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2022 Financial Services Virtual Symposium

November 15, 2022

Welcome!

Financial Services Industry Outlook

Economic Update

Managing ACH Risk

Diversity & Inclusion

ESG in Banking

CECL Panel: Lessons Learned

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2022 Financial Services
Virtual Symposium

Financial Services Industry Outlook

Your Presenter

Jason Rader, CPA
National Industry Leader | Financial Services

417.865.8701
jason.rader@forvis.com

- 30+ years at **FORVIS** serving financial institutions
- Chairs FORVIS' Financial Services committee
- Provides accounting, audit, & advisory services for clients in the financial services industry
- Engagement executive on numerous financial statement audits for financial institutions
- Assists clients with SEC & other regulatory filings including compliance with SOX & integrated audits

Goals for Today

- Current banking environment
- Trends by the numbers

Current Banking Environment

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Current Banking Environment

A LOT has changed since fall 2021

- PPP-related items no longer significant to institutions
- Rising interest rates have widened net interest margins
  - Largest increase in NIM in a quarter since 2010
- Significant amounts of unrealized losses causing large decreases in equity

General Banking Environment

A LOT has changed since fall 2021

- Q2 provision for credit expense more than doubled from Q1, however
  - Increase has primarily been at the big banks as only 1/3 of total banks reported an increase from the prior-year quarter

Trends by the Numbers

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Trends by the Numbers

- So … based on what has transpired, we are going to look at certain banking statistics & compare/contrast to the past few years, & some back to the Great Recession
- Utilizing U.S. regions as reported by the FDIC
- These statistics come primarily from the FDIC’s website
- Typically, the tables included are annual tables, but some are updated through June 30, 2022

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Current Banking Environment & Trends

- Number of troubled banks historically low

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Number of bank failures	0	4	4	0	8	5	8	18	24	51	92
Number of troubled banks	44	56	51	60	95	123	183	<400	<500	800	850
% of charters	0.9%	1.1%	1.0%	1.1%	1.7%	2.2%	3.2%	6.1%	7.1%	11.2%	12.5%

- Thus far in 2022, there have been no bank failures
- 40 troubled banks at June 30, 2022—the lowest level since FDIC began tracking in 1984!

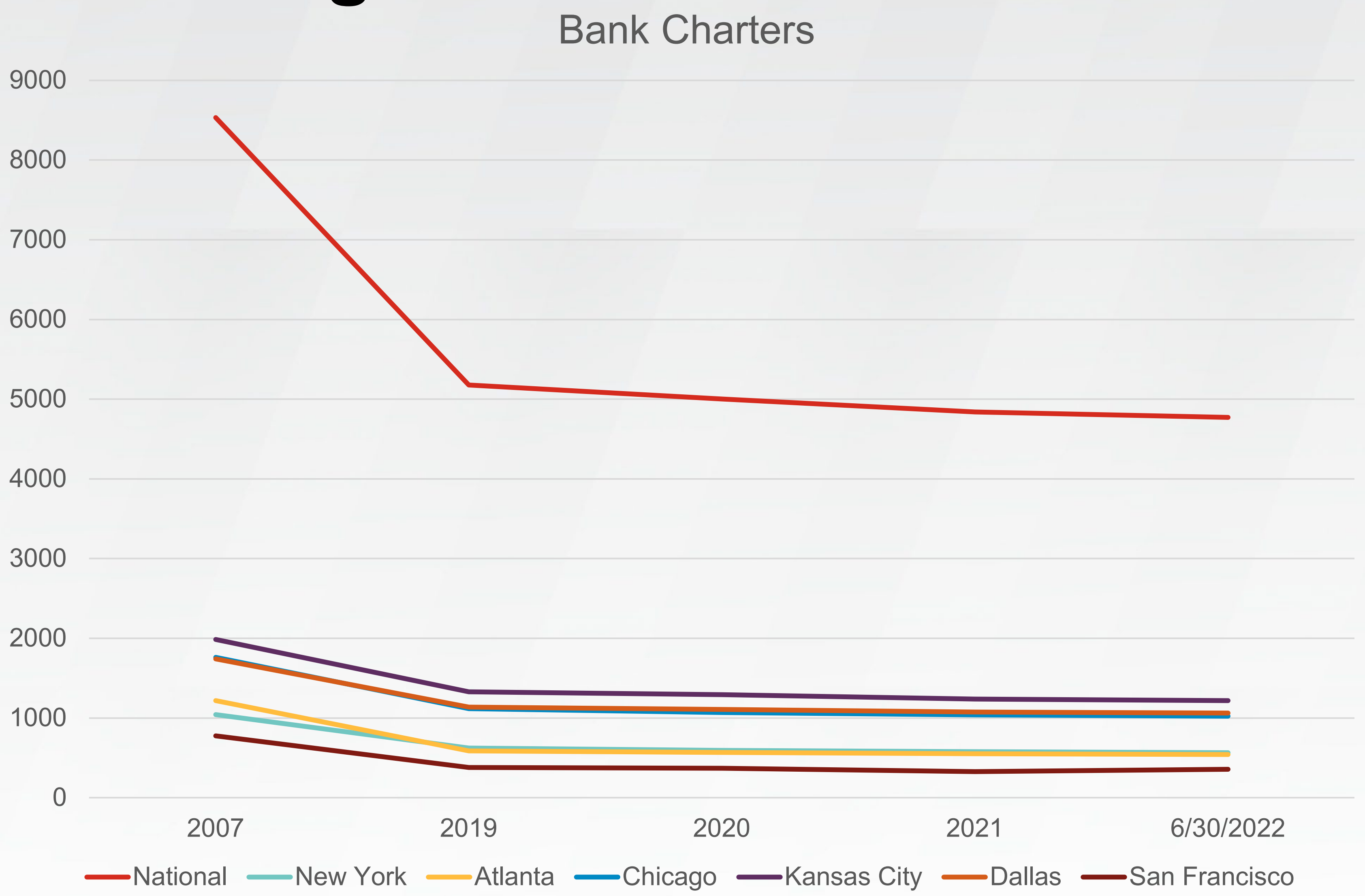
Current Banking Environment & Trends

- A look at the number of bank charters

	6/30/22	2021	2020	2019	2007
National	4,771	4,839	5,001	5,177	**8,533**
New York	564	577	593	625	**1,042**
Atlanta	544	551	569	587	**1,220**
Chicago	1,025	1,040	1,069	1,118	**1,763**
Kansas City	1,219	1,237	1,292	1,330	**1,987**
Dallas	1,062	1,075	1,107	1,138	**1,743**
San Francisco	357	329	371	379	**778**

- Through 6/30/22, 72 banks merged out of existence
- Through 6/30/22, 9 new banks have opened

Current Banking Environment & Trends



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Current Banking Environment & Trends

- NIM: Margins on the rise in 2022

	6/30/22	2021	2020	2019	2010	2007
National	2.67%	2.54%	2.82%	3.36%	3.76%	3.30%
New York	2.53%	2.42%	2.65%	3.12%	4.28%	3.42%
Atlanta	2.76%	2.60%	2.88%	3.49%	3.51%	3.08%
Chicago	2.25%	2.16%	2.49%	2.99%	3.01%	2.80%
Kansas City	2.72%	2.53%	2.80%	3.29%	4.95%	4.43%
Dallas	2.73%	2.70%	3.05%	3.86%	3.91%	3.83%
San Francisco	3.54%	3.35%	3.61%	4.03%	3.52%	3.42%

Current Banking Environment & Trends

- Efficiency Ratio

	6/30/22	2021	2020	2019
National	60.17	63.20	59.78	56.63
New York	60.14	61.37	59.45	58.98
Atlanta	61.05	64.90	60.31	55.19
Chicago	60.93	62.66	59.16	57.73
Kansas City	62.34	69.96	65.24	58.15
Dallas	60.53	63.98	60.38	61.96
San Francisco	55.24	55.98	52.53	49.35

