## Regulatory Policy and Reform<sup>1</sup>

## Why Regulate?

Microeconomic theory provides several cases where regulating the type of products a firm may sell, or which agents may sell a particular product is a sensible solution. Standard microeconomic theory suggests that a free market is efficient if such a market exists for all goods and services and if all such markets are competitive. Regulation may, however, make sense in the presence of market failure, or a missing or non-competitive market. Consider the following examples:

- 1. An externality. A negative externality implies that the private cost of producing output is less than the social cost. The classic example is pollution. In a free market, a firm bases its decisions on the private cost of production and not the pollution that the production process emits. Policy may attempt to solve this problem by forcing producers to internalize all of the production costs. The classic solution is to tax production in order to align the private and social costs. Another solution is to create a market for the spillover effect through some type of tradable permit system. In some cases, however, taxation may not be economically or politically feasible. Regulation is then an additional policy option. In large cities, taxis create an externality through increased emissions and traffic congestion. Rather than tax taxis, many governments instead choose to regulate the market through a licensing program that caps the number of suppliers. Another example is gasoline. Rather than tax the lead content of gasoline, the Federal government instead regulated the market by banning leaded gasoline.
- 2. Mis-pricing of risk. This is a special case of #1. Suppose that the costs of a firm failing includes both a private and a public component. For example, if a bank fails, it may contribute to a run on additional banks. Because, in a free market, firms will only consider the private costs of risk, it may make sense to regulate.
- 3. Informational deficiencies. The general public typically is not sufficiently well informed to understand the risks associated with many medicines. Medicine is therefore highly regulated.

<sup>&</sup>lt;sup>1</sup>These are undergraduate lecture notes. They do not represent academic work. Expect typos, sloppy formatting, and occasional (possibly stupefying) errors.

Many drugs, especially those with serious risks of adverse side effects, are available only through prescription. Prescriptions are an effort to bring uninformed demanders up to informational parity by requiring them to consult with an expert, in this case a medical doctor. The maximum dosage of over the counter drugs s also regulated.

4. Market power. Regulation is also used to ensure competitive markets by preventing and/or reducing agents' market power. Anti trust laws that limit firms' market share, prevent predatory pricing, ban closed shops where all workers must be union members, etc. are common examples of regulation.

This list is not exhaustive, there may be other economic rationales for regulation. Likewise, not all regulation has an economically sensible justification. Regulation may at times be a political tool designed to benefit particular interest groups.

The Great Depression, Banking, and Glass-Steagall

The Great Depression brought about a new regime of banking and financial regulation. Before discussing the details, it is useful to review the role of commercial banks in the Great Depression.

During the Great Depression, most commercial banks' operations were closer to the ECO 103 textbook model than today's banks. Commercial banks received customers' deposits, held a small fraction of these deposit as reserves, and loaned the remainder of these deposits out in order to make a profit. There were two major types of bank failures. First, if too many of its loans went into default, the bank could become insolvent. Second, even if the bank held a solid portfolio of loans, if too many customers sought to make withdraws, the bank would not hold enough reserves and would fail. When a bank failed, its customers joined a list of creditors seeking to divide up the bank's remaining assets. They would typically receive some fraction of their original deposits. Customer were therefore rational to factor in the probability of a bank failing when deciding where to place their assets.

As the Great Depression began, but before its peak, the rate of default on these loans increased. Many banks failed at great loss their customers. This led to runs on otherwise healthy banks.

Worried about more bank failures, too many customers withdrew their deposits, creating a self-fulfilling prophecy and causing more bank failures. By 1933, about 40% of banks had failed, eliminating enough checkable deposits to create a 25% decline in the money supply.

The decline in money, along with monetary policy's failure to reverse this decline, resulted in a 25% deflation and a debt deflation spiral which greatly compounded the Depression's effects. As prices fell, the real value of outstanding loans increased, driving more borrowers into default. More defaults further reduced aggregate demand, which created additional deflation and defaults. The Banking Reform Act of 1933, commonly referred to as Glass-Steagall, added significant regulations to the banking system. The act distinguished between commercial banks and investment banks.

- 1. Commercial Banks. These institutions, those described in ECO 103 and ECO 270 when discussing the money multiplier, accept deposits and attempt to profit by loaning these deposits out at higher interest rates. Most of these loans are mortgages, small business loans, car loans, or home equity loans.
- 2. Investment Banks. These institutions do not accept deposits. Instead they profit by trading securities and raising capital for corporations by issuing and/or insuring bond issues. For a fee, an investment bank, may manage a major firm's issuance of debt. For an additional fee, the investment bank may insure the payment of this debt, thus assuming the default risk.

