

Overview of Financial Regulation

ECON 43370: Financial Crises

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Readings

- ▶ Hanson, Kashyap, and Stein (2011)
- ▶ Wikipedia and related links

Why are Industries Regulated?

- ▶ We do not regulate industries for the sake of regulating them
- ▶ Regulation itself can bring on many problems – government inefficiency, regulatory capture, regulatory arbitrage, etc.
- ▶ Want to regulate/supervise industries when there are (significant) deviations from conditions of perfect competition
 - ▶ Asymmetric information (moral hazard and adverse selection)
 - ▶ Externalities
 - ▶ Natural monopoly
- ▶ Financial crises are about *runs on short term debt*
- ▶ One of the chief goals of regulation from a macro perspective is to *reduce frequency of runs and make them less costly*

Financial Intermediation Has All of These Features

- ▶ Asymmetric information:
 - ▶ Part of why intermediaries exist is to deal with an asymmetric information problem between savers and borrowers
 - ▶ But this gives rise to another informational asymmetry: it is difficult for creditors and equity holders to monitor the activities of complex institutions
- ▶ Externalities:
 - ▶ Failure of one intermediary can negatively impact otherwise healthy companies and individuals
 - ▶ Can also trigger failure of other otherwise healthy intermediaries (fear induced runs and asymmetric information)
- ▶ Natural monopoly:
 - ▶ High fixed cost: intermediaries need to establish reputation and collect information on borrowers
 - ▶ Barriers to entry: in many respects these are a side effect of regulation aimed at dealing with informational asymmetries and externalities

Roadmap

- ▶ We will (quickly) walk through a history of the regulation of intermediaries
- ▶ Mostly domestically, though increasingly global nature of finance has made this much more complicated
- ▶ Most of the discussion will focus on *depository institutions* (banks)
- ▶ Going forward, economists and regulators need to think harder about *non-bank intermediaries* and regulating with an eye towards *macro* rather than micro outcomes (Hanson, Kashyap, and Stein 2011)
- ▶ Designing an effective regulatory system is *very hard* and is *not a panacea*. There is no free lunch – think about tradeoffs

Depository Institutions

- ▶ In the US, there are four types of depository institutions
 1. Commercial banks
 2. Savings and Loans
 3. Savings banks
 4. Credit unions
- ▶ The latter three are often grouped together and called *thrifts*
- ▶ Offer basic banking services and deal mostly with mortgages
- ▶ Tend to be very local
- ▶ Often mutual companies (as in description of Diamond-Dybvig model): depositors are the owners

Complex Network of Regulators

- ▶ Prior to expansive government regulation, there was of course implicit monitoring and regulation via Clearinghouses
- ▶ Commercial banks:
 - ▶ Either nationally or state chartered
 - ▶ National banks regulated by Comptroller of the Currency and are required to be members of the Federal Reserve System
- ▶ Thrifts:
 - ▶ Again either national or state chartered
 - ▶ Prior to 2011, S & Ls and savings banks were regulated by Office of Thrift Supervision (abolished as part of Dodd-Frank)

Charter Value

- ▶ You can't just "start" a bank
- ▶ Has to be chartered either federally or at state level
- ▶ A charter is essentially a state-granted monopoly power
- ▶ But aren't monopolies bad?
 - ▶ In most circumstances yes
 - ▶ But banking is arguably a "natural monopoly" industry with high fixed costs anyway
 - ▶ Chartering subjects institutions to regulation necessary to deal with asymmetric information and externalities
 - ▶ Creation of monopoly rents and threat of losing chartering might encourage banks to *self-regulate*

3-6-3 Rule

- ▶ Borrow funds at three percent, lend funds at six percent, hit the golf course by 3 pm
- ▶ For much of 20th century (after Great Depression), banking was a relatively simple and conservative business
- ▶ Note this in spite of high leverage and implicit (or explicit) promises of bail outs in the event of failure
- ▶ Charter value can offset moral hazard problems with government intervention
 - ▶ Expectation of government intervention: moral hazard, take on too much risk
 - ▶ Charter value: don't want to get into trouble, so take on less risk
- ▶ Charter value began to erode in 1970s and financial system became more complex and risky

Post-Depression History of Regulation

- ▶ Banks are chartered (have some monopoly power), are subject to informational asymmetries (depositors don't know what banks are doing), and their failure is associated with externalities
- ▶ Because of the latter, we have either implicit or explicit promises to try to prevent failure or to make failure “orderly” – deposit insurance and the FDIC
- ▶ Because of this promise to “bail out,” and because of informational asymmetries and monopoly power, banks have been subject to many other restrictions and regulations
- ▶ Basically two kinds: restrictions on competition and restrictions on activities
- ▶ Over time these have eroded

Restrictions on Competition

- ▶ **National Banking Acts of 1863 and 1864**: created nationally chartered banks, a uniform currency, and the Office of the Comptroller of the Currency
- ▶ **McFadden Act**: allowed national banks to branch within a state, but prohibited interstate banking
- ▶ Potential problems:
 - ▶ Lack of geographical diversity
 - ▶ Inefficiently small scale

