BA 311 – Money and Banking

ASYMMETRY IN THE SYSTEM – ADVERSE SELECTION

- Adverse selection – the less desirable assets, projects or opportunities are presented to the market
- Common in many markets – real estate, cars, securities.
- Savers tend to keep best opportunities for themselves and do not sell participation in high value assets.
- High risk firms would rather sell bonds – Why?
- Downside is the same, upside inures to the common shareholders

ASYMMETRY IN THE SYSTEM – MORAL HAZARD

- Moral Hazard– It isn't my money (OPM – Other People's Money)
- Business Judgement Rule protects management
- Misalignment of priorities or incentives between management and shareholders or management and bond holders

ASYMMETRY IN THE SYSTEM – MANAGING THE RISK

- Company research – IB's, rating agencies, analyst reports, D&B, Google
- Independent directors – including institutional investor representatives – though this may create other issues…
- Proxy rights and disclosures, Derivative actions
- My old world – PE/VC Firms
- Regulation – SEC, CFPB, Sarbanes Oxley, Dodd Frank, EU
- Traditional Banking System – Commercial Banks tend to provide capital when open capital markets unavailable.
- Personal Touch & Reputation
- 5 C's – Capacity, Conditions, Character, Collateral and Capital
- Secondary and tertiary sources of repayment

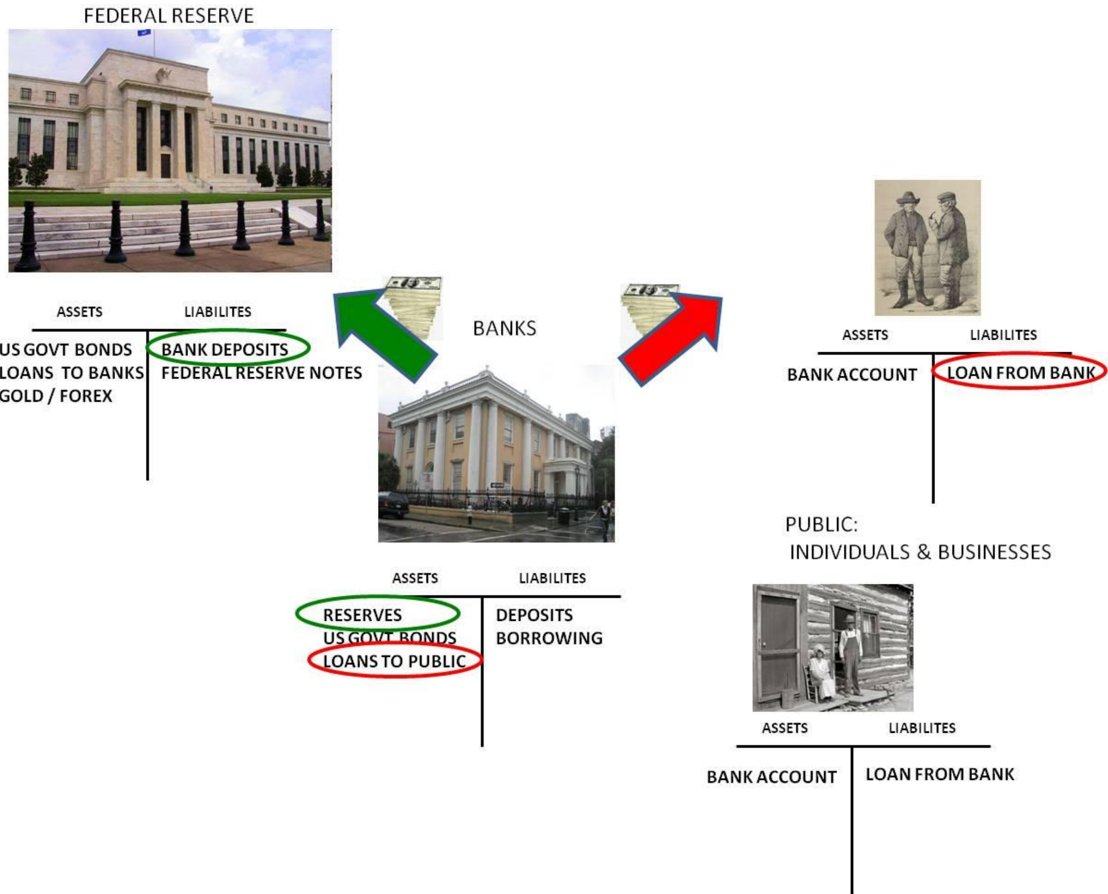
BANKING

- Commercial Banks – Take deposits and make loans. "Typical Bank"
- According to Federal Reserve Data from 2014, there were nearly 6,800 commercial banks in the US. In 1988 there were over 12,500 commercial banks in the US.
- Thrifts – savings banks, credit unions – focus on small business and consumers. At least 65% of lending portfolio must be in consumer loans per regulation.
- There are over 6,100 Credit Unions in the US as of 2015 per the NCUA. There are less than 750 Savings and Loan Associations left in the USA in 2010 per the Brookings Institution. There were 17,000 credit unions and 4,000 S&L's in 1986
- What has happened to the banking industry?

U.S. BANKING DEREGULATION

- Deregulation led to increased concentration
- States reduced branching restrictions – allowing more branches per bank in the 70's and 80's
- Congress opened interstate banking by law in 1994
- Massive size increases and merger activity in the past 30 years
- Congress repealed Glass-Steagall (1933) in 1994 – allowing bank holding companies to reenter areas like investment banking and insurance.
- 2008 Financial Crisis led to passage of Dodd-Frank and increased banking regulation in 2010 – which is getting a fresh look in the current administration.