Many economists discerned an externality with commercial banks. When evaluating credit worthiness, lenders consider the probability of default and the effect on its own balance sheet. Widespread default, however, may have effects on the entire economy that individual lenders may not internalize when approving/rejecting loans. Therefore a tendency to assume too much risk may exist on the part of commercial lenders. Glass-Steagall instituted several major regulations on commercial banks to minimize the riskiness of their portfolios. First, it formally separated commercial and investment banks. Firms were free to engage in either type of banking, but not both. This regulation sought to prevent commercial banks from assuming the risk associated with large

bond issuances and the trading of securities. Glass-Steagall then imposed additional regulations on commercial banks.

Additional regulations exist on commercial banks, often to prevent self-fulfilling bank runs. Banks are required to participate in the Federal Deposit Insurance Commission which insures customers' deposits. The Federal Reserve also establishes reserve requirements. These regulations were largely successful in the recent financial panic. Although commercial banks did fail, these failures were largely due to poor fundamentals or their investment banking components, not self-fulfilling bank runs as in the Great Depression.

## The Financial Services Modernization Act of 1999

The Gramm-Leach-Bliley Act (*a.k.a.* The Financial Services Modernization Act of 1999) was passed by Congress and signed by President Clinton in 1999. It repealed Glass-Steagall's separation of investment and commercial banking by allowing firms to reorganize as financial Holding Companies which engage in both types of banking as well as offering other types of financial services such as insurance. The bill passed easily (77-23 in the Senate). The arguments in favor include:

- 1. Glass-Steagall came to be seen as an outdated set of regulations. By separating commercial and investment banks, critics argued that the government was artificially restricting competition in credit markets. Recall from ECO 270 that less credit reduces capital accumulation which reduces output in both the short and long run.
- 2. The previous point was bolstered by the experience of other countries where allowing both types of banking within firms did not have obviously malignant effects.
- 3. The repeal was seen as a way to promote financial innovation by making it easier to create complex financial instruments based on loans made at the level of commercial banks. Mortgage backed securities are an example of such financial innovation.
- 4. Supporters expected there to be significant cost savings that would be passed on to consumers.

Opponents of repealing the separation between investment and commercial banking argued that allowing combined commercial banks and investment banks could result in abusive lending as well as concentrating credit markets in the hands of too few firms (essentially the opposite of the first argument in favor of repeal).

Another major objection was the concern that problems in the investment banking sector could then propagate into the commercial banking sector. Thus crisis in financial markets could more easily restrict the type of lending often done at the commercial banking level (e.g. mortgages, car loans, student loans, etc.) Note that investment banking does not have an equivalent of the FDIC and is therefore more prone to bank runs.

After 1999, many commercial banks (e.g. Bank of America, and Citigroup) launched commercial banking operations. After the panic of 2008, discussion began about re-implementing Glass-Steagall. To date, this has not yet occurred.

## Financial Market Reform Bill of 2010

In the Summer of 2010, Congress passed, and President Obama signed, the Dodd-Frank Wall Street Reform and Consumer Protection Act. The purpose of this bill was to restrict trading in risky assets where such trading posed a risk not only to the agents involved, but to the aggregate macroeconomy. Its authors were attempting to correct an externality.

The bill is over 2000 pages long. It is currently being implimented. We will discuss a few of its most important provisions:

- i) New bureaucracies. The newly created Consumer Financial Protection Bureau, located within the Federal Reserve, is charged with enforcing existing laws and regulations designed to protect consumers. It is now operational. The Financial Services Oversight Council is charged with identifying troublesome financial transactions that threaten macroeconomic stability. The latter group may require that financial entities sell off some of their assets.
- ii) Breakup authority. The Federal Deposit Insurance Corporation may break up at risk firms. This provision is intended to prevent firms from being "too big to fail."

- iii) Banks. The ability of commercial banks to invest their own funds in financial markets is limited by the bill. For example, commercial banks now have very limited ability to invest in hedge funds. This provision may be viewed as a (very) partial return to the separation of investment and commercial banks that existed under Glass-Steagall.
- iv) Tighter Mortgage Standards: Lends must verify the income and credit rating of potential borrowers.
- v) Mortgage Backed Securities: The creator of MBSs must hold at least 5%. This provision is intended to ensure that lenders internalize the riskiness of their loans and thus reduce potential agency problems.
- vi) Tighter capital requirements. While the bill does not increase the required capital ratios that financial institutions much meet, it does limit the types of assets that may be counted as capital.

Critics of the bill argue that it will limit financial innovation which, despite occasional problems, has greatly increased access to credit markets.

Financial regulation is a large and opaque topic. This lecture has only covered a few regulations in minimal detail that will be of particular interest when chronicling the ensuing financial crisis. If you want to become an expert in this stuff, go to law school.