Current Banking Environment & Trends

- Asset quality metrics remain very strong

Past Due Loans					
	6/30/22	2021	2020	2019	2009
National	1.23%	1.39%	1.76%	1.56%	7.30%
New York	1.19%	1.34%	1.67%	1.39%	5.95%
Atlanta	1.30%	1.43%	1.72%	1.72%	8.29%
Chicago	1.13%	1.28%	1.61%	1.36%	7.73%
Kansas City	1.42%	1.57%	2.13%	1.79%	7.69%
Dallas	1.33%	1.90%	2.56%	1.77%	5.41%
San Francisco	1.05%	1.02%	1.22%	1.34%	7.24%

Current Banking Environment & Trends

- Allowance for credit losses to total loans
- Most banks have not adopted CECL, but most big banks (those roughly >$2B & public) have

	6/30/22 ALL %	2021 ALL %	2020 ALL %	2007 ALL %
National	1.52%	1.58%	2.18%	1.29%
New York	1.52%	1.59%	2.00%	1.52%
Atlanta	1.50%	1.56%	2.30%	1.06%
Chicago	1.45%	1.44%	2.17%	1.29%
Kansas City	1.60%	1.70%	2.37%	1.39%
Dallas	1.20%	1.26%	1.46%	1.16%
San Francisco	1.78%	1.88%	2.45%	1.36%

Current Banking Environment & Trends

- Return on Assets

	6/30/22	2021	2020	2019	2007
National	1.05%	1.23%	0.72%	1.29%	0.86%
New York	0.93%	1.08%	0.63%	1.10%	0.79%
Atlanta	1.06%	1.26%	0.59%	1.29%	0.84%
Chicago	0.96%	1.25%	0.87%	1.34%	0.87%
Kansas City	0.97%	1.10%	0.49%	1.20%	1.46%
Dallas	1.04%	1.12%	0.98%	1.34%	1.02%
San Francisco	1.56%	1.71%	1.03%	1.66%	0.66%

Current Banking Environment & Trends

- GAAP capital down due to losses in AFS portfolios, but regulatory capital has held steady

	6/30/22	2021	2020	2019	2007
National	9.35%	9.94%	10.17%	11.32%	10.37%
New York	9.80%	10.32%	10.50%	11.84%	12.07%
Atlanta	9.89%	10.21%	10.78%	12.23%	10.32%
Chicago	8.87%	9.52%	9.59%	10.89%	9.24%
Kansas City	9.39%	9.81%	9.80%	10.24%	9.75%
Dallas	8.20%	9.64%	10.08%	12.17%	10.23%
San Francisco	9.53%	10.14%	10.44%	11.15%	10.35%

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Summary of 2022 Results Thus Far

- 2022 YTD net income declined YOY, but increased nearly 8% from Q1 2022
- Net interest margin has improved with the rise in rates & is at 2.67% at 6/30/22. Pre-pandemic NIM average from 2015-2019 was 3.25%
- Growth in noninterest expense outpaced asset growth
  - Product of inflation & reduction in asset numbers
- Tangible capital ratios much lower due to securities portfolios

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Summary of 2022 Results Thus Far

- Despite reduction in total assets, loans grew during Q2
  - Reason we are seeing ACL/loan ratio go down despite increased provisions
  - Also why past dues as a % of loans stayed about the same despite the balances of past due loans increasing over Q1 & 2021
- Asset quality has remained historically good heading into end of 2022

Questions?

For more information

Jason Rader | National Industry Partner

417.865.8701

jason.rader@forvis.com

Thank you!

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Assurance / Tax / Advisory

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Managing ACH Risk

Your Presenter

Mark W. Dever, AAP, CAMS
Director – Consultant – ProBank Advisor

502-479-5246
mark.dever@forvis.com

Prior to joining the firm in 1996, Mr. Dever was vice president & manager of cash management operations for a multibillion-dollar regional bank holding company with several affiliates. He has extensive experience in many areas, including the automated clearing house (ACH), domestic wire transfer, affiliate bank post-acquisition conversions & consolidations, bank operation centralizations, & payment system risk

He teaches a variety of seminars including the ACH Processing & Compliance, & the Anti-Money Laundering & Bank Secrecy Act seminars. He has lectured at regional & national seminars, & at graduate schools of banking hosted by various bank associations & national industry groups. He has served on the faculty of both the OTS' Compliance I School, & the FDIC's Advanced Consumer Protection School. He has also taught undergraduate business & management classes in a community college setting

Mr. Dever is an Accredited Automated Clearing House Professional (AAP), & a Certified Anti-Money Laundering Specialist (CAMS)

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Acronyms

- NACHA – National Automated Clearing House Association
- RPA – Regional Payment Associations, *e.g.*, EPCOR
- RDFI – Receiving Depository Financial Institution
- ODFI – Originating Depository Financial Institution
- FFIEC – Federal Financial Institutions Examination Council
- FinCEN – Financial Crimes Enforcement Network
- SEC – Standard Entry Class Codes
- R## – Return Reason Code
- FedNow 24/7 INSTANT PAYMENTS – Fed’s Real-Time Gross Settlement Service

Agenda

1. Identify the five major ACH Risk Categories: Fraud; Operations; Customer Credit; Systemic Risk; & Synthetic Identity Fraud
2. Discuss three additional risks: Strategic; Reputation; & Legal/Compliance
3. Review OCC 2006-39 – ACH Risk Management Guidance
4. Discuss other ancillary “issues” associated with ACH processing
5. Recall the NACHA Rule requiring completion of an ACH Risk Assessment

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ACH Volumes

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2021 ACH Volumes

- In 2021, NACHA reported volumes of 29.1 Billion Entries processed through the Network, an increase of +2.3 Billion (+8.7%). Total Volumes in ‘20 of 26.8 Billion Entries. Network dollars processed grew $10.8 Billion, (+17.4%) with $72.6 Trillion in value
  - B2B Entries grew +20.4%, & increased to 5.3 Billion Entries (CCD & CTX accounted for $50.0 Trillion)
  - Direct Deposit grew +4.3%, & increased 8.4 Billion Entries (PPD credits accounted for $13.03 Trillion)
  - WEB Entries grew +13.2%, & increased to 8.7 Billion Entries (WEB accounted for $4.98 Trillion)
  - P2P Entries grew +24.6%, & increased to 271.2 Million Entries (P2P accounted for $402 Million)
  - Healthcare Entries grew +17.9% & increased to 426.3 Million Entries (Healthcare accounted for $2.0 Trillion)
  - SDAs grew +73.9% & totaled 603.8 Million Entries with a value of $943.7 Billion – +105.1% > 2020
  - 143 Million EIPs, 182 Million ACTCs, & hundreds of millions of UI Payments

2022 – Year-To-Date

- 3rd Quarter
  - Total Volume 7.6 Billion Entries – +4.2% over 3Q’21
  - Total Value of Payments – $19.2 Trillion – +6.0% over 3Q’21
- 2nd Quarter
  - Total Volume 7.5 Billion Entries – +3.5% over 2Q’21
  - Total Value of Payments – $19.6 Trillion – +6.52% over 2Q’21
- 1st Quarter
  - Total Volume 7.3 Billion Entries – +2.2% (+154 Million Entries) over 1Q’21
  - Total Value of Payments – $18.5 Trillion – +7.1% over 1Q’21

ACH Risk

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ACH Risk

- The FFIEC Agencies identify eight types of ACH Risk
  - The “Big Five” include
    - + Fraud
    - + Operations
    - + Customer Credit
    - + Systemic/Liquidity
    - + Synthetic Identity Fraud (SIF)
  - Three Others
    - + Strategic
    - + Reputation
    - + Legal/Compliance

1 – Fraud

- Risk of loss through activities that attempt to misdirect or misappropriate funds
- Fraud can be perpetrated from
  - Internal Sources
  - External “customer” sources
  - External “non-customer” sources
- Best way to prevent Fraud – implementation of series of controls

Internal Controls – Fraud

- Transaction Initiation Authority
- Dual Control/Separation of Duties – Nirvana for Audit
  - Utilize the system security protocols to force the separation of duties
  - Force Separate Balancing & Reconciliation processes
  - Allow only management team members to handle compensation claims arising from transaction errors
- Control system access by data center & application programming staff

