#### Columbia Law School Global Law and Business Seminar: Introduction to Fintech Law

Pre Reading for

July 25-28, 2022



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### Agenda

<u>Recorded Lecture</u>: Overview of Banks and US Federal and State Consumer Finance Law and Regulation (mp4 Video and m4a Audio files available in Files in Courseworks)



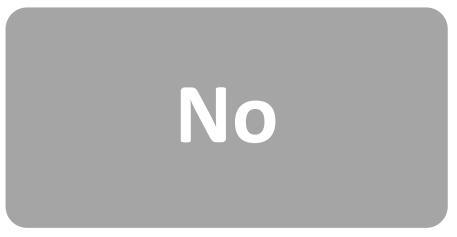
### Background Work

- Learn Basic Business Model Analysis
- Review/Learn About
   Banks and Federal and
   State Consumer
   Financial Law &
   Regulation
- Customize Our Tools for FinTech Analysis:
  - Business Model
  - Economic & Social Impact
  - Law/Regulation

# Introduction to Banks in the US

### Why Start with Banks? Aren't FinTechs Something Entirely Different?

### Umm...





Unbundling of a Bank

The Premise of Fintech disintermediation strategies is "unbundling" traditional bank offerings

### Banks are a Bundle of Financial Services

- What a Bank Does
  - Makes Loans
  - Takes Deposits
  - Initiate & Receives Payments
- Also...
  - Facilitates Investments
  - Advice and Ancillary Services





Most B2C FinTech Begins by Disintermediating Single Bank Functions Using Technology....

- Bank
  - Makes Loans
  - Takes **Deposits**
  - Initiate & Receives Payments
  - Facilitates Investments
  - Advice and Ancillary Services



- FinTech Unbundlers
  - LendingClub
  - Aspiration
  - Square Cash
  - Betterment
  - Nerdwallet





Square





Banks Typically Provide Multiple Services to Customers in Discrete Customer Segments

- Consumers/Small Business
  - Deposits
  - Lending
  - Consumer Payments
  - Simple Investments & Advice
  - ATMs
  - Branch Access
  - Mobile/Online

- Corporate Clients
  - Deposits
  - Lending
  - Capital Markets/I-Banking
  - Asset Management
  - Cash Management
  - B2B Payments
  - International/FX/LOC

### They Also Can Have Niche Businesses and Sometimes Operate Separate Deposit and Lending Segments

- Niche Customer Segments
  - CRE Developers
  - Agriculture/Energy/Entertainment/Trade Finance
  - Securities Custody/Processing
  - Tech Companies/Venture Capital
  - Ultra Wealthy Individuals
- Separate Deposit and Lending Segments
  - Little or No Customer Crossover Between Depositors and Borrowers
  - E.g., CIT, Discover, Ally

#### Banks are Creatures of Law

- Banks are What Legislation Makes Them
- Absent Special Legislative Status, Powers and a "Charter" they Would be Corporations Like any Other





## Banks Have Special Legal Advantages and Costs

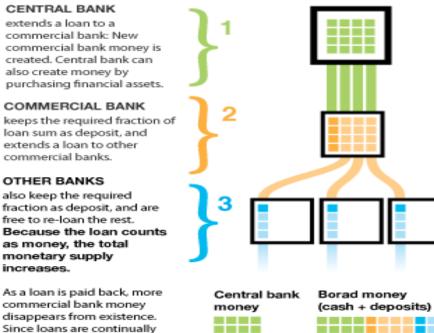
- Legal Advantages
  - Charter from US or State Creates Various preferences in Law
    - Preemption of State laws/exportation
    - Setoffs etc.
  - Deposit Insurance from FDIC
    - Cheap & <u>Stable</u> Funding
    - Security for Customers
  - Direct Access to Fed and Bank Payments System
    - Initiate and Receive Fed/ACH Payments
    - Prevent Non-Bank Competition
    - Visa/MC/Debit Payments
  - Interaction with Capital Markets, Broker-Dealer and/or Asset Management subsidiaries

- Costs of the Bank Charter
  - Capital & Liquidity Requirements
  - Special Obligations: e.g., CRA
  - Failure Backstop Obligations
  - Holding Company Activitie Restrictions
  - Comprehensive Oversight & Regulation
  - = Much Higher Cost Structure

### They Play a Crucial Role in Money Creation

#### Money creation

through fractal reserve banking (expansionary monetary policy)



#### being issued in a normally functioning economy, the amount of broad money in the economy remains relatively

stable.

### That Role is Under Discussion Today for the First Time in Decades...

#### UP FRONT

**Design choices for central bank digital currency** 

Sarah Allen, James Grimmelmann, Ari Juels, and Eswar Prasad · Thursday, July 23, 2020

#### 

entral bank digital currency (CBDC)-fiat currency issued by central banks in digital form-has progressed in the past few years from a bold speculative concept to a seeming inevitability.

More than 80 percent of central bank respondents to 🖪 a Bank for International Settlements survey in 2019 reported engagement in CBDC projects. One in 10 central banks, representing approximately one-fifth of the world's population, expected to offer CBDCs within the next three years. The People's Bank of China has begun to 🖪 pilot a digital yuan, while the United States and European Central Bank are exploring CBDC development. At the same time, a Facebook-initiated fiat-backed cryptocurrency called Libra has raised the prospect of 🖪 an industry alternative.

Various forms of CBDC have in a sense existed for years, but as wholesale facilities available

Community Manager - Initiative for Cryptocurrencies and Contracts



😏 grimmelm

Sarah Allen

#### Ari Juels



Weill Family Foundation and Joan and Sanford I. Weill Professor, Jacobs Technion-Cornell Institute - Cornell Tech, Professor of Computer Science -Cornell University, Co-director -Initiative for Cryptourrencies and Contracts

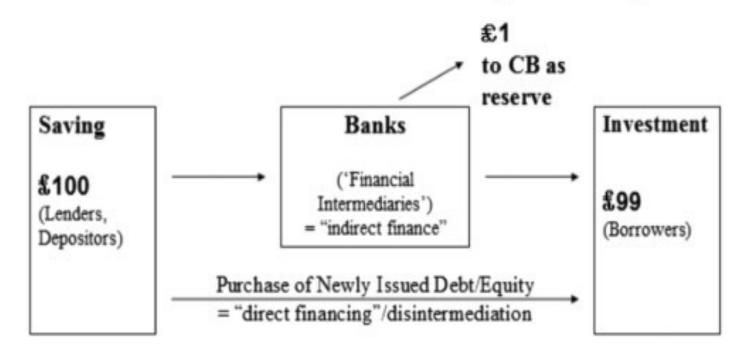
#### Y AriJuels

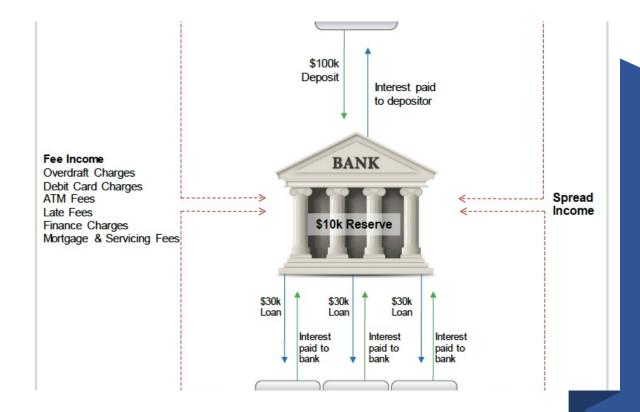
Eswar Prasad



### Banks Act as Intermediaries

The Financial Intermediation Theory of Banking



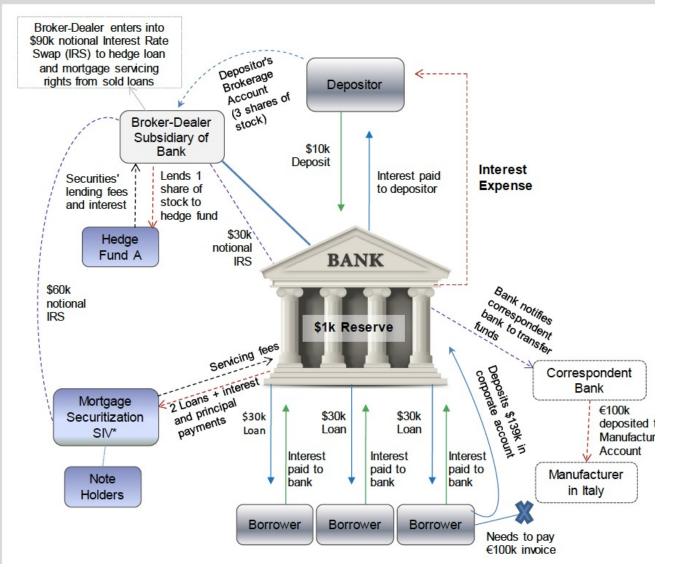


### How a Simple Bank Makes Money

### How a Complex Bank Makes Money

 Many different and interconnected ways

#### Exhibit 4: How a More Complex Bank Makes Money



### Economic Functions of Banks 1/3--Liquidity

- A primary function of banks is to provide liquidity which allows its depositors to access money of known value for consumption purposes, i.e., a 'sum certain'.
- It does this in two ways: by providing access to notes and coins, and by allowing its liabilities, in the form of checks drawn on the bank, to be used as a means of payment.

