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Joao Rafael Cunha

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info: econ@st-andrews.ac.uk

The Advent of a New Banking System in the U.S. - Financial Deregulation in the 1980s *

João Rafael Cunha †

University of St Andrews

Abstract

In this chapter, I argue that the deregulatory process that started in the 1980s in the banking industry in the United States has changed the profile of this sector. Between the Great Depression and the 1980s, the banking sector in the United States was a stable, yet not competitive sector. The financial deregulation of the 1980s changed this sector to a competitive, yet unstable one. This deregulatory process occurred mostly as a response to the economic conditions of the 1970s.

Keywords: Financial Regulation; Deregulation; United States Banks

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†School of Economics and Finance, Castlecliffe, The Scores, University of St Andrews, Fife, KY16 9AR, United Kingdom; joao.cunha@st-andrews.ac.uk

1 Introduction

The 1980s was one of the most eventful and consequential decades in the development of the U.S. financial system. During this decade, the regulatory framework established in response to the Great Depression started to be dismantled. These regulatory changes were a key driving force behind the transformation of the banking sector (Berger et al., 1995). Moreover, the end of the decade saw, what until 2007 was, the most serious banking crisis since the Great Depression. This pattern of deregulation and crises, which started in the 1980s, has continued until the present. Thus, it is worth study this period in greater detail and the consequences it has had for the U.S. banking and financial system.

In this chapter, I will argue that the deregulatory process that occurred in the 1980s changed the profile of the U.S. banking system from a not very competitive and stable system to a competitive, but unstable system.

The banking sector is marked by a peculiar feature. Greater competition may be good for efficiency, but bad for financial stability (Allen and Gale, 2004). In the 1980s, there was a clear change in the profile of the U.S. banking system in the 1980s. In this decade, the U.S. banking sector went from one end of the competition-stability trade-off (stable, but not very competitive) to the other (competitive, but unstable).

Between the Great Depression to the 1980s, the U.S. banking regulators favoured stability. During this period, the U.S. banking system was characterized by low competition and stability.

Since the 1980s, banking regulators have favoured competition. For this purpose, they deregulated this industry. As a consequence, this sector has become more competitive, but also more unstable. As we can see in table 1 from White (2002), in the four decades from 1940 to 1979, there were a total of 246 bank failures and 134 million dollars in deposit insurance losses. The decade from 1980 to 1989 alone dwarfed this numbers with 1086 bank failures and 22961 million dollars in deposit insurance losses. These numbers are more than 4 and 171 times greater than the ones observed in the previous four decades combined.

This deregulatory process was achieved by loosening and repealing regulation in several areas of the banking sector. The 1980s saw a loosening of the restrictions on business areas in which commercial banks could be involved. They also witnessed the repeal of Regulation Q, the interest rate ceiling on deposits. Moreover, there was a gradual lift of the restrictions on branch banking and real estate lending.

The main argument proposed here links to the idea of the financial regulatory cycle proposed by Rajan (2009); Coffee Jr (2011). They suggest that financial regulation moves in a cyclical manner. According to them, periods of loose regulation are followed by times of tight financial regulation, which then revert back to looser regulation. These regulatory changes continue in a cyclical manner.

In my argument, I am referring to a long type of cycle. A type of Kondratiev regulatory cycle. In this long regulatory cycle, the 1980s started a new period of looser regulation. This new phase followed the previous period of tighter regulation that lasted from the Great Depression to the 1980s.

As the largest economy in the world and the global superpower of the time, the U.S. conducted most of its economic policy without much influence from the rest of the world. However, there was one aspect in which coordination with other large economies affected U.S. banking regulation. The Basel Accords attempted to regulate banking practices at an international level. In 1988, Basel I created a set of rules to establish capital adequacy. However, it may have contributed to the growth of securitization and, thus, the 2007-08 financial crisis (Shadow Financial Regulatory Committee, 1999; Brunnermeier, 2009).