External Controls – Fraud

- Transaction Initiation Authority
- Utilize Pins, Codewords, Tokens for the employees of your clients
- Utilize callbacks to confirm selected transactions – Be careful though …
- REFUSE fax or written requests for transfers
- Two Controls for ODFIs
  - Processing Calendars/Schedules – looking for files that should not be there
  - Originated File Totals

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Collusion

- Regrettably, two or more working together, especially if one is internal, they can beat you every time
- Two Points
  - Hire the right people
  - Do things to keep “honest people honest” – operational self-audits

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Terminated Originator Database

- A key component of NACHA's risk management strategy is the Terminated Originator Database (TOD) service which allows ODFIs & Third Parties to add information on, investigate new, & periodically verify Originators & Third-Party Senders (TPS)
- Inclusion into TOD after being terminated for cause does not mean that an Originator or Third-Party Sender is prohibited from working with another ODFI, it merely permits educated business decisions to take place
- NACHA encourages ODFIs to use TOD to
  - Add information on terminated Originators & TPSs
  - Investigate new Originators & TPSs before onboarding
  - Periodically verify current Originators & TPSs ensuring they have not been terminated by another ODFI

2022 SAR Activity Distribution – 1st Half of 2022
896,596 // 1,778,804 (+ 36.41 % // + 22.04%)

1	Check	253,261		10.09%
2	Transaction(s) Below CTR Threshold	218,152		8.69%
3	Suspicion Concerning the Source of Funds	191,699		7.64%
4	Transaction with No Apparent Economic, Business, or Lawful Purpose	181,378		7.23%
5	Transaction Out of Pattern for Customer(s)	154,185		6.14%
6	Suspicious EFT/Wire Transfers	148,315		5.91%
7	Identity Theft	123,474		4.92%
8	Credit/Debit Card	120,076		4.78%
9	Suspicious Use of Multiple Transaction Locations	118,859		4.74%
10	Other Fraud (Type)	115,100		4.59%
11	Counterfeit Instrument	99,748		3.97%
12	ACH	88,468		3.53%

2 – Operational Risk

- Two Types: Errors & Omissions (E & O), & Business Continuity Management (BCM)
- Errors & Omissions – by virtue of the fact that humans are involved in all our transactions, mistakes do occur …
- Same Controls we used to prevent fraud can help us prevent errors
  - Dual Control/Separation of Duties
  - Customer Call-Backs
  - Review Schedules – now looking for files that should be, but have not arrived – Mortal Sin of ACH Origination?

Business Continuity Management (BCM)

- Some of the more frustrating expenditures made by a DFI fall under the heading of Business Continuity Management, & yet no DFI can be without some level of operational business continuity preparedness
- An operational BCM plan should include
  - Written Plan
  - Recovery Location
  - Processing Materials
  - Work-In-Process
  - Operating Procedures off-site
  - Employee Contacts
  - Test, Test, Test!!!

3 – Customer Credit Risk

- The creditworthiness of the client is critical as DFIs provide electronic banking services & products to clients. Credit Risk, the risk that a party to the transaction cannot provide the necessary funds for settlement, is created in many ways, including
- Credit Origination
- Debit Origination
- Daylight Overdraft Risk

"Perfect" Payroll

Wednesday

ODFI

Credits Out

Thursday

RDFI

Credits In

Friday

Credits Made Available to Receiver?

Huge (-$) in Fed Account

To Settle – FRB Credits the RDFI, by Debiting?

What is the rest of the equation?

ODFI Debits the C/C & Credits FRB

Debit Returns – R01 – Worst Case??

6 Days

TH FR MO TU WE

Client Credit Controls

- The NACHA Rules require ODFIs to assign cross-system exposure limits to each client originating files, & to monitor those limits across multiple settlement days
  - Need credit limits, debit limits, & DOD limits
  - Obtain credit committee approval of "electronic limits" as part of the client's overall loan exposure to the DFI
  - Suspend transactions when limits are exceeded & obtain credit officer's approval prior to release
  - Require pre-funding of certain files
  - Delay availability of debit origination settlements
  - Relationship managers/credit officers should make the credit decisions, accepting responsibility for credit & debit processing decisions which should not be left in operations

FedACH Risk® Management Services

Effective risk management is important to all financial institutions. The Federal Reserve Banks offer a suite of FedACH Risk Management Services to help you monitor and manage your ACH payments business, even if you use a third-party sender.

FedACH Risk Origination Monitoring Service

Offers originating depository financial institutions (ODFIs) enhanced control, flexibility and automated ease in monitoring ACH risk, regardless of the network entry point or your ACH software

FedACH Risk RDFI Alert Service

Provides notice of noteworthy conditions within a receiving depository financial institution's (RDFI) incoming FedACH® Service files, batches and entries. It is an information-only service that alerts the RDFI and/or its account holders to potential fraud, significant origination errors and conditions of interest. The service is available to any RDFI that receives FedACH transactions, regardless of the receiving point or file delivery setup of the financial institution or its service provider.

FedACH Risk Returns Reporting Service

Enables ODFIs to produce reports of returns by originator for a single day or up to a 10-day period of processing days within the previous 60 business days

Learn More

- Contact me about FedACH Risk Management Services (Off-site)
- Product Details
- Frequently Asked Questions (FAQ)
- FedACH Operations Resources

For more information about FedACH Risk Management Services, contact your account executive or use Find Your Contacts for a list of service and support contacts who can assist you.

4 – Systemic Risk

- Systemic risk, the risk that a funds transfer system participant is unable or unwilling to settle its commitments, thus causing the other participants in the system to be unable to settle their commitments, takes multiple forms
- Liquidity problems can result in opportunity costs, defaults on other obligations, or higher costs associated with obtaining funds from another source for some period of time
- Operational failures may also negatively affect liquidity if payments do not settle on time
- Fed & the private sector operator utilize various tools to contain & control the risk
  - Correspondent Bank Settlement Risk

5 – Synthetic Identity Fraud (SIF)

The Fed and the industry have become increasingly concerned about Synthetic Identity Fraud. Synthetic Identity Fraud occurs "when perpetrators combine fictitious and sometimes real information, such as names and Social Security numbers (SSNs), together to create new identities. These identities may then be used to defraud financial institutions, private industry, government agencies or individuals. (Source = *July 2020 White Paper Payments Fraud Insight: Mitigating Synthetic Identity Fraud*). In synthetic identity fraud, the fraudsters leverage the personally identifiable information of individuals – frequently children, the elderly, or homeless – those less likely to access their credit information and thus discover the fraud. Synthetic identities can behave like legitimate accounts and may not be flagged as suspicious using conventional fraud detection models.

Beginning in the Fall of 2020 and concluding in early 2021, a Federal-Reserve convened focus group of 12 experts developed an industry-recommended definition of synthetic identity fraud – "Synthetic Identity Fraud (SIF) is the use of a combination of personally identifiable information (PII) to fabricate a person or entity in order to commit a dishonest act for personal or financial gain".

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5 – Synthetic Identity Fraud (SIF)

Personally identifiable information elements that may be used to create a synthetic identity include both primary elements (elements that are in combination, typically unique to an individual or profile (e.g. name, date of birth, SSN, and other government-issued identifiers)) and supplemental elements (elements that can help substantiate or enhance the validity of an identity but cannot establish an identity by themselves (e.g., mailing address, phone number, e-mail address, et al.)).

In 2022, the Federal Reserve released and continues to update a *Synthetic Identity Fraud Mitigation Toolkit* which offers a wide variety of informative resources for financial institutions, consumers, and businesses to help understand, identity, and combat synthetic identity fraud. There are currently six modules in the toolkit including: SIF – The Basics; How Synthetic Identities are Used; When Synthetics become a Reality; Detecting a Synthetic Identity; Validating Identities; and Identifying Synthetics.