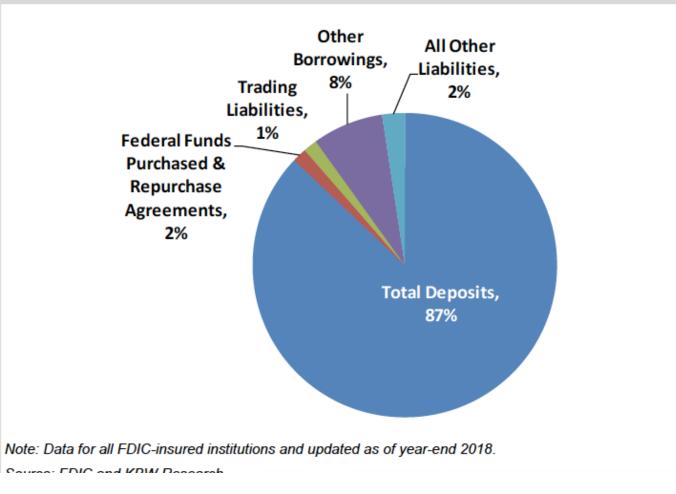
Economic Functions of Banks 2/3--Maturity Transformation

- Not only are many of the assets of banks illiquid, but they are also medium-to-long term in nature.
- On the liability side of the balance sheet, banks take deposits that can be withdrawn instantaneously, or after one, two, or three years.
- Banks translate short-term deposits into longerterm investments, an important economic function
- (This only works if the bank is stable and depositors don't "run")

Economic Functions of Banks 3/3— Credit & Risk Transformation

- Banks invest in productive consumer and commercial assets. In particular, banks are critical to the financing of individuals and small and medium-sized companies
- Bank deposits are essentially risk-free and are a store of "certain" value
- Banks transform these low-risk liabilities into riskier and socially productive credit investments (loans) through risk management expertise





Deposits are Essential for Banks

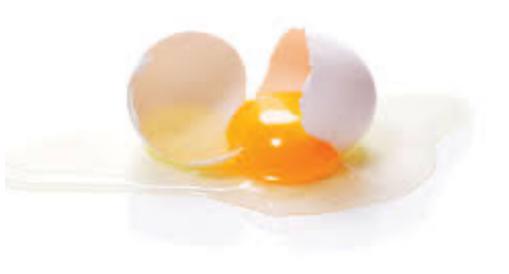
Deposits and Payment Processing are What Make Banks Different from other Intermediaries

- There are many financial institutions that perform some form of liquidity, maturity, and credit transformation but are not banks. Nonbank lenders are one example.
- What distinguishes banks from these other institutions is that banks are deposit-takers. They take in deposits that provide a risk-free way to store value and form part of the national payment system.
  - Because the liabilities of banks are to a large extent insured and central to the payment system, the cost of deposit interest is lower than for institutions that raise non-deposit finance.
  - Because deposits are part of the payments system, the failure of a formal bank is of particular social and political as well as economic significance.

### But...Banks are Inherently Fragile



- The fragility of banks derives from two features. The first is that the bank is performing maturity and liquidity transformation. In the event of a large number of depositors withdrawing their investments, the bank is unable to meet their demands by liquidating assets and cashing in long-term investments.
- A problem of liquidity— the inability to convert long-term assets into cash except at a discount to 'hold to maturity' values—will rapidly morph into a problem of 'solvency'—assets being worth less than debts—if left unchecked.
- The second feature is the obligation of the bank to service its depositors so long as it is solvent, thereby creating an incentive on depositors who are concerned about the viability of the bank to withdraw their deposits ahead of other people i.e. make a "run" on the bank. Deposit insurance was created in part to deal with this problem.



### Bank Fragility Begets Regulation



- Banks' fragility, combined with the important functions they perform, engenders a belief that they need to be regulated to protect against the risks of failures. Four types of regulatory tools are typical:
  - Capital requirements on banks to maintain balance sheet reserves, so as to meet any shortfall in the value of the bank assets in relation to their liabilities, the capacity for 'loss absorbency'.
  - Liquidity requirements cause banks to hold some of their assets in a liquid form, which are available to meet withdrawals by depositors.
  - A 'lender of last resort' that stands ready to make short-term loans to banks against illiquid assets, and
  - Insurance against risks of losses on deposits.

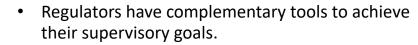


#### Bank Regulation: a Costly Regime of Examinations, Ongoing Monitoring, Reporting & Compliance

- Regulators have complementary tools to achieve their supervisory goals.
- Examinations, monitoring, and reporting requirements are all part of an ongoing, iterative process that allows regulators to evaluate banks, the industry, and market trends.
- This pervasive regulation is much more extensive than that applied to nonbanks doing similar things and subject to the same substantive laws.
- Banks incur compliance costs, such as employee time dedicated to recordkeeping and reporting, the purchase and maintenance computer systems and software used in compliance activities, and paying outside contractors such as accountants to ensure compliance.



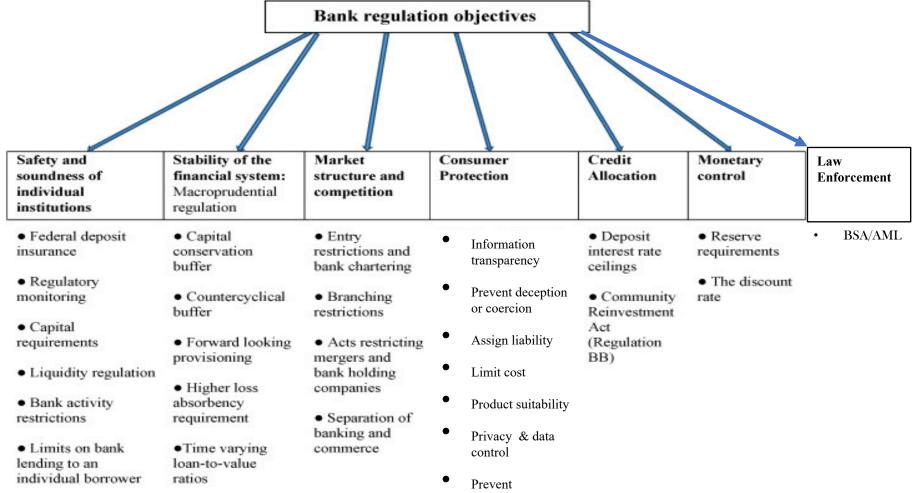
## Much Bank Regulation is Focused on Prevention of Failure



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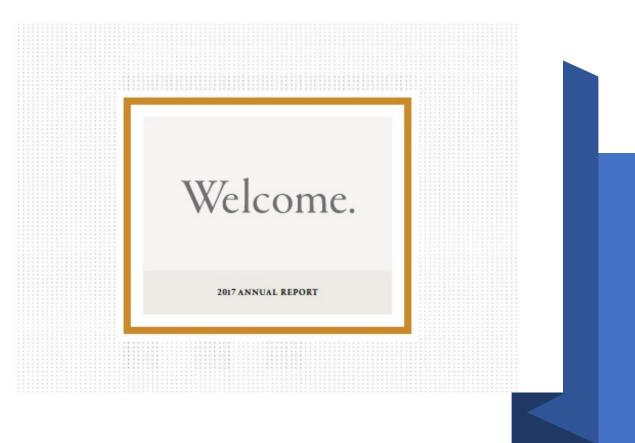


### What are the Objectives of Bank Regulation?



### Questions?

### Let's Look at a Simple Bank: First Republic Bank



### First Republic

#### FULL-SERVICE PRIVATE BANKING, PRIVATE BUSINESS BANKING AND PRIVATE WEALTH MANAGEMENT



#### THE FIRST REPUBLIC DIFFERENCE

What sets First Republic apart is our unwavering commitment to exceptional client service. Each client benefits from having a single point of contact who coordinates all relationships within the organization and who personally refers clients to colleagues as needed. At First Republic, our goal is to build long-term, rewarding relationships with our clients.

#### PRIVATE BANKING

Our full suite of private banking services is designed to address our clients' complete financial picture and help them achieve their personal goals. To accomplish this, every private banking client works with a personal banker who knows them by name and serves as a single point of contact for all of their deposit and lending needs. At First Republic, our primary source of new clients is through referrals from satisfied existing clients.

Our distinctive brand of Private Banking includes:

- · A client-first approach based on advice and solutions not products
- · Full-service banking on both coasts, including online and mobile banking, bill pay and no access fees at virtually all ATMs around the world. With our ATM Rebate Checking account, we even rebate access fees charged by other banks.
- A commitment to ensuring our clients' financial safety and privacy remains at the forefront of everything we do

#### PRIVATE BUSINESS BANKING

Our professional business bankers provide the same personalized and highly responsive service to the business community as we do to personal banking clients. That's why we call it Private Business Banking.

Specialized services offered for:

- Accounting Firms
- Investment Management Firms

- Entertainment Industry
- Family Offices
- Hedge Funds/Firms
- Independent Schools

- Law Firms
- Medical Practices
- Nonprofits
- Private Aircraft/Marine Financing
- Private Clubs
- Private Equity Funds/Firms
- Property Management Firms
- Real Estate Investors
- · Small Businesses
- Technology Firms
- Venture Capital Funds/Firms
- Wineries

#### PRIVATE WEALTH MANAGEMENT

First Republic Private Wealth Management professionals deliver objective, customized wealth management solutions and goals-based strategies to individuals, corporations and nonprofit organizations.

Wealth Management services include:

<ul> <li>Investment Management</li> </ul>	Financial Planning	Brokerage Services
Trust Administration and Custody	<ul> <li>Insurance Services</li> </ul>	<ul> <li>Foreign Exchange</li> </ul>

Banking products and services are provided by First Republic Bank, Member FDIC and Equal Housing Lender 😭

Investment, Insurance and Advisory Products and Services are Not FDIC Insured, Not Guaranteed and May Lose Value.

#### Business Management Firms Engineering Services

Investment Advisory services are provided by First Republic Investment Management, Inc. Trust services are provided by First Republic Trust Company and First Republic Trust Company of Delaware LLC. Brokerage services are offered through First Republic Securities Company, LLC, Member FINRA/SIPC. Insurance services are provided through First Republic Securities Company, DBA Grand Eagle Insurance Services, LLC, CA Insurance License # 0113184, and First Republic Investment Management, DBA Eagle Private Insurance Services, CA Insurance License # 0K93728.

