community bank capital buffer levels have also been revised to more closely reflect regulator expectations.

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System Requirements: Microsoft® Word 2007 and Excel 2007 or higher

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