There are several explanations proposed as the main reason for the deregulatory process that occurred in the U.S. financial sector in the 1980s. The main one is usually attributed to the prevailing economic conditions following the end of the post-WWII 'Golden Age' prosperity (Sherman, 2009). Political reasons (Krippner, 2011; Hare and Poole, 2014) and pressure from the industry (Evanoff et al., 1985) are also other notable reasons to justify the financial deregulation of this decade.

The next section of this chapter will elaborate on the regulatory changes that liberalized the banking sector in the U.S. in the 1980s. In section 3, I will focus on the consequences of the deregulatory process. Section 4 presents a comparison between the U.S. and Canadian banking systems. Section 5 will present some of the lessons we can take from this deregulatory experience. Section 6 concludes.

2 The Liberalisation of the U.S. Financial Sector in the 1980s

In the 1980s, several of the regulatory constraints imposed on the financial sector were loosened. Most of the regulations that were lifted had their origin in the regulatory response to the Great Depression. These changes represented a tectonic shift in the level of restrictions financial firms faced. This represented a shift along the financial regulatory cycle from a period of high regulatory constraints on financial firms to a a period of looser regulation.

2.1 Regulatory Background

Until the 1980s, commercial banking in the U.S. was a protected industry. Through the McFadden Act of 1927, the federal government prohibited interstate branch banking, thus, protecting banks from out-of-state competition. Moreover, most states also imposed restrictions on intrastate banking.

Following the Great Depression, the Glass-Steagall Act of 1933 separated commercial and investment banking. This allowed regulators to more tightly regulate commercial banks, while also shielding them from competition from other financial institutions. Additionally, Regulation Q imposed an interest rate ceiling on deposits, which restricted price competition between commercial banks.

Nationwide branch banking was *de facto* prohibited in the U.S.. The Douglas amendment to the Bank Holding Company Act of 1956 forbade holding firms from acquiring banks outside the state where it was headquartered unless the state of the bank being acquired explicitly allowed this type of acquisitions in their law. As we can see in table 2, no state allowed it until 1978. Additionally, most states also restricted within-state bank branching (Kroszner and Strahan, 1999). Thus, making the U.S. a country where nationwide branch banking was banned. Figure 1 provides supporting evidence to this point. It shows that in 1980, there were many banks, but few branches.

Just before the start of the 1980s, over 95 percent of commercial banks were "community banks". These were banks that held less than $ 1 billion in assets (2006 dollars). These banks were able to exist, because the restriction on branch banking heavily protected them from competition from larger nationwide banks (DeYoung, 2010).

2.2 New Business Areas

One of the cornerstones of the Glass-Steagall Act of 1933 was the separation of commercial and investment banking. The 1980s witness the erosion of this separation, despite the fact that this Act was only formerly repealed in 1999 with the Gramm–Leach–Bliley Act. In 1984, the Federal Deposit Insurance Corporation ruled that insured non-member banks could establish or acquire subsidiaries that were engaged in securities activities (Federal Deposit Insurance Corporation, 1984).

Additionally, in 1986, the Federal Reserve reinterpreted the Glass-Steagall separation between commercial and investment banks. The Fed established that a bank could receive up to 5 percent of its gross revenues from investment banking services. To support their new interpretation, the Fed argued that the Glass-Steagall Act did not precisely define what "engaged principally" meant. Thus, the amount to which commercial banks were involved in other activities was open to interpretation. In the following year, the Fed pushed this rationale further by allowing several banks to be involved in securities underwriting (Sherman, 2009).

In this same year of 1987, Alan Greenspan was appointed Chairman of the Federal Reserve. Under his tenure, the Fed continued to reinterpret the Glass-Steagall

Act. This time, it allowed commercial banks to operate "Section 20" subsidiaries to underwrite corporate securities as long as they did no exceed 10 percent of gross revenues (Sherman, 2009; DeYoung, 2010). Section 20 of the Glass-Steagall Act prohibited member banks of the Federal Reserve System from being affiliated with any firm that was "engaged principally" in securities underwriting. The Fed chose to not interpret this as a total prohibiting against the underwriting of securities by commercial banks and relaxed the existing restrictions.