#### **Overview of Products and Services**

RESIDENTIAL LENDING	<ul> <li>Single-Family Mortgages</li> <li>Vacation Home Mortgages</li> <li>Co-Op and Condominium Loans</li> <li>Home Equity Lines of Credit</li> </ul>	Bridge Loans     All-in-One, Construction-to-Permanent Loans     Eagle Community Loans <sup>1</sup>
PERSONAL LENDING	<ul> <li>Stock/Bond Secured Loans</li> <li>Unsecured Loans</li> <li>Streamlined Loans and Lines of Credit</li> <li>Overdraft Lines of Credit</li> </ul>	<ul> <li>Student Loan Refinancing<sup>2</sup></li> <li>Loan Programs to Help Partners and Employees Invest in Their Firm or Fund</li> <li>Aircraft and Marine Financing</li> </ul>
COMMERCIAL REAL ESTATE LENDING	Multi-Family Property Loans     Mixed-Use Building Loans	Commercial Real Estate Loans     Construction and Renovation Loans
CHECKING, SAVINGS, CDS (DEPOSITS)	ATM Rebate Checking <sup>3</sup> Classic Checking     Basic Checking     Money Market Checking     Money Market Savings	<ul> <li>Passbook Savings</li> <li>Certificates of Deposit (CDs)</li> <li>Traditional, Roth and SEP IRAs</li> <li>Banking Online and Bill Pay</li> <li>Mobile Banking and Mobile Check Deposit</li> </ul>
BUSINESS BANKING	Business Lending by Industry     Lines of Credit and Term Loans     Owner-User Commercial Real Estate Loans     Streamlined Small Business Lending     Capital Call Lines     Loan Programs to Help Partners and     Employees Invest in Their Firm or Fund     Standby Letters of Credit     Business Analyzed Checking     Simplified Business Checking     Business Interest Checking     Business Money Market Accounts     Multi-Client Management Accounts     Attorney Trust Accounts (IOLTA, IOTA, IOLA)     Custody and Business Escrow Services     Deposit Account Control Agreements	Corporate Online Banking and Bill Pay     Mobile Banking     Wire Transfer Services     Wires Direct Transmission     ACH Services     ACH Direct Transmission     Remote Deposit Services     Direct Image Cash Letter     Biller and Payment Solutions     Positive Pay Services     Paid Check Imaging     Lockbox Services Nationwide     Armored Car and Cash Vault Services     Courier Services     Merchant Card Services     On-Site ATM Installation and Maintenance     Complimentary Internet Security Health Checks

S gradif: 1227 - Corporate provider of education debt repayment and savings benefits programs4

FINANCIAL PLANNING	Comprehensive Financial Review and Plan     Cash Flow and Retirement Planning     Insurance Review	<ul> <li>Tax Planning Strategies</li> <li>Wealth Transfer and Legacy Planning</li> <li>Philanthropic Planning</li> </ul>
INVESTMENT MANAGEMENT	<ul> <li>Equity Management</li> <li>Fixed Income Management</li> <li>Alternative Investments<sup>1</sup></li> <li>Endowment Investment Management and Consulting</li> </ul>	<ul> <li>Cash Management</li> <li>Environmental, Social and Governance Investing</li> <li>401(k) Plan Management</li> <li>Online Investment Management Service<sup>2</sup></li> </ul>
BROKERAGE SERVICES	<ul> <li>Full-Service and Online Brokerage Services</li> <li>Equities and Mutual Funds</li> <li>Money Market Mutual Funds</li> <li>Fixed Income</li> <li>Margin Loans</li> <li>Structured Product Investments</li> </ul>	<ul> <li>Stock Donation Brokerage Services</li> <li>10b5-1 Plans for Corporate Executives</li> <li>Hedging Strategies for Concentrated Stock Positions</li> <li>FDIC-Insured Sweep Accounts</li> </ul>
TRUST SERVICES	<ul> <li>Personal Trust Services with Open Architecture</li> <li>Trustee of Revocable, Irrevocable and Testamentary Trusts</li> <li>Estate Settlement/Executor Services</li> </ul>	<ul> <li>Agent for Trustee Services</li> <li>Custody Services</li> <li>Business Escrow Services</li> <li>Independent and Objective Reporting</li> <li>Delaware Trust Services</li> </ul>
INSURANCE SERVICES	<ul> <li>Access to Top Carriers and Best-in-Class Products</li> <li>Permanent Life Insurance Products for Estate, Business Planning and Tax-Deferred Cash Accumulation</li> </ul>	<ul> <li>Private Placement Life and Annuity Products, Offering Alternative Investments</li> <li>Disability Products for High-Income Executives and Professional Services Firms</li> <li>Specialty and Hybrid Long-Term Care Products</li> </ul>
FOREIGN EXCHANGE	<ul> <li>Spot Foreign Exchange Contracts</li> <li>Foreign Currency Wires</li> <li>Foreign Currency Drafts</li> <li>Foreign Currency Accounts/Deposits<sup>3</sup></li> </ul>	<ul> <li>Forward Foreign Exchange Contracts</li> <li>Currency Swaps</li> <li>Foreign Currency Options</li> <li>Structured Hedging Solutions</li> </ul>

<sup>1</sup> These products are offered to clients who meet certain eligibility and suitability requirements.

<sup>2</sup> Offered in partnership with FutureAdvisor.

a Foreign currency deposit accounts are offered by First Republic Bank, Member FDIC.

Investment Advisory services are provided by First Republic Investment Management, Inc. Trust services are provided by First Republic Trust Company and First Republic Trust Company of Delaware LLC, Brokenage services are offered through First Republic Securities Company, LLC, Member FINRA/SIPC. Insurance services are provided through First Republic Securities Company, DBA Grand Eagle Insurance Services LLC. CA Insurance Linease # 013184 and First Republic Insurance DBA Earle Plaste Insurance Insurance Services LLC. CA Insurance Linease # 013184.

<sup>1</sup> A relationship manager can provide details and determine if a property is eligible for the Eagle Community Loan Program.

<sup>2</sup> This product is not a student loan. The terms of this product may differ from terms of your current loan. For example, this product does not contain special features such as forbearance periods and income-based repayment plans available for student loans.

a Domestic and foreign country ATM access fees are rebated at the end of the monthly cycle. Foreign currency conversion and other

#### Consolidated Statement of Income

in thousands, except per share amounts

YEAR ENDED DECEMBER 31	2017	2016	2015
Interest income:			
Loans	\$ 1,903,070	\$ 1,573,403	\$ 1,361,654
Investments	521,837	378,719	268,682
Other	14,861	19,266	27,464
Cash and cash equivalents	11,850	9,485	6,292
Total interest income	2,451,618	1,980,873	1,664,092
Interest expense:			
Deposits	134,786	73,765	61,072
Borrowings	165,369	89,946	86,357
Total interest expense	300,155	163,711	147,429
Net interest income	2,151,463	1,817,162	1,516,663
Provision for loan losses	60,181	47,192	55,439
Net interest income after provision for loan losses	2,091,282	1,769,970	1,461,224
Noninterest income:			
Investment management fees	282,868	224,626	178,738
Brokerage and investment fees	32,221	31,868	19,659
Trust fees	13,658	12,365	10,745
Foreign exchange fee income	27,691	22,406	22,517
Deposit fees	22,633	20,699	19,311
Loan and related fees	13,012	14,097	12,393
Loan servicing fees, net	13,800	13,465	13,040
Gain on sale of loans	9,233	4,828	9,725
Gain (loss) on investment securities, net	(833)	1,055	821
Income from investments in life insurance	37,874	48,119	35,474
Other income	8,304	1,284	2,630
Total noninterest income	460,461	394,812	325,053
Noninterest expense:			
Salaries and employee benefits	930,908	763,625	596,593
Information systems	208,625	153,207	119,114
Occupancy	136,746	119,139	106,856
Professional fees	56,950	52,740	73,022
FDIC assessments	55,792	44,200	35,250
Advertising and marketing	48,398	32,783	25,562
Amortization of intangibles	20,625	25,002	21,760
Other expenses	181,497	146,490	117,452
Total noninterest expense	1,639,541	1,337,186	1,095,609
Income before provision for income taxes	912,202	827,596	690,668
Provision for income taxes	154,542	154,168	168,523
Net income	757,660	673,428	522,145
Dividends on preferred stock	58,040	68,589	58,928
Net income available to common shareholders	\$ 699,620	\$ 604,839	\$ 463,217
Basic earnings per common share	\$ 4.44	\$ 4.07	\$ 3.27
Diluted earnings per common share	\$ 4.31	\$ 3.93	\$ 3.18
Dividends per common share	\$ 0.67	\$ 0.63	\$ 0.59
Weighted average shares — basic	157,624	148,752	141,689
Weighted average shares — diluted	162,340	154,095	145,510

See notes to consolidated financial statements in our Annual Report on Form 10-K.

#### CONSOLIDATED BALANCE SHEET

dollars in thousands

#### ASSETS

AS OF DECEMBER 31	2017	2016
Cash and cash equivalents	\$ 2,297,021	\$ 2,107,722
Investment securities:		
Investment securities available-for-sale	2,418,088	2,007,258
Investment securities held-to-maturity	16,157,945	13,150,157
Total investment securities	18,576,033	15,157,415
Loans:		
Single family (1-4 units)	31,508,468	26,266,866
Home equity lines of credit	2,735,612	2,634,944
Multifamily (5+ units)	8,640,233	6,676,642
Commercial real estate	6,083,152	5,464,870
Single family construction	591,066	494,616
Multifamily/commercial construction	1,116,855	919,641
Business	8,295,224	6,872,327
Stock secured	1,083,553	822,908
Other secured	1,015,039	723,648
Unsecured	1,771,013	1,131,955
Total loans	62,840,215	52,008,317
Allowance for loan losses	(365,932)	(306,398
Loans, net	62,474,283	51,701,919
Loans held for sale	87,695	407,226
Investments in life insurance	1,330,652	1,273,172
Tax credit investments	1,107,546	1,121,416
Prepaid expenses and other assets	1,254,720	923,324
Premises, equipment and leasehold improvements, net	296,197	207,592
Goodwill	198,447	203,177
Other intangible assets	91,774	112,399
Mortgage servicing rights	66,139	62,410
Total Assets	\$ 87,780,507	\$ 73,277,772

#### LIABILITIES AND EQUITY

AS OF DECEMBER 21	2017	2016
Liabilities:		
Deposits:		
Noninterest-bearing checking	\$ 26,355,331	\$22,740,303
Interest-bearing checking	17,324,683	14,575,890
Money market checking	9,251,504	7,969,787
Money market savings and passbooks	8,752,396	8,203,340
Certificates of deposit	7,234,794	5,113,061
Total deposits	68,918,708	58,602,381
Short-term borrowings	100,000	100,000
Long-term FHLB advances	8,300,000	5,900,000
Senior notes	894,723	397,955
Subordinated notes	777,084	387,380
Debt related to variable interest entities	-	25,973
Other liabilities	971,691	955,431
Total Liabilities	79,962,206	66,369,120
Shareholders' Equity:		
Preferred stock, \$0.01 par value per share;		
990,000 and 1,139,525 shares issued and outstanding	990,000	1,139,525
Common stock, \$0.01 par value per share;		
161,695,803 and 154,292,487 shares issued and outstanding	1,617	1,543
Additional paid-in capital	3,778,913	3,301,705
Retained earnings	3,051,611	2,459,540
Accumulated other comprehensive income (loss)	(3,840)	6,339
Total Shareholders' Equity	7,818,301	6,908,652
Total Liabilities and Shareholders' Equity	\$ 87,780,507	\$73,277,772

See notes to consolidated financial statements in our Annual Report on Form 10-K.