For more information on Synthetic Identity Fraud go to https://fedpaymentsimprovement.org

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Synthetic Identity Fraud Mitigation Toolkit

Synthetic identity fraud is a real problem facing the payments industry and other types of businesses. Furthermore, feedback from the Federal Reserve's ongoing engagement with payments fraud experts and a June 2021 survey reinforces the need for synthetic identity fraud awareness and dialogue about detection and mitigation strategies.

The Fed supports the payments industry in combatting synthetic identity fraud by encouraging education, understanding and broad industry collaboration. This fraud mitigation toolkit offers a wide variety of informative resources for financial institutions, consumers and businesses. Through future phases of the toolkit, new resources will be added over time, including in the areas of synthetic identity fraud detection and mitigation.

Why is it Important to Know About Synthetic Identity Fraud?

In the continued progress toward a vision of faster, safer and more efficient payments in the United States, synthetic identity fraud is a high priority for the payments industry and broader U.S. economy because:

- **Accounts for substantial financial loss**
  - Often miscategorized as a credit loss, accounting for an estimated $20 billion in losses (Off-site) for U.S. financial institutions in 2020.

https://fedpaymentsimprovement.org/synthetic-identity-fraud-mitigation-toolkit/

Other “Not So Big” Risks

- In addition to international firms – FFIEC agencies identify three other risks associated with ACH processing
  - Strategic
  - Reputation
  - Legal/Compliance

Strategic Risk

Strategic risk is the risk associated with the financial institution's future business plans and strategies. This risk category includes plans for entering new business lines, expanding existing services through mergers and acquisitions, and enhancing infrastructure. Strategic plans that include significant market expansion or the addition of new products may expose financial institutions to increased risk. Strategic plans should demonstrate that management has assessed the risks and documented the institution's program to mitigate them. Strategic plans should also address the institution's capability to provide the service. The strategic plan should include a comprehensive vendor management program.

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Reputation Risk

Reputation risk is the risk that negative publicity regarding an institution's business practices will lead to a loss of revenue and/or litigation. Reputation risk is linked with customer expectations regarding the delivery of payment services, and whether the institution is meeting its regulatory and consumer protection obligations relating to those services. An institution's reputation, particularly the trust afforded it by clients and counter-parties can be irrevocably tarnished due to perceived or real breaches in its ability to conduct business securely and responsibly. In addition, financial institutions are responsible for risks associated with the activities of third-party service providers with which they contract.

Legal/Compliance Risk

Legal risk is the risk arising from failure to comply with statutory or regulatory obligations, and may also arise if the rights and obligations of parties involved in a payment are subject to considerable uncertainty, for example if a payment participant declares bankruptcy. Legal disputes that delay or prevent the resolution of payment settlement can cause credit, liquidity, or reputation risks at individual institutions. Legal risk can result from an institution`s failure to comply with the bylaws and contractual agreements established with the clearinghouse, and other counter-parties with which it participates in processing, clearing, and settling payment transactions. Legal risk also arises from noncompliance with existing consumer protection statutes and regulations, and case law governing payment transactions (e.g., Regulation E, Gramm-Leach-Bliley Act (GLBA), et al). The bylaws and agreements between clearinghouse participants include specific responsibilities and liabilities. Financial institutions should assess the risks of agreeing to such bylaws and agreements, as those that do not comply can be fined or lose their membership.

OCC 2006-39 ACH Risk Management Guidance

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OCC 2006-39 – ACH Risk Management Guidance

- https://www.occ.gov/news-issuances/bulletins/2006/bulletin-2006-39.html

On September 01, 2006, the OCC published Bulletin 2006-39 which provides guidance to national banks and federal examiners on managing the risks of ACH activity. The bulletin outlines the key components of an effective ACH risk management program, and financial institutions are "strongly encouraged" to use the guidance to develop an ACH risk management program that reflects the nature and complexity of the institution's activities. The key components found in the OCC guidance include:

ACH Risk Management Program – Financial institution participants in the ACH system should have in place systems and controls to mitigate the risks associated with ACH activities. A strong risk management program begins with clearly defined objectives, a well-developed business strategy, and clear risk parameters. The board and management both have significant roles in the development and implementation of the program.

OCC 2006-39 (cont.)

Reporting to the Board of Directors – To oversee management's execution of the ACH program effectively, the board of directors, or a committee thereof, should receive periodic reports that allow the board to determine whether ACH activities remain within board-established risk parameters and are achieving expected financial results. Such reports generally include: metrics and trend analyses on ACH volume, returns, operational losses, and transaction types, with explanations for variances from prior reports; metrics and trend analyses related to the composition of the bank's portfolio of originators and, as applicable, third-party senders; capital adequacy relative to the volume of ACH activity and the level of risk associated with originators; the percentage of the deposit base that is linked to ACH origination activity; a summary of return rates by originator, and as applicable, third-party senders; unauthorized returns that exceed board-established thresholds; notices of potential and actual Rules violations and fines by NACHA; financial reports on profitability of the ACH function as a cost center; and risk management reports, including a comparison of actual performance to approved risk parameters.

Credit Risk – Financial institutions need to implement credit-risk controls that establish underwriting standards, require analysis of originators' creditworthiness, and set appropriate exposure limits. As with other types of credit exposures, each financial institution's loan policies should include formal underwriting standards and an approval policy for ACH originators, and ongoing credit analysis should be performed on all ACH originators.

Ancillary “Issues”

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Federal Financial Institutions Examination Council

FFIEC

Retail Payment Systems

RPS

April 2016

IT EXAMINATION

HANDBOOK

MANUAL EXA

FFIEC BANK SECRECY ACT/ANTI-MONEY LAUNDERING INFOBASE

Prompt delivery of introductory, reference, and educational training material on specific topics of interest to field examiners from FFIEC members

View the online BSA/AML Examination Manual and Procedures.

Welcome to the FFIEC Bank Secrecy Act/Anti-Money Laundering InfoBase. The "FFIEC InfoBase" concept was developed by the FFIEC's Task Force on Examiner Education and the Task Force on Supervision to provide field examiners at the financial institution regulatory agencies with an electronic source for training and distributing needed examination information. Financial institutions will also benefit from this training and examination information. The long-term goal of the InfoBase is to provide just-in-time training for new regulations and for other topics of specific concern to examiners within the FFIEC's member agencies: Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, Consumer Financial Protection Bureau and the State Liaison Committee. The SLC includes representatives from the Conference of State Bank Supervisors, the American Council of State Savings Supervisors, and the National Association of State Credit Union Supervisors.

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Authentication & Access to DFI's Services & Systems

Authentication and Access to Financial Institution Services and Systems

On August 11, 2021, the FFIEC issued guidance that provides financial institutions with examples of effective authentication and access risk management principles and practices for customers, employees, and third parties accessing digital banking services and information systems. This guidance replaces the FFIEC-issued *Authentication in an Internet Banking Environment (2005)* and *Supplement to Authentication in an Internet Banking Environment* (2011) which provided risk management practices for financial institutions offering Internet-based products and services. This Guidance is available at: www.ffiec.gov/press/pr081121.htm.