BANKING FLOWS



LOAN SECURITIZATION

- Bank bundles similar loans together and creates loan pools. Investors provide the capital and receive the payments.
- Securitization is used on more than just mortgages. Car loans, credit cards and other securitization pools are becoming commonplace.
- FHLB, FNMA, FMAC all facilitated securitization prior to the 2008 financial crisis.
- Moves risk off bank balance sheets and recycles capital.
- "Shadow Banking" system – not held by regulated entities
- Often servicing rights are separated by the bank and retained or sold separately.

SUBPRIME

- Allow people with poor credit histories to borrow.
- Area worked by "finance companies" – they borrow from the banks and then lend subprime – making money on the spreads.
- Moved into mortgages and auto loans – leveraging securitization markets
- Payday lenders – high fees and interest rates
- Pawn Shops – high fees, chattel as collateral
- What is usury?
- Is this OK?

WHAT DOES THE US GOVERNMENT DO?

- Provides backstop guarantees to banks to encourage lending
- FHA, VA
- SBA
- Federal Student Loans
- Community Reinvestment Act – based on a history of discrimination
- Provides deposit insurance (FDIC)
- Banking regulation and oversight (will come back to this later)

BANKING FLOWS

FEDERAL RESERVE

ASSETS	LIABILITES
US GOVT BONDS	BANK DEPOSITS
LOANS TO BANKS	FEDERAL RESERVE NOTES
GOLD / FOREX	

BANKS

ASSETS	LIABILITES
RESERVES	DEPOSITS
US GOVT BONDS	BORROWING
LOANS TO PUBLIC	

ASSETS	LIABILITES
BANK ACCOUNT	LOAN FROM BANK

PUBLIC:
INDIVIDUALS & BUSINESSES

ASSETS	LIABILITES
BANK ACCOUNT	LOAN FROM BANK

BANKING SYSTEM OVERVIEW

HOW BANKS MAKE MONEY

- Reinvest invested capital and deposits in interest producing loans and fee generating businesses
- Net Interest Margin = Interest Received less losses – Interest Paid
- Non-Interest income is becoming more and more important
- Core Deposits – checking, savings – cheap cheap cheap
- Purchased Funds – Time deposits (CD), purchased deposits (CD) more expensive
- Core deposits are harder to keep and raise. Why?
- C&I Lending
- Off Balance Sheet Products and Services are more profitable than traditional banking post Glass-Steagall (Lines & letters of credit, trading, brokerage, insurance, IB)
- Fees

BANK RISK MANAGEMENT

- Liquidity Risk – withdrawals take all the cash.
- To Manage – Balance liquidity and return. Use Fed Funds
- Credit Risk – Chances a loan defaults
- To Manage – Securitization, loan sales, analytics & underwriting
- Interest Rate Risk - Maturity mismatch – LT vs ST
- To Manage – Securitization, floating rates, derivatives
- Economic and Market Risk – changes outside bank control
- To Manage – business model development, diversification of customer base, underwriting standards, forecasting and modeling

WHAT HAPPENS WHEN A BANK GOES BAD?

- Equity is wiped out – losses cause reserves to become exhausted
- Government will seize the bank (FDIC/NCUA)
- Deposits and other assets are generally sold or merged into a solvent bank
- Proceeds used to pay off creditors
- FDIC guarantees depositors up to statutory limits (currently $250,000 per depositor)

INSURANCE AND MORAL HAZARD

- Bank Run – consumers start pulling all money from a bank
- Creates liquidity strain
- FDIC developed to reduce probability and severity of bank runs
- Creates moral hazard – why? On who's part?
- Depositors – Chase high returns on deposits regardless of bank security because deposits are "safe"
- Bankers – can take bigger risks and hope for bigger returns (and bonuses) because insurance protects downside and shifts risk to taxpayers.

BANK LIFECYCLE

- Chartered by Federal (National Bank) or State (State Bank) agencies. This includes Credit Unions and S&L's
- Limitations on ownership – Industrial Banks are limited in the US (Utah)
- Underwritten by regulators to ensure that they are adequately capitalized and have solid business and regulatory plans.
- Regulatory environment includes states and national agencies. Regulations are usually complementary. If not, most restrictive controls.
- Federal include OCC, OTS, FDIC, NCUA, Federal Reserve and Farm Credit Administration
- Regulators review assets, procedures and controls, training and management, portfolio composition, risk management approaches and other elements to assess risk (financial and operational)
- Must hold at least a 5% capital cushion. Can be closed if it falls to 2% or less. Also Subject to Basel Accords.
- Banks can be seized and sold or run in receivership if regulatory requirements are not met.

BANK LIFECYCLE – BASEL AND CAMELS

- Basel Accords are an international framework for regulating banks
- We already have Basel I, II, III – working on Basel IV
- Analyze risk and based on risk adjusted measures set capital requirements for international banks.
- US Banks are generally subjected to Basel requirements
- US Banks are also evaluated on CAMELS scheme for risk. CAMELS is used to identify weak areas and proscribe fixes. Rated 1-5 where 1 is best.
- It is nearly impossible for you to look up a CAMELS rating on a bank. Why?

BANK LIFECYCLE – BASEL AND CAMELS