### Questions?

### A Sprint Through US Regulatory and Legal Structures Relevant to FinTech, Banking and Securities

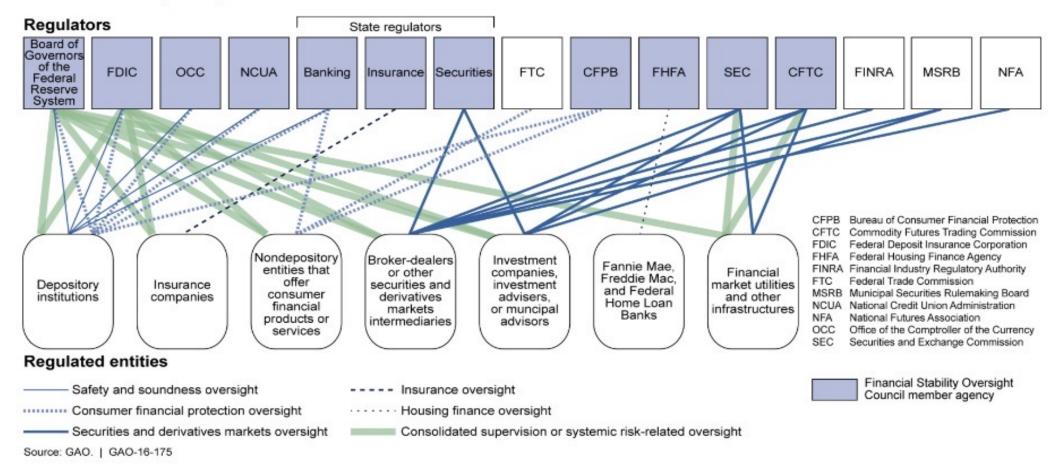
#### US Regulatory Structure

• "The financial regulation and architecture we have today is the result of principled and differing views about the appropriate nature of regulation, turf battles among congressional committees and regulatory agencies, politics, lobbying and inter-sectoral wars in the private sector, and happenstance, personality, technology, and the long shadow of history."

• --Barr, Jackson and Tahyar

### US Regulatory Structure is Complex

#### U.S. Financial Regulatory Structure, 2016



### **US Bank Regulators**

The United States has a complex regulatory framework that features a myriad of federal regulatory agencies having often overlapping responsibility for banking regulation. A brief description of the relevant bank regulatory agencies follows:

• The Board of Governors of the Federal Reserve System ("Federal Reserve")

The Federal Reserve System is the central banking system of the United States and conducts U.S. monetary policy. In addition, the Federal Reserve supervises BHCs (and FHCs), state-chartered banks that are members of the Federal Reserve System, the U.S. activities of FBOs, and SIFIs designated by the FSOC (as described below).

• The Federal Deposit Insurance Corporation ("FDIC")

The FDIC is the primary regulator for state-chartered banks that are not members of the Federal Reserve System as well as statechartered thrifts. The FDIC also insures bank and thrift deposits and has receivership powers over FDIC-insured banks and certain other institutions.

• The Office of the Comptroller of the Currency ("OCC")

The OCC is an independent bureau of the U.S. Department of the Treasury led by the Comptroller of the Currency that charters, regulates, and supervises all national banks and federal savings associations as well as federal branches and agencies of foreign banks (although most FBOs operate through state-licensed branches).

• The Consumer Financial Protection Bureau ("CFPB")

The CFPB has primary authority to develop consumer protection regulations applicable to both banks and non-banks, and to enforce compliance with such laws by banks with \$10bn or more in assets and their affiliates, as well as by certain non-banks.

• The Financial Stability Oversight Council ("FSOC")

The FSOC is chaired by the Secretary of the U.S. Treasury and comprises the heads of eight financial regulators and one independent member with insurance experience. Notably, FSOC is empowered to designate systemically significant non-bank financial institutions (generally referred to as non-bank SIFIs) for supervision by the Federal Reserve. However, no such institutions are currently subject to Federal Reserve supervision.

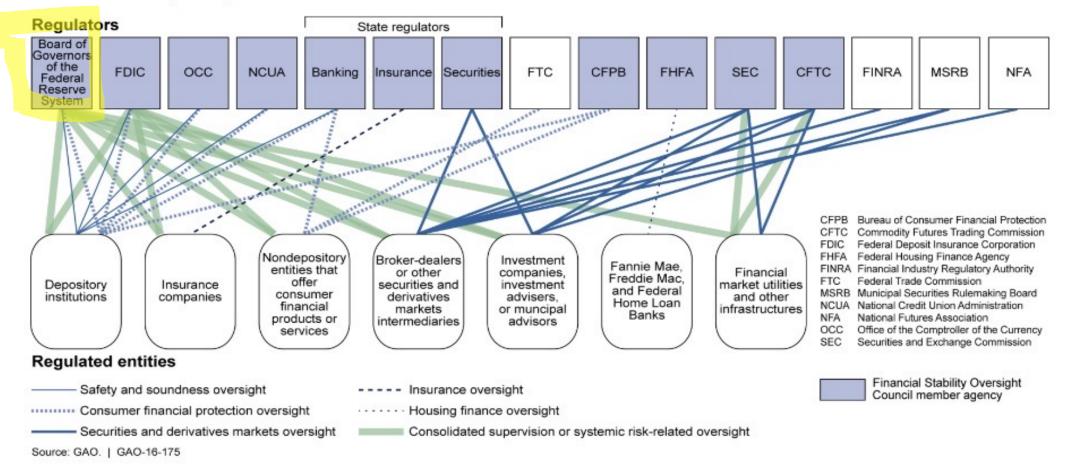
# Primary Federal Banking Statutes

Primary federal banking statutes

- The National Bank Act (1863) created the basic framework for the U.S. banking system and the chartering of national banks.
- The Federal Reserve Act, enacted in 1914, created the Federal Reserve System.
- The Banking Act of 1933 generally separated commercial banks from investment banks and created the system of federal deposit insurance.
- The Federal Deposit Insurance Act ("FDI Act") consolidated prior FDIC legislation into one act and authorised the FDIC to act as the receiver of failed banks. Section 18(c) of the FDI Act, commonly called the Bank Merger Act, subjects proposed mergers involving FDIC-insured depository institutions to prior regulatory approval. Section 7(j) of the FDI Act, commonly called the Change in Bank Control Act, subjects certain acquisitions of FDIC-insured institutions to prior regulatory approval.
- The Bank Holding Company Act of 1956 ("BHC Act") requires Federal Reserve approval for a company to acquire a bank (and thereby become a BHC) and requires BHCs to obtain prior Federal Reserve approval to acquire an interest in additional banks and certain nonbank companies.
- The act commonly known as the Bank Secrecy Act (1970) requires all financial institutions, including banks, to establish a risk-based system of internal controls to prevent money laundering and terrorist financing.
- The International Banking Act of 1978 ("IBA") establishes the framework for federal supervision of foreign banks operating in the United States.
- The Gramm-Leach-Bliley Act (1999) generally repealed the provisions of the Banking Act of 1933 that separated investment banks from commercial banks (Glass-Steagall Act) and authorised the creation of FHCs.
- The Dodd-Frank Act (2010) was the greatest legislative overhaul of financial services regulation in the United States since the 1930s and made significant changes to the U.S. bank regulatory framework.
- The Economic Growth, Regulatory Relief, and Consumer Protection Act ("**EGRRCPA**"), Pub. L. 115-174 (2018), relaxed the regulatory requirements imposed by Dodd-Frank for all but the very largest banks, those holding \$250bn or more in assets.

### The Federal Reserve

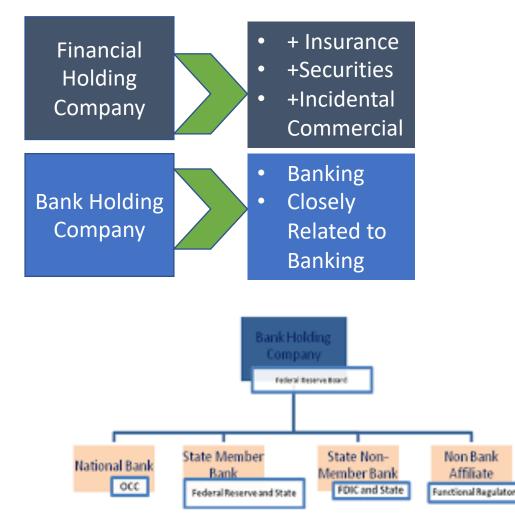
#### U.S. Financial Regulatory Structure, 2016





## Federal Reserve Wears Many Hats

## Bank & Financial Holding Companies



"Control" of a Bank is the Key Concept:

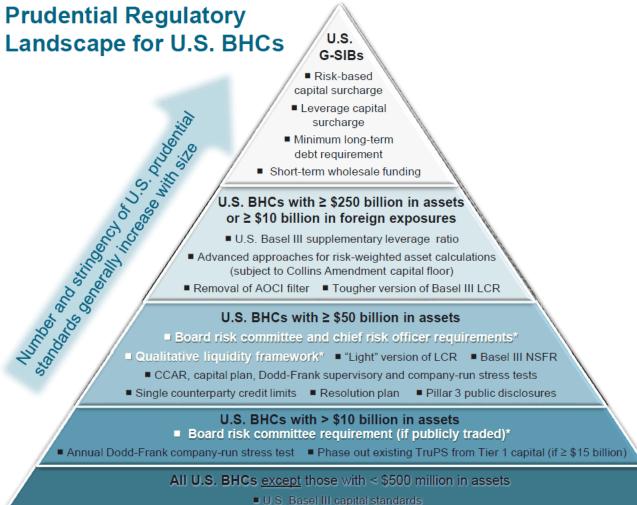
- The size and terms of investments in banks are dictated by a variety of Federal Reserve, FDIC and OCC rules, many of them unwritten.
- Control thresholds arise when an investor owns more than 4.9%, 9.9%, and 24.9% of a single class of voting stock, but softer factors are given great weight.
- Effectively has precluded many private equity and VC investments in banks.
- "Volcker Rule" a related issue

### Bank Holding Company Restrictions

- The primary legislation defining the allowable scope of BHC activities is the Bank Holding Company Act of 1956 (BHCA, 12 U.S.C. § 1841). The Act establishes conditions under which a corporation may own a U.S. commercial bank and invests responsibility for supervising and regulating BHCs with the Federal Reserve.
- A key original goal of the BHCA was to limit the comingling of banking and commerce, that is, to restrict the extent to which BHCs or their subsidiaries could engage in nonfinancial activities.
- This separation is intended to prevent self-dealing and monopoly power through lending to nonfinancial affiliates and to preventing situations where risktaking by nonbanking affiliates erodes the stability of the bank's core financial activities, such as lending and deposittaking.
- To further enhance stability, BHCs are also required to maintain minimum capital ratios and to act as a "source of strength" to their banking subsidiaries, that is, to provide financial assistance to banking subsidiaries in distress.