Later on, in 1989, the Fed started relaxing the restrictions from the Glass-Steagall Act that banned banks from underwriting corporate securities themselves (DeYoung, 2010). This was due to the competitive pressure U.S. commercial banks faced from their European counterparts and non-bank financial institutions (Calomiris, 2000).

Following these developments, many states started allowing state-charted banks to participate in securities underwriting, securities brokerage, real estate development, insurance underwriting and insurance brokerage. By the end of the decade, only 7 states prohibited state-chartered banks from doing securities brokerage and 29 allowed them to engage in securities underwriting. Twenty five states permitted their banks to enter into real estate development and 6 allowed banks to underwrite insurance beyond credit life insurance (Davison, 1997).

2.3 Branch Banking

Nationwide branch banking was not fully allowed in the U.S.. The McFadden Act of 1927 had prohibited interstate branching. This lasted until the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. Kane (1996) explains that the *status* *quo* of not allowing nationwide branch banking was the best for regulators due to economic and political incentives.

However, a nationwide banking system began being established in the 1980s. This happened because branch banking restrictions were gradually removed throughout the 1980s. The Garn-St Germain Depository Institutions Act of 1982 amended the Banking Holding Act to permit any bank holding firm to acquire failed banks or thrifts regardless of the state where they were headquartered. This created a manner for banks to enter another states where they would normally not be able to receive a charter (Kroszner and Strahan, 1999).

Shortly afterwards, the Office of the Comptroller allowed nationally chartered banks to branch without restrictions in states where savings institutions were not subjected to branching restrictions. This introduced statewide bank branching in several states, most of them located in the south (Stiroh and Strahan, 2003).

Throughout the 1980s, most states relaxed their laws prohibiting interstate banking and branch banking. States circumvented the McFadden Act by establishing bilateral and multilateral agreements that allowed banks to acquire their counterparts from any other state participating in the agreement. This allowed banks to cross state lines through multi-bank holding firms (DeYoung, 2010). As we can see in table 2, by 1993, only Hawaii did not permitted the entrance of banks from all other states. Additionally, most states changed their laws to allow branch banking. By 1990, only the Colorado still completely prohibited branch banking (Bordo, Rockoff, and Redish, 1994).

All these factors led to the creation of a *de facto* nationwide banking system in this decade. Figure 1 shows that this deregulatory process was followed by an increase in the number of branches.

According to Kerr and Nanda (2009), the lift of branch banking restrictions led to an increase in competition in other industries. This happened because entrepreneurship grew remarkably after this reform. They argue that the lift of restrictions on branch banking reduced the distortions in the banking sector due to the limited competition. This, in turn, democratized access to loans for entrepreneurship and, thus, increased competition in other areas of the economy.

2.4 Interest Rate Relaxation

One of the most important regulatory changes in the 1980s was the relaxation of the ceiling on interest rates. The Depository Institutions Deregulation and Monetary Control Act of 1980 established the Depository Institutions Deregulation Committee (DIDC), who was required to gradually phase-out Regulation Q. Moreover, it also allowed commercial banks and thrifts to offer money market deposit accounts (MMDAs). Later, the Garn-St Germain Depository Institutions Act of 1982 required the DIDC to abolish any remaining Regulation Q differentials by 1984.

Regulation Q set interest rate ceilings on deposits. It was established in 1933 as part of the response to the Great Depression. It was meant to increase lending to local communities by reducing the balance small banks held at large ones, increase bank profits by restricting competition for deposits, and increase the liquidity of the banking system (Gilbert, 1986).

As the post-war high growth rate economic climate was dying off, interest rate ceilings became a problem in a high inflation and high interest rate climate. As figure 2 shows, from 1966 until 1986, market interest rates rose sharply with Treasury bills rising above the ceiling rates on deposits. This meant that as inflation became endemic in the 1970s, savings in banks lost value in real terms. Thus, consumers were moving away from deposits that offered low interest rates in an economy with high inflation. In this economic environment, as figure 3 shows, money market mutual funds continued to grow and were becoming an alternative that paid higher interest rates compared to deposits at commercial banks.