The Guidance

The new guidance:

- Highlights the current cybersecurity threat environment including increased remote access by customers and users, and attacks that leverage compromised credentials; and mentions the risks arising from push payment capabilities;
- Recognizes the importance of the financial institution's risk assessment to determine appropriate access and authentication practices to determine the wide range of users accessing financial institution systems and services;
- Supports a financial institution's adoption of layered security and underscores weaknesses in single-factor authentication;
- Discusses how multi-factor authentication or controls of equivalent strength can more effectively mitigate risks; and
- Includes examples of authentication controls, and a list of government and industry resources and references to assist financial institutions with authentication and access management

ACH Risk Assessment

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ACH Risk Assessment

- The Rules change that took effect on 06/18/2010 required ALL participating DFIs to conduct, or have already conducted, a risk assessment of its ACH activities, & to implement a risk management based on the results of such risk assessment
- All participating DFIs must also comply with the requirements of their functional DFI regulator(s) regarding risk assessment & risk management programs
- Developing the risk assessment generally involves two steps – first, identify the specific risk categories unique to the DFI – Quantity of Risk; second, conduct a more detailed analysis of the data identified to minimize & mitigate the risk – Quality of Risk
- Quantity less Quality leaves Residual Risk – which management accepts
- Critical Point – Keep ACH Risk Assessment updated, at least annually

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Diversity & Inclusion

Corporate Social Responsibility

November 15, 2022

Meet Your Presenter

Kevin E. Price
EVP; Diversity, Inclusion, & Corp Social Responsibility

704.243.8393
kevin.price@forvis.com

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Agenda

- Corporate Social Responsibility at **FORVIS**
- Why This Matters
- Sow an Action, Reap a Habit
- What You Can Do

CSR at FORVIS

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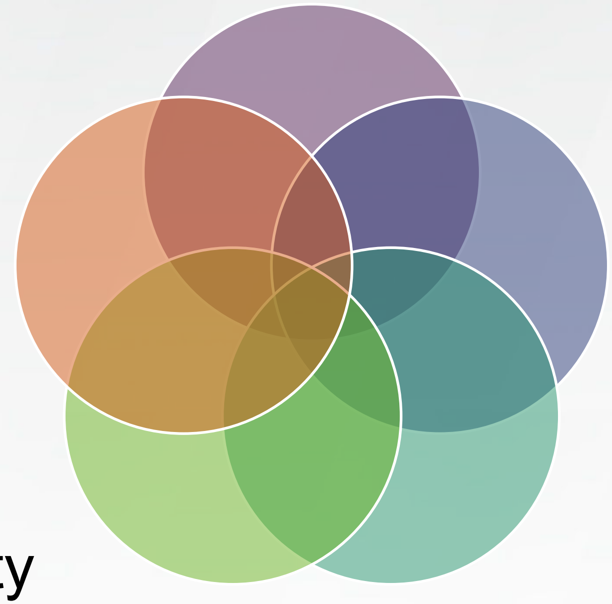
What Is Corporate Social Responsibility?



What Is Involved?

D&I

- Workforce
- Workplace
- Marketplace

- Awareness
- Action
- Allyship
- Accountability

- Infusion over Initiatives

- Habits over Single Efforts

Philanthropy

- Serving Our Communities
- Fostering Progress
- Purpose & Impact-Driven

- Think Globally to Impact Locally

- Alignment to Organizational Objectives

Supplier Diversity

- Mindful & Intentional Efforts to Provide Opportunities

- Another Example of Serving Our Communities

- Growing Importance in Marketplace

Accessibility

- Beyond Accommodation

- People-Focused

- Agile Approach

- Recruiting Tool

- Experience-Driven

ESG

- Environmental
- Social
- Governance

- Significant Growth in Importance

- Workforce Is Watching

- More to Come

Our Approach to This Work

EXPERIENCE

CONTINUOUS IMPROVEMENT

INNOVATE

MISSION ALWAYS

WHAT IF

Why Does This Matter?

The Client Experience Will Never Exceed the Employee Experience

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What We Will Do & How We Will Achieve It

FORVIS Will Deliver an Unmatched Inclusive Experience for All

We Are Unwavering in Our Commitment to Improving the Human Experience Through Respect & Belonging

Infusing into the Experience

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Woven into the Fabric …

Talent Life Cycle

Client Engagement

Community Presence

Industry & Marketplace Impact

What You Can Do

START WITH THE WHY

FOCUS ON THE PEOPLE EXPERIENCE

BUILD THE RIGHT HABITS

MEASURE WHAT YOU EXPECT

Thank you!

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ESG for Financial Services

November 2022

Meet Your Presenters

David Pulido
Managing Director, ESG & Climate Risk

646.798.3430
david.pulido@forvis.com

- David is a senior risk management leader with domestic/international experience that includes functioning as National Risk Practice Leader & focuses on Risk & Regulatory Advisory services
- David has significant client-facing experience in Climate Risk Management & ESG Advisory services, helping clients in establishing & progressing their ESG reporting programs
- He has provided risk advisory services to assist with implementing frameworks, policies, & conducting due diligence of relevant investment & metric targets

Carlotta Franchin
Managing Director, ESG & Climate Risk

646.876.4802
carlotta.franchin@forvis.com

- Carlotta is a seasoned financial services professional, leveraging her experience across risk & regulatory advisory & corporate roles in the U.S. & Europe to help organizations further define & execute on their ESG programs
- She has worked on Financed Emissions Program management, ESG & Sustainability Reporting, across a variety of frameworks, ESG portfolio integration, & various sustainable finance program & product development
- She is an Associate Board Member of a nonprofit focused on increasing Diversity, Equity, & Inclusion in Asset Management & is a certified Sustainable Finance Professional from Columbia University

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Agenda

ESG impacts the Financial Services sector in unique ways

Today's session will provide an overview of ESG & its implications for your company

- ESG Overview
- Financial Services Implications
- Climate Risk Management
- Financed Emissions
- Overcoming Challenges
- How We Can Help

ESG Overview

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The Components of ESG

1997	Global Reporting Initiative (GRI) founded to enhance corporate transparency
2000	Carbon Disclosure Project (CDP) sets to create an economic system that operates within sustainable environment boundaries
2011	Sustainability Accounting Standards Board (SASB) founded to provide an expanded accounting language for sustainability issues
2015	All United Nations (UN) Member States adopt UN Sustainable Development Goals (SDGs)
2017	Task Force on Climate-Related Financial Disclosures (TCFD) released recommendations designed to help companies provide better information to support informed capital allocation
2022	Value Reporting Foundation announced (SASB/IIRC Merger) ISSB announced (VRF/CDSB consolidation; support by TCFD, WEF) SEC Proposed Rule for Climate Disclosures

Evolution of ESG Reporting

ESG reporting frameworks & standards continue to evolve & merge as demand for ESG information from investors, regulators, employees, & customers increases

Category	Common Disclosure Topics
Environmental	GHG Emissions Energy Consumption Water Usage Waste Generation Targets/goals related to the above metrics
Social	Diversity & Inclusion Human Capital Data Privacy & Security Community Impact Workplace Safety
Governance	Board Diversity Executive Pay Risk Assessment Process Business Ethics

U.S. SEC Rule in Play

In March 2022, SEC answered investor & company requests for more standardized guidance on ESG issues

- Proposed rule would require information about a registrant's climate-related risks that are reasonably likely to have a material impact on its business, results of operations, or financial condition
- SEC hopes for more consistent & comparable information across companies
- Rules would apply to all SEC reporting companies, even those with no publicly listed securities

Required disclosures would include

- Climate-related risks & their actual or likely material impacts on business, strategy, & outlook
- Governance of climate-related risks & relevant risk management processes
- Greenhouse gas (GHG) emissions, which, for accelerated & large accelerated filers & with respect to certain emissions, would be subject to assurance
- Certain climate-related financial statement metrics & related disclosures in a note to its audited financial statements
- Information about climate-related targets & goals, & transition plan, if any

Presentation & Attestation

- Provide climate-related disclosure in its registration statements & Exchange Act annual reports
- Provide Regulation S-K mandated climate-related disclosure in a separate, appropriately captioned section of its registration statement or annual report
- Provide Regulation S-X mandated climate-related financial statement metrics & related disclosure in a note to its consolidated financial statements
- Electronically tag both narrative & quantitative climate-related disclosures in Inline XBRL
- If an accelerated or large accelerated filer, obtain an attestation report from an independent attestation service provider covering, at a minimum, Scopes 1 & 2 emissions disclosure

Proposed Timeline Considerations (may be delayed**)**

- *Large Accelerated** – Fiscal Year 2023 Scope 1 & 2 with Limited Assurance starting for Fiscal Year 2024
- *Accelerated & Non-Accelerated** – Fiscal Year 2024 Scope 1 & 2 with Limited Assurance starting for Fiscal Year 2025
- *Small Reporting Company* – Fiscal Year 2025 Scope 1 & 2 with no assurance requirement