Restrictions on Activities

- ▶ **Glass-Steagall**: designed to separate commercial from investment banking
- ▶ Commercial banking:
 - ▶ Take deposits and make loans
- ▶ Investment banking:
 - ▶ Deal in securities underwriting
 - ▶ Firms raising money not through bank loans but through capital markets (issuing bonds and stocks)
- ▶ Basic idea: investment banking is riskier. By separating that from depository institutions, reduce fear-induced runs and crises
- ▶ Restrict assets (no equities for commercial banks) and stabilize cost of funding (interest rate ceilings)
- ▶ In addition, **Regulation Q** imposed strict limits on interest on deposits (cap on savings accounts, no interest on demand deposits)

Erosion of Restrictions on Competition and Activities

- ▶ Creation of bank holding companies was a way to get around branching restrictions
- ▶ The **Bank Holding Company Act** of 1956 gave Federal Reserve regulatory authority over bank holding companies
- ▶ They were still prohibited from interstate branching, but some loopholes allowed barrier between commercial and investment banking to partially whittle away
- ▶ **Riegle-Neal Act** of 1994 dropped interstate banking restriction
- ▶ **Gramm-Leach-Bliley Act** of 1999 dropped barriers between investment and commercial banking
- ▶ After the financial crisis, the traditional investment banks became bank holding companies. This subjected them to Federal Reserve oversight but gave them access to Fed liquidity

Transformation of Banking in 1970s

- ▶ Changing structure of banking and changing regulatory framework was largely a reaction to economic events of the 1970s
 - ▶ High inflation: made traditional banks subject to Regulation Q unattractive for depositors because of interest rate ceilings
 - ▶ Led to rise of money market funds and new classes of short term debt – commercial paper, repo, etc
 - ▶ Rise of institutional investors: retirement planning and pensions became a much bigger thing, particularly with demographic changes
 - ▶ This, along with MMFs, generated demand for securitization
 - ▶ Increasing global competition
 - ▶ Eroded charter value
 - ▶ Caused banks to seek greater risk and look for ways to remain profitable
 - ▶ Securitization and “off-balance sheet” financing resulted

CAMELS

- ▶ **CAMELS:**
 - ▶ Capital adequacy
 - ▶ Asset quality
 - ▶ Management
 - ▶ Earnings
 - ▶ Liquidity
 - ▶ Sensitivity to interest rate risk
- ▶ Capital restrictions: designed to limit risk of failure due to credit risk
- ▶ Liquidity restrictions: designed to limit risk of failure due to liquidity risk
- ▶ Of course in practice not easy to distinguish the two

Capital Requirements

- ▶ Basic idea: have a sufficient amount of equity relative to assets (i.e. not too much leverage)
- ▶ Designed to give institutions (i) some “skin in the game” and (ii) a “cushion” to avoid losses
- ▶ Issues:
 - ▶ What kind of capital (e.g. common vs preferred stock)?
 - ▶ Same amount of capital for different kinds of assets (risk-weighting)?
- ▶ **Basel Accords**: internationally agreed upon capital requirements
- ▶ Tradeoff: capital requirements are onerous (leverage increases profitability). Too high and funds leave regulated sector for greener pastures. Too low not enough cushion.

Liquidity Requirements

- ▶ Things like reserve requirements
- ▶ Basic idea is to ensure institutions can deal with funding shortfalls without having to engage in asset sales
- ▶ Should maturity structure of debt matter for how much liquidity an institution must hold?
- ▶ Here micro vs macro is potentially quite important
- ▶ Asset sales at a micro level to raise funds not so problematic, but if everyone is doing it can be problematic
- ▶ Related to risk-weighted capital requirements: generally more liquid assets (e.g. government bonds) get lower weights when computing risk-weighted assets

Disclosure Requirements and Consumer Protection

- ▶ Financial intermediaries are subject to strict disclosure requirements
- ▶ Meant to lessen asymmetric information problem
- ▶ Of course, can also be problematic. More information can be bad (Gorton and Tallman)
 - ▶ Mark to market accounting
 - ▶ Off balance sheet activities
- ▶ Consumer protection: try to increase transparency so that people know what they are getting into

Dodd-Frank

- ▶ Sought to promote financial stability (e.g. Financial Stability Oversight Council)
- ▶ Created many new regulatory agencies and merged or eliminated some (e.g. Office of Thrift Supervision)
- ▶ Lots of focus on consumer protection
- ▶ Expanded regulatory reach and oversight of Fed and other government agencies, but made it more difficult to act with discretion in a crisis – i.e. “the end of too big to fail”

Micro vs. Macro

- ▶ Historically, regulation has take a *micro* focus
- ▶ Regulate individual institutions to try to deal with market frictions and moral hazard problem associated with bail outs
- ▶ Increasingly see the need to take a more *macro* focus to deal with *systemic* problems and crises
- ▶ We turn to this next