Regulation Q failed its original aims of increasing profits and reducing the balance banks held at other banks. Thus, Congress repealed Regulation Q. This measure quickly produced results. As we can see in table 3, in this period, checkable deposits started growing rapidly after all depository institutions were allowed to offer these type of accounts in 1981. Additionally, table 4, shows that, in the same period, the share of small time and savings deposits plus money market deposit account at commercial banks increased from around 40 percent of the overall market to over 50 percent in 1985.

2.5 Real Estate Lending

The 1980s also saw the liberalisation of regulation governing real estate lending. The Garn–St Germain Depository Institutions Act of 1982 removed statutory restrictions on real estate lending by national banks. These restrictions included maximum loan-to-value ratios for real estate loans and set aggregate limits on real estate limits.

Additionally, this act gave the Comptroller of the Currency the authority to set these rules in the future. This agency proposed no limitations on real estate loans, because it believed that they were hampering the ability of the banks to response to changes in the real estate market. Moreover, it also believed that this choice should be the prerogative of the bank management team (Davison, 1997).

Later in the decade, the Alternative Mortgage Transactions Parity Act of 1982 removed the restrictions on classes of mortgages with exotic features, such as adjustable rates and interest only mortgages (Sherman, 2009). These type of loans had teaser rates, which were very low to non-existent in the first years and then ballooned to very high interest rates. Lenders usually targeted low income, high risk borrowers with low credit ratings for these types of loans. Thus, giving rise to the subprime loans. These consumers often did not fully understand the financial contract into which they had entered. These type of loans became one of the main financial arrangements used to inflate the real estate bubble of the early 2000s that was in the root of the financial crisis of 2007-08 (Brunnermeier, 2009).

2.6 Entry

In 1980, the Office of the Comptroller changed its policy to award a bank charter (Davison, 1997). The OCC started emphasizing more on the organizing group and its operating plan rather than the ability of a region to support a bank. This new policy led to an increase in the number of bank charters granted due to an increase in the percentage of approved bank applications. The number of new national bank charters issued increased by around 75 percent from 1980 to 1984. This was fuelled by an increase in the average percentage of approved new bank applications per year from 58 percent in the 1970s to 89 percent in the 1980s (White, 1992; Davison, 1997).

2.7 Deposit Insurance

During the 1980s, the main regulatory goal was to increase competition. However, as the stability competition trade-off suggests, as competition increases, the stability of the financial system may decrease (Allen and Gale, 2004). This increase in instability was clear. The 19080s witnessed the highest number of bank and thrift failures since the Great Depression. To try to mitigate this problem, regulators used deposit insurance to prevent bank runs following the rationale of Diamond and Dybvig (1983). The Depository Institutions Deregulation and Monetary Control Act of 1980 increased the deposit insurance limit from $40,000 to $100,000.

Avoiding bank runs and credit-flow disruptions through the use of deposit insurance can be an expensive business. Hanc (1998) estimates that the cost of dealing with the S&L crisis was $160.1 billion, of which $132.1 billion is the estimated figure supported by the taxpayers. The author suggests that these figures may have been smaller if there were penalties or costs to tame risky behaviour. He mentions risk-based premiums and capital requirements as examples of penalties or costs that would have reduced risky taking. Capital requirements were eventually adopted exactly to address this issue.

This preference to achieve short-term stability though deposit insurance led to a moral hazard problem. Given that the deposit insurance scheme assumes the losses of the depositors, depositors have no incentives to monitor bank risk. This allows managers to take on more risk. Additionally, they are able to raise an amount of funds that is frequently not commensurate with the risk of the endeavors. This may lead to a misallocation of resources and, thus, increase the likelihood of failures.

Pyle (1995) argues that the deposit insurance scheme in place in the U.S. was one of the causes of the S&L crisis. He states that this scheme was unsound, because it led to moral hazard. Additionally, he claims that it increased the cost of the crisis.

2.8 Failure Resolution - The rise of the "too-big-to-fail" doctrine

This preference of the regulators for short-term stability over market discipline has also been evident in the manner they resolved troubled financial institutions. In 1984, Continental Illinois was the first large bank rescued in the United States. This introduced the "too-big-to-fail" doctrine in the United States. To salvage the troubled institution, regulators prepared a $4.5 billion rescue plan for the bank. Continental Illinois was the seventh largest bank in the U.S. with over $40 billion in assets (Hanc, 1998).