- BHCs today engage in a significantly broader range of activities than the narrow limits set out in the 1956 BHCA, enabled through subsequent amendments to the Act.
- For example, in 1970 the BHCA was amended to allow multibank holding companies to engage either directly or indirectly through subsidiaries in activities that are "closely related to banking" BHCs may invest in nonfinancial firms, although their stake cannot generall exceed 5 percent of the company's outstanding voting stock.
- The passage of the Gramm-Leach-Bliley Act (GLBA) of 1999 further amended the BHCA to enable a BHC to register as a financial holding company (FHC), thereby allowing the firm to engage in a broad range of financial activities, including securities underwriting and dealing, insurance underwriting, and merchant banking activities.7
- Today, virtually all large BHCs are registered as FHCs.

# Holding Company Requirements Grow with Size

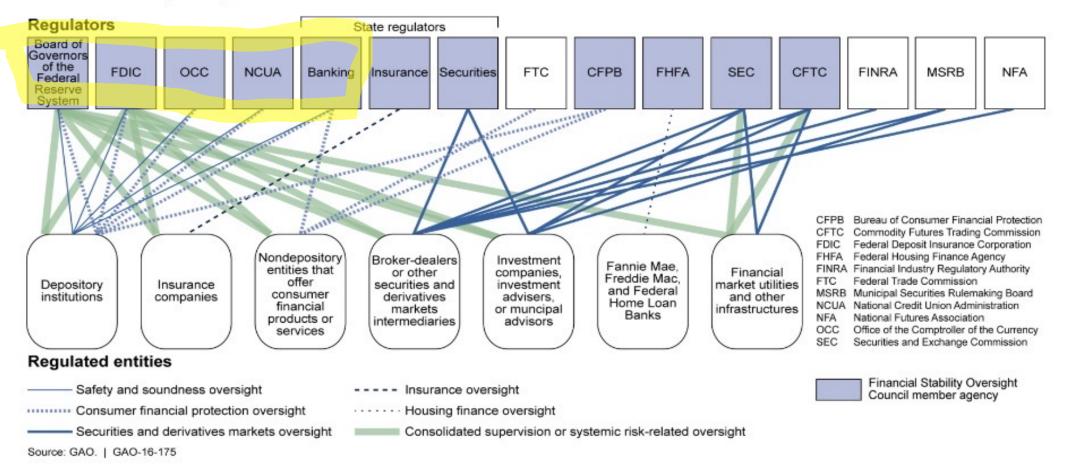


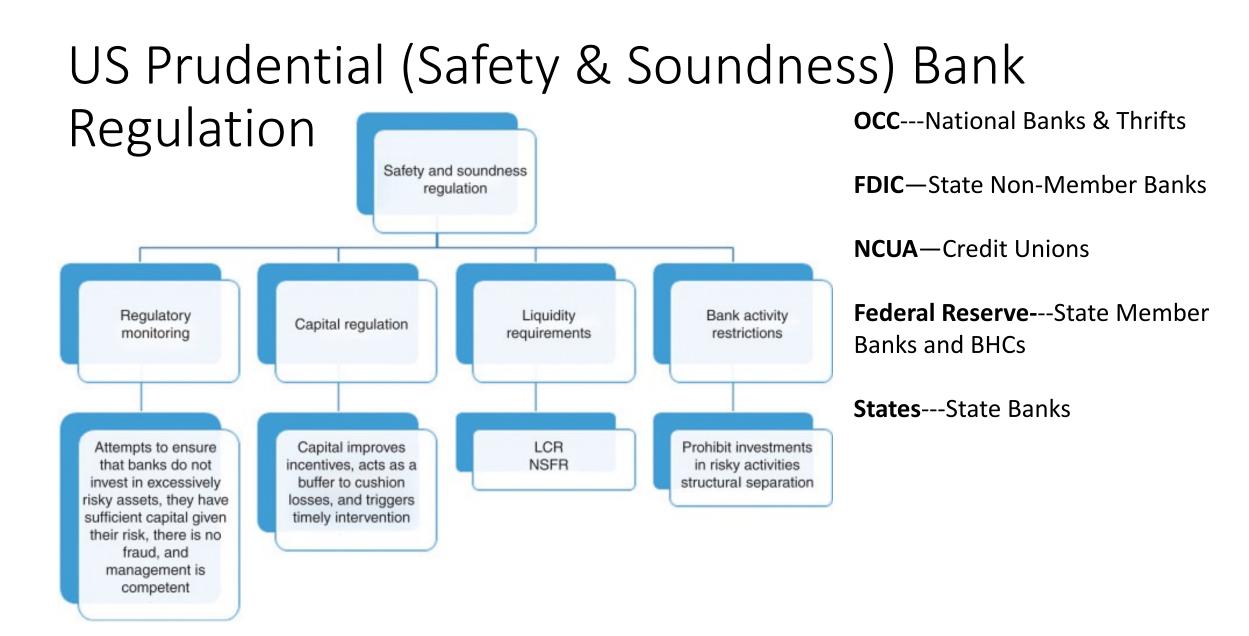
VC and PE and Strategic Investors Don't Want to be Bank or Financial Holding Companies

- They typically invest in a variety of sectors that go well beyond Bank and Financial Holding Company limitations
- They would have to divest all noncompliant investments if they were deemed to "control" a bank
- They would be required to hold capital and act as a "source of strength" to the bank
- They would become subject to supervision, examination etc etc.

## The Prudential Bank Regulators

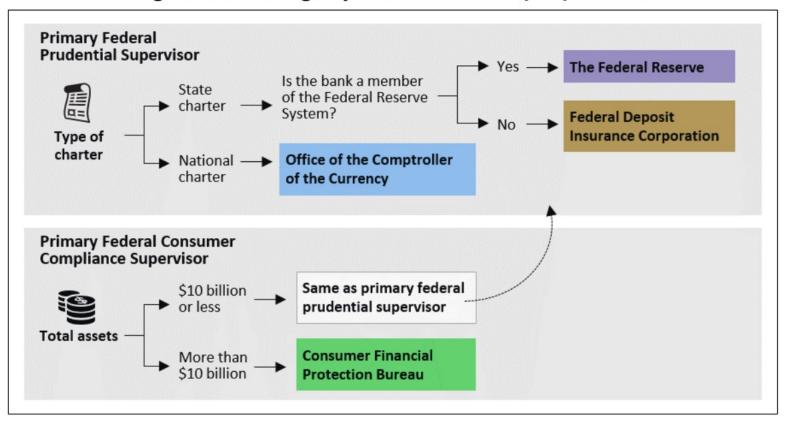
#### U.S. Financial Regulatory Structure, 2016





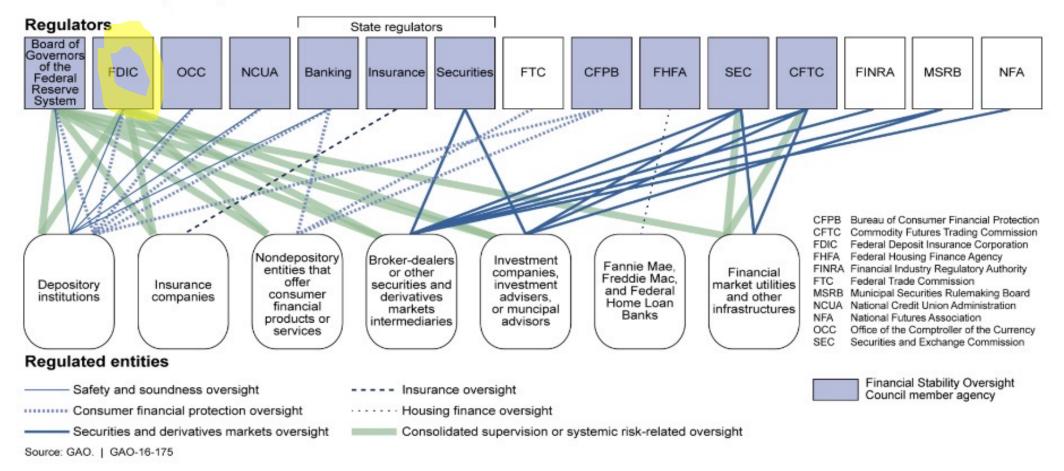
### Who's Your Consumer Regulator?

Figure 1. Which Agency Is a Bank's Primary Supervisor?



### Deposit Insurance

#### U.S. Financial Regulatory Structure, 2016



### **Deposit Insurance Regulation**



- The obligation of the bank to service its depositors so long as it is solvent creates an incentive on depositors who are concerned about the viability of the bank to withdraw their deposits ahead of other people—i.e. make a "run" on the bank.
- Deposit insurance was created in part to deal with this problem.