** Large Accelerated Filers have aggregate worldwide market value of voting & non-voting common equity held by non-affiliates > $700M; Accelerated Filers > $80M, < $700M. **Both subject to Scope 3 disclosure, if deemed material or targets have been set**

Additional U.S. Regulatory Updates

President Biden's May 2021's Climate Risk Executive Order, called upon the federal government to assess & develop solutions to address climate risk to the financial system, accelerated additional U.S. regulatory developments, in line with extensive EU & global regulatory efforts underway on climate & broader ESG & sustainability topics

FRB

September 29, 2022, **FRB** announced six of the nation's largest banks[1] will participate in a **pilot climate scenario analysis exercise** to enhance the ability of supervisors & firms to measure & manage climate-related financial risks

- Pilot will launch early 2023 & is expected to conclude ~ end of the year
- Firms will analyze the impact on specific portfolios & business strategies of the FRB scenario
- FRB will review the analysis & engage with the firms to build capacity to manage climate-related financial risks
- Insights gained from the pilot are expected to be published in aggregate, to help identify potential risks & promote risk management practices (no firm-specific information will be released)

OCC

OCC (Dec 2021) & FDIC (Mar 2022) released similar DRAFT **Principles For Managing Exposures to Climate – Related Financial Risks for Large Banks** (≥ $100bn or that have material exposures to climate-related financial risks), expected to be finalized in 2022

- OCC Banks are expected to implement enhanced governance, strategic planning, risk management, oversight, & data reporting practices to address climate change; including scenario analysis
- *Banks that are not regulated by the OCC & FDIC or are smaller in size might still want to consider reviewing the Climate Principles to inform their own risk management activities, particularly for banks that have larger & more complex operations associated with material exposures to climate-related financial risks*

[1] Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, & Wells Fargo
[2] FRB will publish details of the climate, economic, & financial variables that make up the climate scenario narratives

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Financial Services Implications

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Unique Industry Implications

ESG & Climate Reporting

- Quickly evolving from standalone to be fully integrated financial reporting, reflecting an expectation for ESG considerations to be embedded in all key risk & strategic processes
- Data availability & quality challenges, translating into large investments
- Regulatory & market expectations for assurance, audit-ready data, control frameworks, & board oversight

Financed Emissions

- Largest emissions category for banks & their most challenging targets
- Significant data availability & quality issues & evolving calculation methodologies
- Market expectation to publicly disclose reduction targets, fully dependent on client engagement strategies

Reputation Management

- Managing investments & relationships in high-emitting sectors & companies will be under scrutiny
- Risk of intentional & unintentional greenwashing
- Board increasing responsibility in ESG & Climate Risk management increases reputational & litigation risks

Climate Scenario Analysis & Stress Testing

- Scenario Analysis increasingly recognized as key risk management tool to inform financial institutions' responses to both physical & transitional risks
- Central Banks (BoE, ECB, FRB) mandated climate "stress testing" exercises to assess resilience of the financial system against climate risks & inform risk management expectations

Credit Processes

- Regulatory & industry expectations to incorporate ESG & Climate Risk factors within credit processes
- Various approaches to PD, LDG, EAD, & scorecards adjustments
- Consider ESG factors integration in due diligence, underwriting, origination, & pricing processes

Regulatory Environment

- Steadily increasing supervision, still evolving & expected to globally converge over time (growing pains)
- Substantial strategic & operational impacts of new regulations will greatly increase effort & compliance cost
- Several regulations anticipated to become market expectations even for companies not required to comply

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Climate Risk Management

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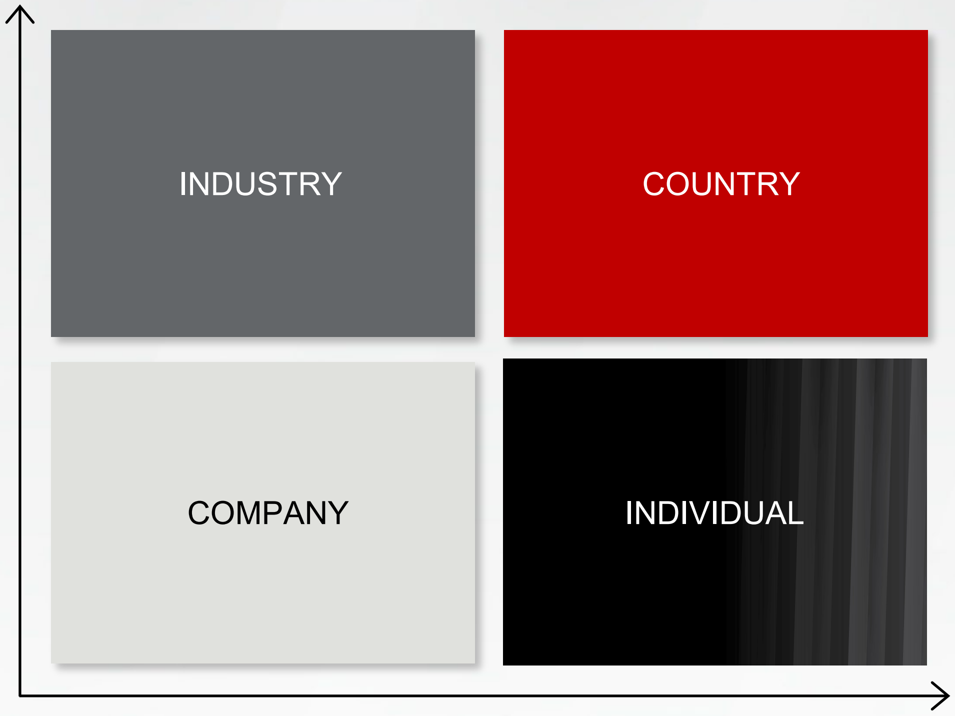
Climate Risk: Framing the Problem

Risks of climate change are among the most consequential perils since the dawn of humanity. Impacts of climate change are systemic; creating lasting impacts that are felt on a global scale. Climate change impacts are also spatial which creates local impacts based on the unique characteristics of certain geographies. These factors contribute to differing financial impacts resulting from physical & transition climate risks across geographies, populations, & industries. Combatting climate change requires a global & coordinated effort involving stakeholders across the public & private sectors

Climate Impact Matrix



PHYSICAL RISK

Physical risks include acute risks, which are event-driven (weather-related natural catastrophes)

Physical risk includes floods, draughts, wildfires, &/or coastal damage

Physical risk includes chronic risks, which are longer-term in nature such as changes in weather patterns that affect water availability

TRANSITION RISK

Transition risks arise from responses to climate change within the economy & society

Transition risks lead to policy & legal risks, technology risks, market risks, & reputational risks

Transition risks include adjustments in pursuit of a low carbon economy, *e.g.*, CO_2 tax, emission regulations, stranded assets, technology changes, consumer preferences

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Integrating Climate Risk

As Climate Risk becomes increasingly prevalent, organizations must look at how to integrate it into their ERM Framework & day-to-day operations. Below is a depiction of a few of the key Climate Risk considerations for an ERM Framework build-out & continual development

Climate Risk Measures < < < < > < < < < < < < < < < < < < **ERM Program** > > > > > > > > > > > > > > Climate Risk Measures

Establish a formalized program & communications approach to imbed Climate Risk into the organization

RISK REPORTING & COMMUNICATION
Demonstrate how risks across the organization roll-up to impact the board's strategic objectives

Cultivate & imbed Climate Risk controls & their respective testing into processes like SOX & RCSA

CONTROL TESTING
Design & execute control assessments & work with our clients to embed control testing into their governance, risk, & compliance framework

Perform a maturity assessment incorporating Climate Risk to identify challenges, barriers, & gaps to industry-leading practices & provide a detailed remediation plan of action

RISK CULTURE ASSESSMENT
Design & develop automated risk dashboards using key performance indicators identified across business lines. Develop benchmarks to help assess ERM maturity level, relative to your peers & regulatory expectations

Identify data sources & implement tools & models to manage Climate Risk

RISK TAXONOMY DEVELOPMENT
Leverage technology & data analytics to centralize risks & risk attributes while maintaining accuracy timeliness