Through the extensive use of deposit insurance and "too-big-to-fail", policymakers gave bankers an implicit guarantee subsidy. Effectively, the government and its agencies were implicitly guaranteeing deposits and debts of the banks. This means that depositors and lenders don't have any incentive to monitor to whom they borrow their money. Thus, bankers were able to raise more funds than they would normally do for the level of risk they were taking. This, then, led to a misallocation of financial resources and may contribute to an increase in the long-term instability of the banking system.

Forbearance was an alternative way to deal with troubled financial institutions that was introduced in the 1980s. It was inaugurated with the Net Worth Certificate Program that was a part of the Garn-St Germain Act of 1982. This allowed insured depository institutions to operate without meeting the the regulatory standards of safety and soundness. Forbearance was applied at the discretion of the regulators on a case-by-case basis. (Davison, 1997; Hanc, 1998).

This forbearance policy permitted bank regulators to allow several banks that later failed to operate with minimal capital for a long period of time. The Federal Savings and Loan Insurance Corporation (FSLIC) was the most permissive agency regarding this policy. This very tolerant attitude led to an increase of the costs of thrift failures throughout the 1980s (Hanc, 1998).

This policy of forbearance was very criticised by Romer and Weingast (1991). They argue that by keeping institutions in business, it allowed them to gamble for resurrection. This, in turn, meant that the cost of resolution of troubled financial institutions increased.

2.9 Capital Requirements & Basel I

With the reduction of competitive barriers in the banking industry throughout the 1980s, regulators believed that a reasonable level of capital was necessary to sustain the soundness and safety of the banking system (Kobrak and Troege, 2015). Capital requirements were expected to induce prudent behaviour and give banks a buffer in case they faced financial troubles in an increasingly competitive banking system (Hellmann, Murdock, and Stiglitz, 2000). They were meant to be a cushion for unforeseen losses and a protection for depositors, which would increase the confidence of the public in banks.

Capital requirements became increasingly a more important topic in the regulatory agenda in the U.S. as capital levels in the largest banks steadily declined throughout the 1970s. This topic became a very contentious one. There was a lot of debate over what types of capital to include and how to weight them. The guidelines on capital ratios were decided by the main three national regulatory bodies, the Federal Reserve (Fed), Federal Deposit Insurance Corporation (FDIC), and The Office of the Comptroller of the Currency (OCC), However, the guidelines they adopted were not uniform (Davison, 1997).

Recognizing the benefits of international coordination, national authorities started working on a common set of principles regarding capital adequacy (Drach, 2019). This was done by the Basel Committee on Banking Regulations and Supervisory Practices, a committee of G-10 banking authorities. In 1988, the Basel Committee reached an agreement on a general set of guidelines for bank capital adequacy, usually known as Basel I.

Basel I defined standard capital, set risk weights and credit conversions for off-balance sheet exposures. Capital was split into two tiers. Tier 1 capital included common stock and preferred shares. Tier 2 included loan-loss reserves, revaluation reserves, undisclosed reserves, certain types of equity-like debt instruments and subordinate debt (Bank for International Settlements Committee on Banking Regulations and Supervisory Practices, 1988; Davison, 1997; Gordy and Heitfield, 2010).

Moreover, it also established standards to compute the agreed measure of capital adequacy. This was a risk-based capital ratio intended to reflect the riskiness of the portfolio of a bank. This measure was a refined version of an equity-to-assets ratio. In this measure, the denominator (risk weighted assets) was a weighted sum of both on- and off-balance sheet items. The risk weights for each item were devised somewhat arbitrarily. In the end, the Committee agreed on a minimum risk-based capital ratio of 8 percent (Bank for International Settlements Committee on Banking Regulations and Supervisory Practices, 1988; Barth, Caprio, and Levine, 2008; Gordy and Heitfield, 2010).