# Runs May Not Seem Likely, But...in 2008...and 2020



#### **STATEMENTS & REMARKS**

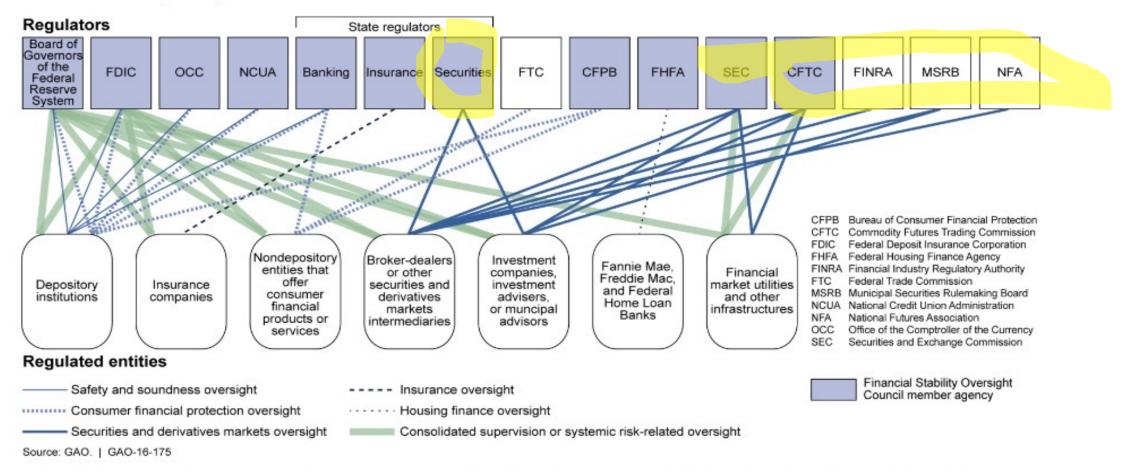
Remarks of Deputy Secretary Justin Muzinich at the 2020 U.S. Treasury Market Conference



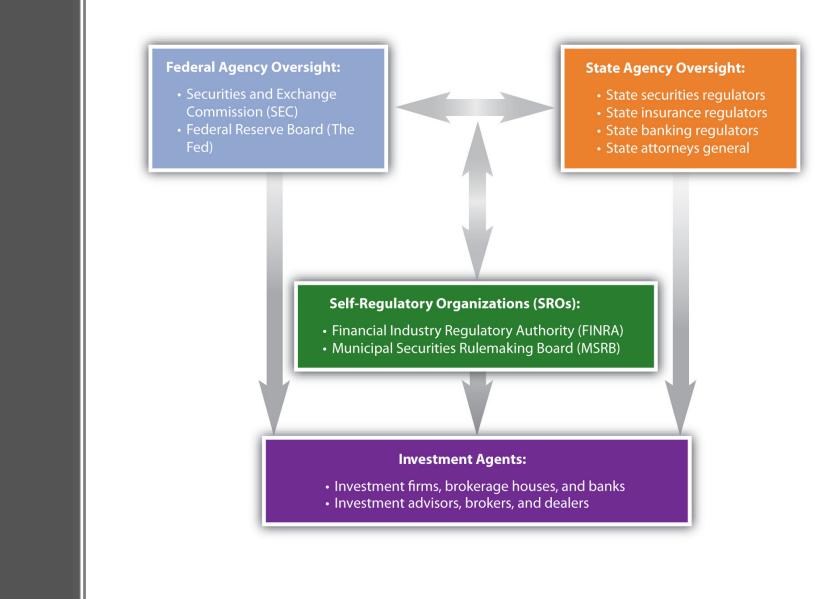
September 29, 2020

### Securities Regulators

#### U.S. Financial Regulatory Structure, 2016



# Securities Regulation



### SEC



#### The Mission

#### The Mission of the SEC:

- Protect Investors
- Maintain Fair, Orderly, and Efficient Markets
- Facilitate Capital Formation



#### The Mission

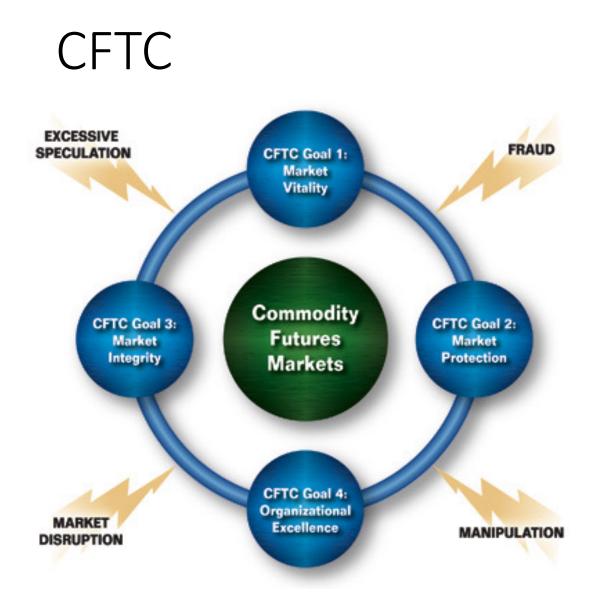
#### COMPLET / INVESTOR ACCOMPLISHES its Mission by:

- Administering and enforcing federal securities laws
- Overseeing brokerage firms and investment advisers
- Reviewing filings by most public companies

### SEC



- Securities Offerings
- Public Reporting
- Anti-Fraud
- Broker- Dealers
- Investment Companies
- Investment Advisors



- The mission of The Commodity Futures Trading Commission (CFTC) is to foster open, transparent, competitive, and financially sound markets. To achieve this aim, the CFTC administers and enforces the Commodity Exchange Act ("CEA") and its respective regulations.
- The CFTC has exclusive jurisdiction over, among others, any transaction "for the contract of sale of a commodity for future delivery," with certain exceptions. Consequently, commodities are generally subject to the regulatory requirements of the CEA.
- In addition, market participants in commodities face CFTC registration requirements for traders, advisors, agents and exchanges as well as enforcement actions brought by the CFTC's Division of Enforcement for violations of fraud and manipulation rules and regulations.

### SEC and CFTC



#### **CFTC and SEC Jurisdiction**

#### Commodity Interests subject to CFTC Jurisdiction

#### Securities subject to SEC Jurisdiction

#### New "Swaps" - Swaps on broad-based security indices New - Swaptions "Mixed Swaps" - Options on interest rates, Already currencies, commodities - Many forward contracts Single stock and - Cash settled FX swaps narrowand FX forwards based index Already Regulated futures - Commodity and broadbased index futures - Options on futures **Options on commodities**

Joint CFTC/SEC Jurisdiction

#### New "Swaps"

- "Security-based Swaps" (on single security and narrow-based security indices)

#### Already Regulated

-Stocks

- Bonds

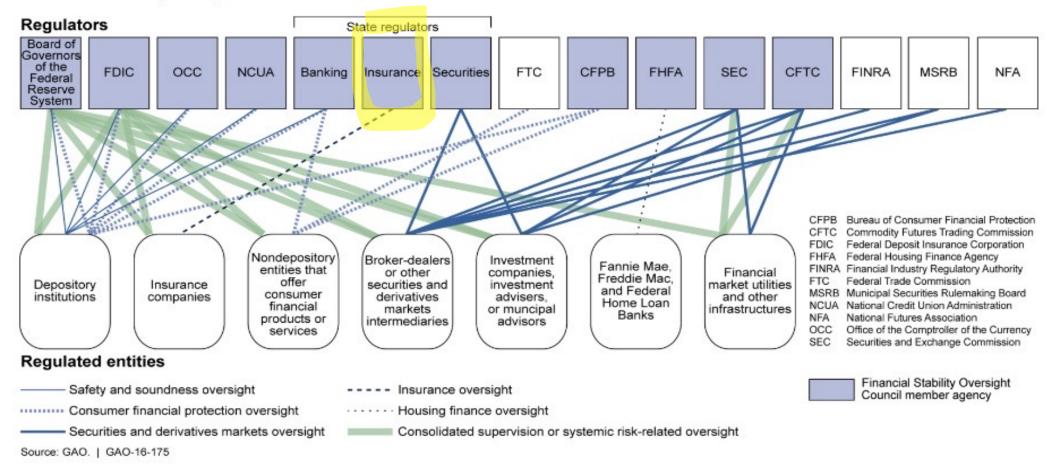
 Options on securities and security indices

June 4, 2015

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### Insurance Regulation

#### U.S. Financial Regulatory Structure, 2016

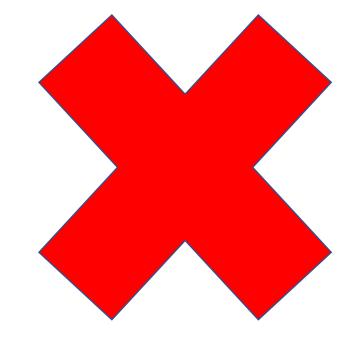


# Insurance Regulation: Beyond Scope of Course

Practising Law Institute

Insurance Regulation Answer Book

Sutherland Asbill & Brennan LLP



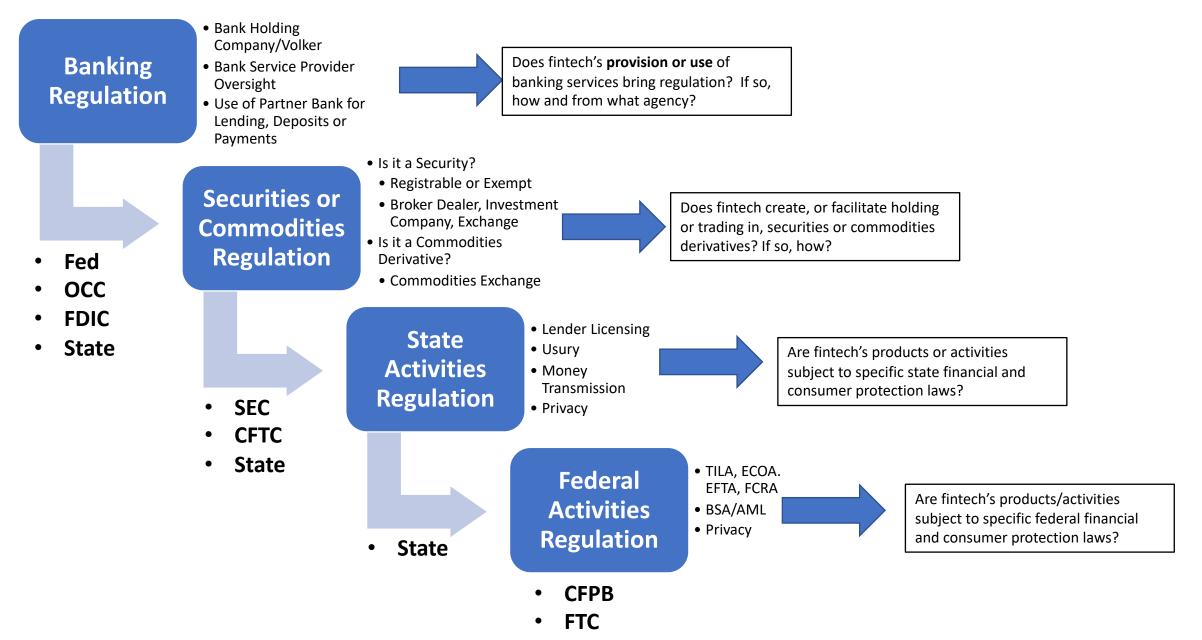
# Questions?