RISK MANAGEMENT FRAMEWORK DEVELOPMENT
Establish an ERM framework that enables a clear view of its overall risk level by developing processes for continuous measurement & monitoring of exposures

Discuss Climate Risk as a standalone Level 1 risk (credit, market, liquidity, operational, strategic, etc.) or as a sub-risk category (Level 2) of an existing Level 1 risk category

RISK GOVERNANCE DESIGN
Design & implement valuable governance tools throughout the organization while maintaining adequate governance principles

Integrate Climate Risk into the existing ERM Framework

RISK APPETITE FRAMEWORK DEVELOPMENT
Develop a risk appetite statement to support efforts in developing strong risk management practices

Develop a climate risk appetite statement, risk tolerances, metrics, & KRIs required to manage, evaluate, monitor, track, & report on Climate Risk

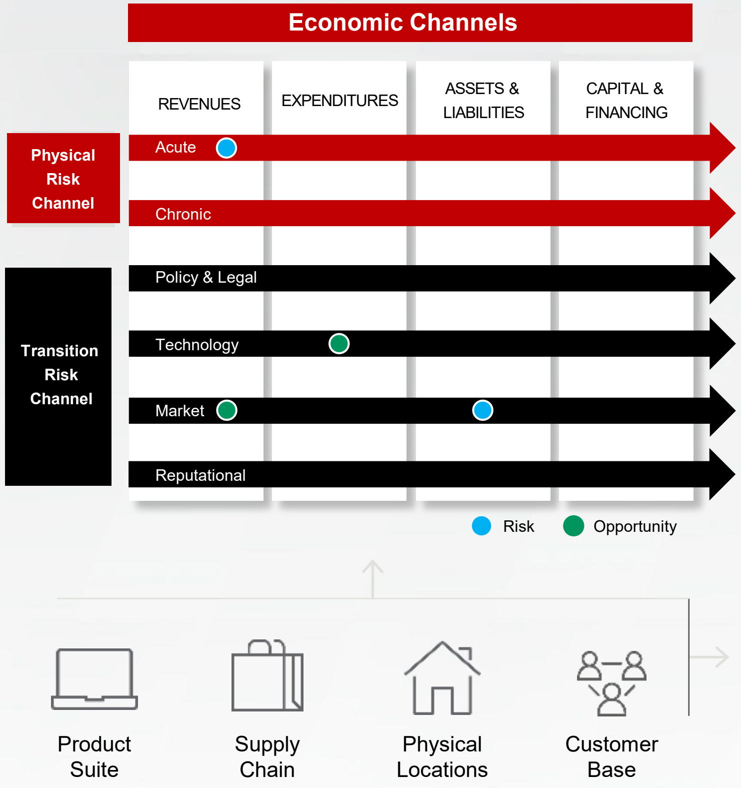
RISK IDENTIFICATION DESIGN & DEVELOPMENT
Hold workshops with business line stakeholders to identify potential risks that affect each individual business line. Understand the importance of properly managing these potential risks

Leverage existing risk management assessment policies, standards, & procedures to assess Climate Risk effectively & efficiently

Climate Risk Scenario Analysis

Scenario analysis looks at plausible futures & provides senior management a framework to contemplate impacts to business strategy, but not to deliver precise forecasts. These routines need to be built over time starting with qualitative assessments & maturing to more quantitative models over time

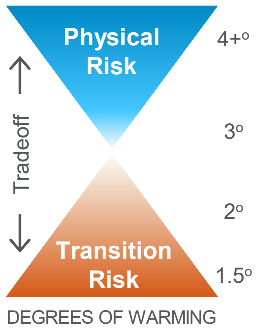
CLIMATE RISK & OPPORTUNITY IDENTIFICATION



SCENARIO SELECTION & SPECIFICATION

Create Macro Narrative

- Leverage IPCC, NGFS, SBTi, IEA
- Choose **2º** or lower scenario & others that are relevant to company
- Draft global narrative



Company Tailoring

- Physical & transition risk geography targeting
- Transition focus
- Application scope
- Time frames

Assumptions Tuning

- Carbon price
- Energy demand/mix
- Demographics
- Technology
- Policy
- Economy

SCENARIO ANALYSIS

Work Preparation

- Workshop participant/SME identification
- Data collection of business, operational, supply chain, & other data
- Scenario descriptions
- Workshop expectations & objectives
- Pre-reading sent to all participants

Facilitated Scenario Workshop

- SME roundtable facilitated by FORVIS to capture impacts of each scenario
- Effects on earnings, costs, revenues, assets, management responses, & business interruptions
- Strategy resiliency

Post-Workshop Governance

- Document & report output to participants & incorporate feedback
- Obtain sign-off from senior management

INTEGRATION

- Description of scenarios selected
- Assumptions & methodology
- Time frames for specification & analysis
- Results including impact to strategy, implications to value chain or performance

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Physical Climate Risk Dashboard

The Physical Climate Risk Dashboard empowers companies to identify their physical risk exposure across their portfolio & operations using the latest in climate science. Our platform, designed in collaboration with Jupiter Intelligence™, provides the insights needed to help assess & manage physical risk exposure & inform key stakeholders of resilience under different direct & indirect scenarios

Beyond our 8 key physical climate perils, FORVIS provides scenario analysis for risk management, existing & future regulatory requirements through 2100 & across multiple warming scenarios, as well as asset & portfolio-level spatial resolution capabilities to <90m, ideal for real estate development, logistics, risk engineering, safety & operations, underwriting, & capital planning

15x

Increased number of people impacted by heat stress if the world's temperature rise reaches 2˚C

Source: METOFFICE

Core Capabilities

- Any global location & multiple visualization options
- Inbuilt Jupiter Intelligence™ Climate Score Global Metrics
- Science-backed data based on SSP & RCP climate pathways
- Supports the Taskforce for Climate-Related Financial Disclosures (TCFD) requirements for scenario analysis
- Provision of risk analysis, evaluation, & reporting
- Regulatory reporting compliance for global disclosures
- Impact & materiality assessment alignment to support business strategy management & risk management

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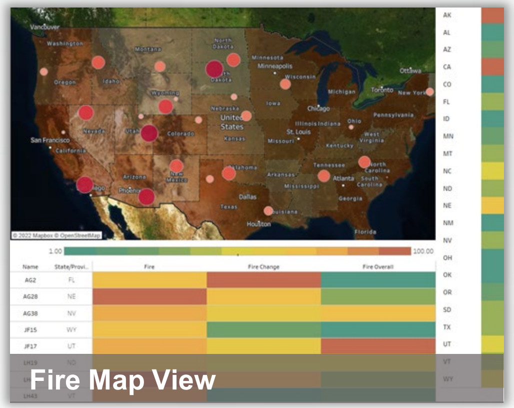
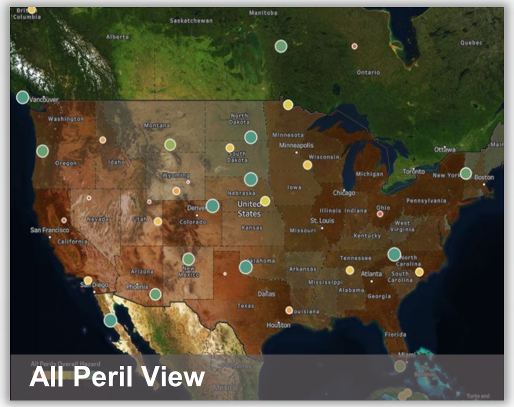
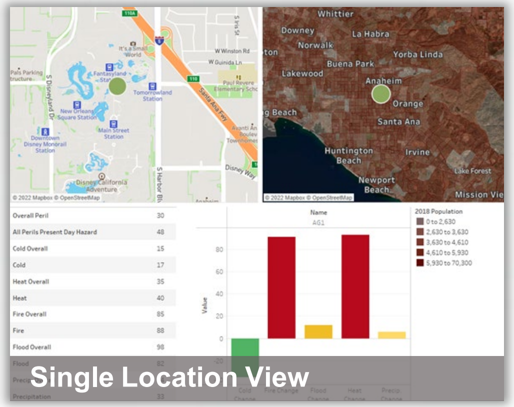
Visualization Examples


Fire Map View


All Peril View


Single Location View

Be Prepared

All we require to kick off your physical risk analysis is a list of locations or postcodes. Simply contact your FORVIS representative or reach out to our ESG team & we'll support your journey to both mitigating & adapting to the challenges of climate change

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Financed Emissions

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Financed Emissions

Current carbon accounting models, ownership of GHGs associated with investments, & lending activities are considered part of a financial institution's carbon footprint—which are accounted for in its Scope 3 Emissions, the largest & most material one. *Measuring the financed emissions of a portfolio is the foundation enabling financial institutions to perform scenario analysis, set targets, inform actions, & disclose progress towards reducing its carbon footprint & reaching Net-Zero goals (if defined)*

Industry Groups & Challenges

- The **Partnership for Carbon Accounting (PCAF), Net-Zero Banking Alliance (NZBA)**, & **Glasgow Financial Alliance for Net Zero (GFANZ)** are three of the key industry groups, which, in line with the GHG Protocol, offer guidance to estimate baseline Finance Emissions (PCAF), setting reduction targets, & managing progress (NZBA), in a Transition Plan (GFANZ)
- **Key challenges** – Emissions data is often incomplete, inconsistent, or may be entirely missing, thus defaulting on estimates; not all sectors & asset types have clearly-defined carbon accounting standards, *e.g.*, capital markets; methodologies keep evolving as more data & comments are received; client engagement strategies & divestments impact profitability

Regulatory Next Steps & Implications

- The existing & proposed frameworks to calculate & manage Financed Emissions are guidance documents, counting on voluntary commitments from participating organizations
- Disclosure of financed emissions is primarily voluntary in the U.S., including in the SEC Proposed Rule. But regulators are signaling expectations for enhanced climate risk disclosures, following the EU regulations, that are already proposing to require banks to measure & disclose financed emissions by June 2024
- Calculation & management of Financed Emissions requires a substantial amount of work from a governance, change management, data readiness, reporting, operational, & technology infrastructure development

PCAF 2015

- *Created in 2015 by 14 Dutch financial institutions (322 currently)*
- *Industry-led initiative to enable financial institutions to consistently measure & disclose the GHG emissions financed by their loans & investments*
- *Financed Emissions calculated as total emissions of borrower/investee * financed share of financial institution*
- *Emission factors are calculated based on emissions scores 1 (Audited data) through 5 (estimates w/ limited support) dependent on available data*

NZBA 2021

- *Industry-led, UN-convened Net-Zero Banking Alliance brings together a global group of banks*
- *Transition GHG emissions from their lending & investment portfolios to align with pathways to net-zero by 2050 or sooner*
- *Within 18 months of joining, set 2030 targets (or sooner) & a 2050 target*
- *Banks' first 2030 targets will focus on priority sectors where the bank can have the most significant impact,* i.e.. *the most GHG-intensive sectors*

GFANZ 2022

- *Global coalition of leading financial institutions committed to accelerating the decarbonization of the economy*
- *Criteria that all GFANZ members must align with include*
  - *Use science-based guidelines to reach net-zero emissions across all emissions scopes by 2050*
  - *Set 2030 interim targets that represent a fair share of the 50% decarbonization required by the end of the decade*
  - *Take immediate action to begin decarbonizing, including within 12 months*
  - *Set & publish a net-zero transition strategy*
  - *Commit to transparent, annual, public reporting & accounting on progress against those targets*
  - *Adhere to restrictions on use of offsets*

Overcoming Challenges

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Overcoming ESG Challenges

Stakeholders

Create a stakeholder map to understand the different ESG focus areas & to support materiality determination

Scope & Materiality

Inventory requirements across ESG disclosure mechanisms to determine scope & assess materiality for your company

Data

Ensure formality around the data sourcing process & train data stewards to provide quality & governance for reporting data

Strategy

Understand that ESG risks impact strategy & ESG disclosures are a commitment to that strategy

Governance

Establish formal governance structure with accountability from the BoD downward for driving ESG initiatives & decisions

Program Management

ESG reporting & the associated initiatives stemming from it require the same amount of program rigor as any other large-scale transformation

How We Can Help

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FULL SUITE OF ESG & CLIMATE RISK SOLUTIONS

Our global economy has evolved & allowed us to accomplish amazing feats, only dreamed about in generations past. We have changed the way we do business, the way we live, & how we interact with each other. At the same time, our interconnectedness as a global society has caused our symbiotic relationship with the planet to become taxed. Some of our greatest societal achievements have also led to some of our greatest future risks. Our offerings are designed to help clients achieve their goals in the backdrop of this new ESG landscape & contribute to the betterment of the world for generations to come

CLIMATE RISK MANAGEMENT

- Climate Risk & Opportunity Assessment
- Risk Management Process Integration
- Supply Chain/Third-Party Risk Management
- Climate Quantitative Solutions – Physical/Transition Risk Modeling & Validation
- Scenario Analysis & Stress Testing
- Climate Risk Data Strategy
- Climate Risk Appetite Statement
- Business Continuity Planning
- Climate Change Adaptation

ESG-CENTRIC ADVISORY

- Circular Economy & Resource Efficiency Management
- Diversity, Equity, & Inclusion (DEI) Assessment
- Corporate Social Responsibility (CSR) Development
- Environment, Health, & Safety (EHS) Support
- ESG Investment Policy & Process Development
- Life Cycle & Impact Assessments
- Sustainable Finance Methodology & Strategy
- B Corp Assessment & Certification Support
- Carbon Credit Advisory
- Capital & Green Financing Advisory

ESG STRATEGY & GOVERNANCE

- ESG Materiality Assessment & Stakeholder Analysis
- End-to-End Program Design & Management
- Framework Assessment & Alignment
- Executive & Board Training & Education
- Sustainability Communications & Marketing
- ESG Strategic Development
- ESG Data & Technology Architecture Strategy
- ESG Policy Development

CORPORATE DATA & REPORTING

- ESG Data Sourcing Strategy
- Audit Readiness Assessment & SOX/Internal Controls Support
- Sustainability Reporting Copy & Design
- Data Governance & Data Quality Implementation
- ESG Data & Reporting Software Selection/Implementation
- Regulatory Disclosure Support & Requirements Management
- Sustainability KPI Identification & Dashboards

SUSTAINABLE PERFORMANCE IMPROVEMENT

- Carbon Accounting (Scope 1, 2, & 3)
- Market Insight & Performance Analysis
- Peer Benchmarking & Competitor Analysis
- ESG Ratings Review & Management
- Sustainability Goal Setting
- Net-Zero Strategy & Decarbonization Pathways
- Science-Based Targets Initiative (SBTi) Submission Support
- GHG Emissions Reduction Strategy

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Latest Thinking

To educate, create opportunities for dialogue, & provide exceptional service to clients, FORVIS produces & disseminates Knowledge Share articles, podcasts, webinars, & more. Samples of our recent material include

ESG REPORTING – NAVIGATING THE DISCLOSURE LANDSCAPE

Explore recent developments in the ESG disclosure realm

DEVELOPING A CLIMATE RISK MODEL FRAMEWORK

Background, frameworks, models, & next steps for climate risk

ESG: GROWTH, PERFORMANCE, & SUSTAINABILITY

We have designed methodologies to help enable the achievement of your goals

Thank you!

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CECL Panel: Lessons Learned

November 15, 2022

Meet Your Presenters

Lindsay Schuster
Partner

703.226.0083
lindsay.schuster@forvis.com

Gordon Dobner
Partner

713.499.4600
gordon.dobner@forvis.com

Alan Hodgson
Managing Director

336.714.1620
alan.hodgson@forvis.com

Kevin Ives
Director

314.231.5544
kevin.ives@forvis.com

CECL Panel: Lessons Learned

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QUESTIONS?

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Thank you!

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