Sprint Through US Regulatory and Legal Structures Relevant to FinTech— Non-Banks and FinTech

#### US Approach to Fintech Regulation is Uncoordinated

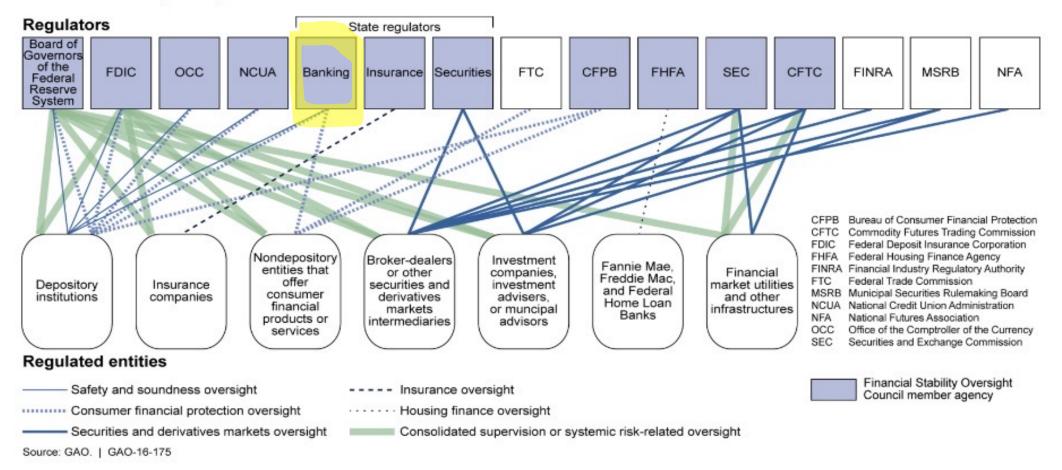


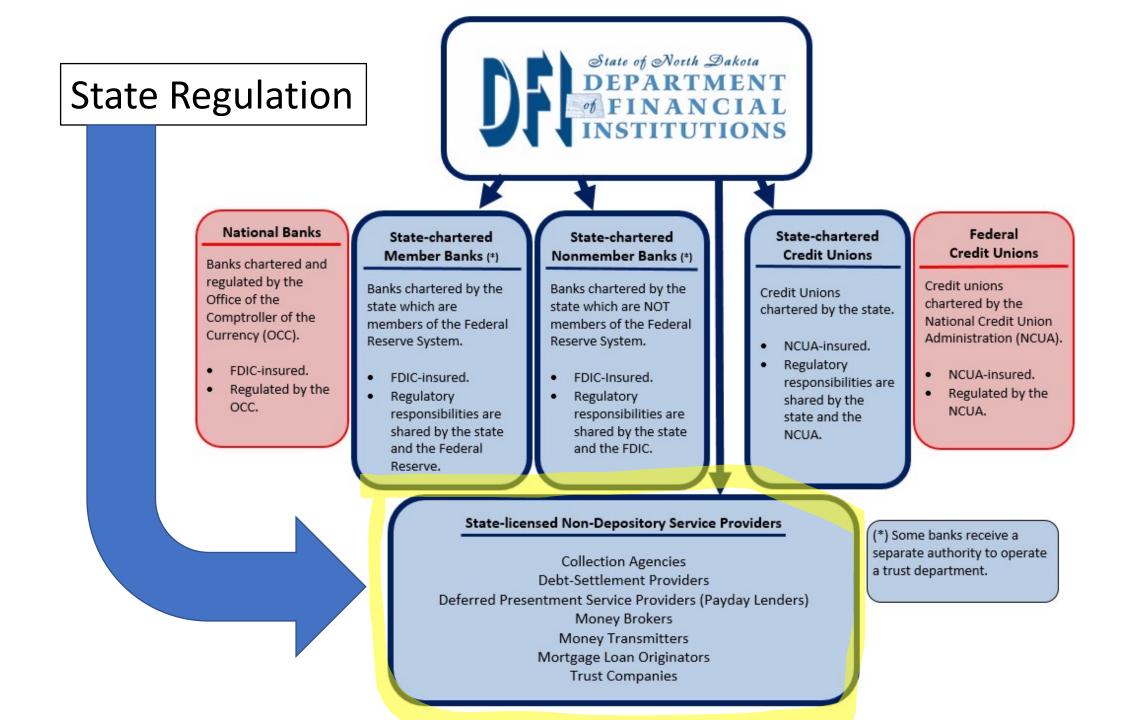
#### No US Laws Specifically Designed for Fintech—A Multi-Layer Analysis Must be Followed



### State Non-Bank Regulation

#### U.S. Financial Regulatory Structure, 2016





#### Kansas State Bank Commissioner

#### Who We Regulate

Home» Consumer Assistance » Who We Regulate

Who We Regulate	Who We Regulate
nline Insitution Lookup	✓ Residential Mortgage Lenders and Brokers (Licensed as Mortgage Companies)
e a Complaint	✓ Loan Originators (Licensed as Loan Originators)
onsumer Education	✓ State Chartered Banks - Kansas Chartered
nsas Financial Scholars	✓ State Chartered Trust Companies
lendar	
Qs	✓ Finance Companies (Licensed as Supervised Lenders)
ner Resources	✓ Payday Lenders (Licensed as Supervised Lenders)
Open Records Request	✓ Title Loan Companies (Licensed as Supervised Lenders)
	✓ Debt Buyers (Licensed as Supervised Lenders)
	✓ Auto Dealers who Extend Credit (Notification Registrants)
	✓ Consumer Credit Sales (Notification Registrants)
	✓ Credit Counseling Companies (Licensed as Credit Service Organizations)
	✓ Debt Management Companies (Licensed as Credit Service Organizations)
	✓ Money Transmitters
	Who We DO NOT Regulate
	✓ Nationally Chartered Banks (Often have NA following their name) - Regulated by Office of the Comptroller of Currency (OCC)
	✓ Federal Savings Banks (Often have FSB following their name) - Regulated by Office of the Comptroller of Currency (OCC)
	State Chartered Banks Chartered in Other States - Regulated by the State in which they are chartered. See CSBS Directory of State Banking Departments
	✓ Kansas Chartered Credit Unions - Regulated by Kansas Department of Credit Unions
	✓ Nationally Chartered Credit Unions - Regulated by the National Credit Union Administration
	Collection Agencies* - Fair Debt Collection Practices Act is enforced by Federal Trade Commission (FTC)
	*If consumer debt is purchased by a collection agency, then it would qualify as a 'Debt Buver' and licensure may be required as a supervised lend

\*If consumer debt is purchased by a collection agency, then it would qualify as a 'Debt Buyer' and licensure may be required as a supervised lender as indicated above in the "Who We Regulate" section.

### State Financial Regulation

- 50 States Plus DC, PR and Territories: Every One Has a Regulator
- What State Law Applies?
  - Contractual Choice of Law and Location of FinTech Not Dispositive
  - Generally if Customer in State or Solicits by Any Means in State, That State Law Applies
  - Email, Internet, Smartphone, Telephone all Count as Solicitation
- Jealous of Authority & Active in Enforcement
  - Directly and through State AGs

### Types of Nonbank State Laws 1/3

- Banks are Exempt from Most, but Not All
- Lending & Loans
  - Usury Caps
  - Loan Broker Licensing
    - Lead Generators (NerdWallet) as Brokers
- Money Transmitters
  - Very Broadly Defined
  - Example: Maryland
    - "the business of selling or issuing payment instruments or stored value devices, or receiving money or monetary value for transmission to a location within or outside of the United States by any means, including electronically or through the Internet."
- Financial Privacy
  - States Can Go Further than Federal (GLB Act) Law

### Types of Nonbank State Laws 2/3

- California as Example of Financial Privacy Laws
  - California Consumer Privacy Act of 2018 (Later Slide)
  - California California Financial Privacy Act
    - Opt-in vs Opt-out
    - Financial Institution can't sell, share, transfer or otherwise disclose nonpublic personal information to or with any nonaffiliated third parties without <u>explicit prior consent</u> of consumer
  - Song-Beverly Credit Card Act
  - California Online Privacy Protection Act
    - Requires an company that collects personally identifiable information through website or mobile app to post a privacy policy.
- Electronic Transmission Laws
- Bitcoin and Crypto Laws



# Types of Nonbank State Laws 3/3

**Bitcoin and Crypto Laws** 



### Multistate Licensing

## Coordinated Exams

- Money transmitters like Western Union, PayPal and cryptocurrency firms will be able to more easily expand across the United States, after 48 state regulators agreed to a single set of supervisory rules that should reduce their compliance costs.
- Money services businesses will undergo a single exam by a joint group of state regulators that oversee licensing, instead of dozens of individual state exams.
- The new streamlined regime applies to 78 large payment and cryptocurrency firms, which combined move over \$1 trillion annually.

CSBS

### \bout Newsroom Policy Data & Research Examiners NMLS 📿 🧰

me > State Regulators Roll Out One Company, One Exam for Nationwide Payments Firms

### PRESS RELEASES

### State Regulators Roll Out One Company, One Exam for Nationwide Payments Firms

Sep 15, 2020 | Download PDF 🕹

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Money transmitters operating in 40 or more states will benefit from streamlined state supervision in 2021.

The Conference of State Bank Supervisors (CSBS) announced today the launch of a state-initiated program whereby nationwide payments firms will undergo a single comprehensive exam to satisfy all state regulatory requirements. Known as MSB Networked Supervision, the initiative will apply to 78 of the nation's largest payments and cryptocurrency companies that combined move more than \$1 trillion a year in customer funds.

Building on years of multistate coordination, this exam protocol will enable states to fine tune a risk-based approach to each company's operations. When compliance issues arise, the states will be better positioned to follow up throughout the year.

The single exam will be led by one state overseeing a group of examiners sourced from across the country. By relying on experts across the state system — including in cyber security and anti-money laundering — regulators will gain more insight while also freeing up state resources.

**Rosemary Gallagher**, Western Union associate general counsel, shared, "Western Union was a proud participant in the CSBS's successful one company, one exam pilot. We firmly believe that the impact of this new approach to multistate exams will be significant in terms of driving harmonization and streamlining of state supervision across the board."

Kevin Hagler, Georgia Department of Banking and Finance commissioner and CSBS Board chair, said,



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### About the California Consumer Privacy Act

Your personal information is being sold to businesses you don't even know exist.

The California Consumer Privacy Act will give you important new consumer privacy rights to take back control of your personal information, including:

- 1. Right to know ALL data collected by a business on you, twice a year, free of charge.
- 2. Right to say NO to the sale of your information.
- 3. Information Security: Right to sue companies who collected your data, where that data was stolen or disclosed pursuant to an unauthorized data breach, if the company was careless or negligent about how it protected your data (i.e. if the data was unencrypted, un-redacted, or the company didn't have reasonable security policies and procedures in place to protect it). Identity Theft needs to be curbed!
- 4. Right to DELETE data you have posted.
- Right not to be discriminated against if you tell a company not to sell your personal information.
- Right to be informed of what categories of data will be collected about you prior to its collection/at point of collection, and to be informed of any changes to this collection.
- 7. Mandated opt-in before sale of children's information (under the age of 16).
- 8. Right to know the categories of third parties with whom your data is shared
- Right to know the categories of sources of information from whom your data was acquired.
- Right to know the business or commercial purpose of collecting your information.

Enforcement is via a private right of action (consumer lawsuits) for data breaches, with the rest of the act subject to enforcement by the California Attorney General, at up to \$2,500 per violation.

In short, the California Consumer Privacy Act will accomplish the following three major

Beyond Banks: California Consumer Privacy Act of 2018



A DEPART

# Other Relevant Federal Laws 1/3

## • Bank Service Provider Rules

- Allows examination and enforcement against contractors for banks (e.g., FinTechs)
- Electronic Funds Transfer Act---Reg E
  - EFTs in and out of consumer accounts
- Bank Secrecy Act
  - Applies to "Money Service Businesses"
    - Forex, check cashing, travelers checks, money orders, prepaid access, money transmitter

# Other Relevant Federal Laws 2/3

## • Truth in Lending Act

- Consumer credit and finance charges
- Privacy, Title V of Gramm-Leach-Bliley Act
  - Any institution "substantially engaged" in "financial activities"
  - CFPB Regulation P
    - Notices re privacy policy
    - Procedures for sharing nonpublic personal information with unaffiliated third parties
    - Opt-out right for consumer
  - FTC retains authority over some nonbanks, including money transmitters

# Other Relevant Federal Laws 3/3

- Equal Credit Opportunity Act (ECOA)
  - Discrimination in Lending
- Fair Credit Reporting Act
  - Consumer Reporting Agencies
- Fair Debt Collection Practices Act

## What Does US Reg Structure Mean for Individual Companies?

Strengthened but not simplified

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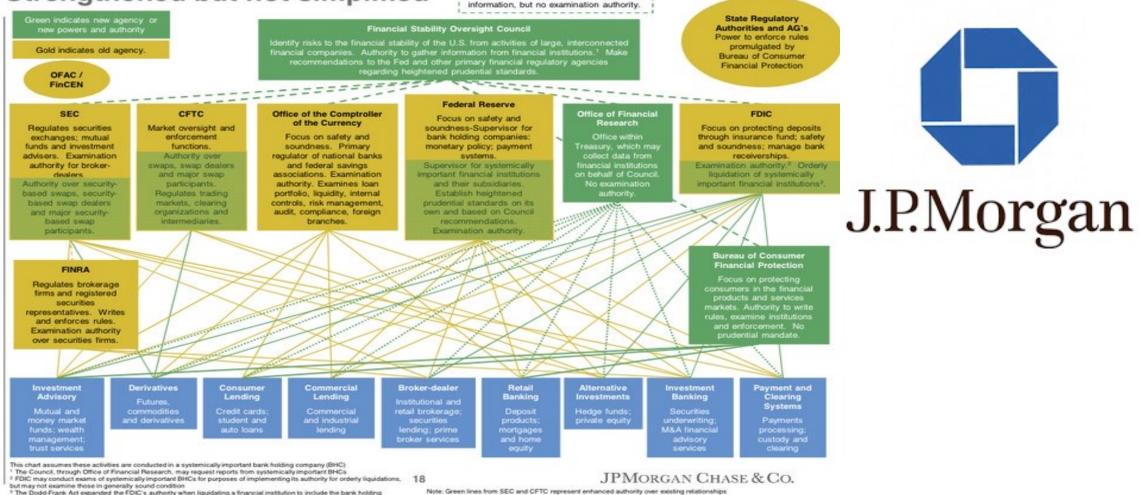
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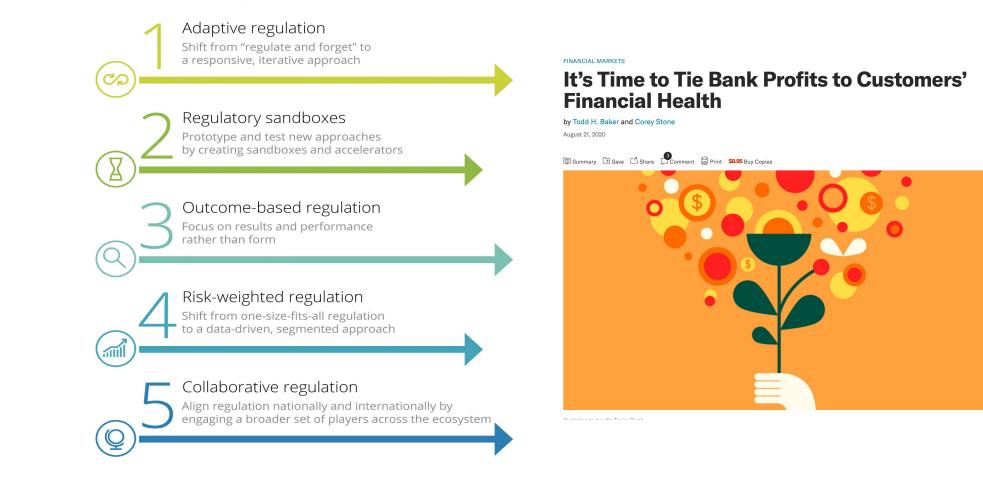
<sup>1</sup> The Dodd-Frank Act expanded the FDIC's authority when liquidating a financial institution to include the bank holding company, not just entities that house FDIC-insured deposits Traditional Models of Consumer Regulation

- Disclosure
  - Truth in Lending
- Behavioral Regulation & Nudges
  - Default Option for 401(k)
  - Opt-in for Overdrafts
- Duties (Positive & Negative)
  - CRA
- Product Regulation
  - CFPB Payday Rule
  - Mortgage Underwriting
- Subsidy & Tax
  - GSEs and Mortgages

# Questions?

# Reg Tech and New Approaches to Regulation

Figure 4. Principles for the future of regulation



Source: Deloitte Center for Government Insights analysis.

Deloitte Insights | deloitte.com/insights

# Competitors or collaborators? Several agencies have a claim to the fintech sector

OCC: Created a fintech charter for national standards

CFPB: Formed a global coalition for fintech innovation

CFTC: Struck a deal with UK regulator to foster innovation

FDIC: Weighing a pending ILC application from a fintech firm

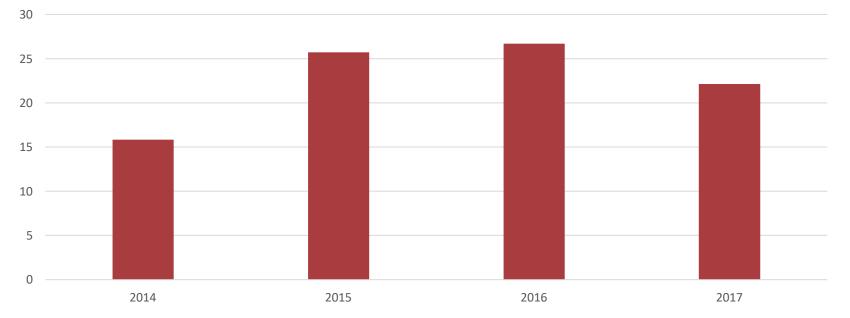
State regulators: Launched a "sandbox" initiative

Regulators are engaging in agency-based *initiatives to support* innovation

Fintech & Regulatory Competition

## What is a fintech regulatory sandbox?

- Regulatory sandboxes reduce regulation or license requirements for participating businesses so they can experiment with new products in certainty that they will be safe from litigation by regulators
- Sandboxes often have provisions designed to protect consumers despite the lifting of regulation on participating businesses, such as enhanced supervision of participants
- Generally, sandbox participants must meet several criteria, often including small scale, an innovative business model and a plan for testing the product
- Regulators use the lessons learned from sandboxes to fine-tune regulation going forward in a proactive way, rather than reacting to crises or harm to consumers
- Given the uncertainty of which regulators or jurisdictions apply, sandboxes can add certainty to fintech ventures



Fintech funding, in billions of dollars

Sources: Deloitte, "Fintech by the numbers." EY, "As FinTech evolves, can financial services innovation be compliant?"

## Key questions for policymakers

### The Treasury Department and CFPB have expressed support for a sandbox

### Who would run a federal fintech sandbox?

- CFPB has established an Office of Innovation and proposed a regulatory sandbox concept, but CFPB's earlier fintech support effort, called Project Catalyst, has failed to catch on
- Treasury Department's fintech and innovation report also suggested a regulatory sandbox

### What sort of businesses would participate?

- Different sandbox examples are directed at different types of fintech projects
- Sandbox participants could be limited to a certain sector, such as payments or insurance
- A sandbox could cater to startups, like Australia's does, or existing institutions, like Hong Kong's

### How will sandbox participants be limited?

- International sandboxes tend to have more restrictions on business-to-consumer fintech products than business-to-business products
- Most sandboxes limit the number of customers as well as loans or deposits handled by a company

### What regulations will be lifted for sandbox participants?

- Arizona's and some international sandboxes release participants from licensing requirements
- Singapore takes a case-by-case approach to sandbox participants, with different regulations being lifted depending on the nature of the business and the safety of consumers

### How long will participation be limited to?

- Many, but not all, fintech sandboxes limit participants to a certain amount of time in the program
- Longer durations give a product more time to test, while shorter durations quickly reinstate consumer-protection regulations

Sources: Monetary Authority of Singapore, Jason Henrichs, "Fintech needs more regulatory 'sandboxes," American Banker, April 26, 2018. National Journal Research 2018.