Basel I had a very narrow goal. It was established to deal only with credit risk. Especially with the risk that loans may become non-performing. It never intended to deal with operational, market or systemic risks. These were issues that did not receive much attention from regulators in the 1980s.

The Shadow Financial Regulatory Committee (1999) credits Basel I as being an important factor in the fast growth of securitization, because it gave banks an incentive to shed assets that had a high risk weight and replace them with tranches of those pooled assets that carried a lower risk coefficient in the calculations of the risk-weighted capital ratios. Brunnermeier (2009) also suggests that Basel I was responsible for the increase in popularity of securitized and structured products. This increase in securitization has been linked with the financial instability witnessed in 2007-08 (Lehnert, 2009; Marques-Ibanez and Scheicher, 2009). Moreover, Berger et al. (1995) point out that given that banks did not have to hold capital against off-balance sheet items, these capital requirements gave banks incentives to shift items into off-balance sheet activities.

2.10 Rationale for Deregulation

There are several explanations that have been proposed as the main reason for the financial deregulation that occurred in the U.S. during the 1980s. Sherman (2009) identifies the inflation observed in the 1970s as the main reason for the need to repeal Regulation Q. The post WWII 'Golden Age' period had witnessed economic growth and stability. However, the 1970s were a decade of great economic turmoil with the end of the Bretton Woods system, the oil shocks and slower economic growth. These events and the policies followed by the Fed were the causes of the great increase in inflation seen in this decade. This economic turmoil laid the foundations for the repeal of Regulation Q.

Evanoff et al. (1985) identifies that in the 1980s there were market pressures and an impetus for change in the financial industry. This pressure was motivated by the combination of tight financial regulation and adverse economic conditions that severally limited the profit opportunities of financial institutions.

Krippner (2011) argues that the deregulation of the U.S. financial markets in the 1980s was an attempt to depoliticize the allocation of the limited resources in the economy. This would make the markets, rather than politicians, responsible for any unsatisfactory outcomes. She asserts that this happened because in the 1970s there was an growing lack of confidence in the ability of the government to manage the economy. This was due to the increase in wealth inequality, government budget deficits, and inflation.

Finally, Hare and Poole (2014) state that there has been a significant shift to the right in U.S. politics starting in the 1980s. Ronald Reagan won the presidential election of 1980 with an economic motto of less government interference in the economy. This victory was part of a greater ideological shift in the economic policies followed in the U.S. since then. This new ideology firmly established itself in U.S. politics during the 1980s under the leadership of Presidents Reagan and Bush.

3 Consequences & Legacy of the 1980s Deregulation

The consequences of the deregulatory process of the 1980s have been long-lasting. The regulatory changes of this decade gave momentum to a process of deregulation that has continued in the following decades. These regulatory changes have moved the U.S. financial sector from a highly regulated one to a more loosely regulated sector. This represented a move along the financial regulatory cycle.

3.1 Increase in Non-Interest Income

As figure 4 shows the share of non-interest income as a percentage of aggregate operating income of U.S. commercial banks gradually increased throughout the 1980s and 1990s. The main reasons for this change were the ability to expand to other financial services that generate non-interest income, the repeal of Regulation Q and the growth of "originate-and-distribute" business model (DeYoung, 2010). Moreover, Stiroh (2010) shows that 39% of the net operating revenue (net interest income plus non-interest income) in 1986 was from non-interest sources. This value increased to 48.2% in 1996 and 53.2 in 2006.

The gradual loosening of the restrictions on the separation of commercial and investment banking allowed commercial banks to enter into non-traditional lines of businesses that produce non-interest income. These areas include securities brokerage, securities underwriting, and insurance sales.

Moreover, the removal of Regulation Q meant that banks were not always allowed to pay market interest rates on deposits. However, banks compensated this competitive restrictions by competing on the products market. They offered depository services (e.g. certified check, overdraft protection, safe deposit boxes) for free or below costs. As a result, they were earning more in interest income than they would in a free market. Once Regulation Q was repealed, banks started offering market rates for deposits and charging fees for depository services that were previously provided for free (DeYoung, 2010).

In the traditional originate-to-hold banking business model, banks originate loans and keep them until maturity in their balance sheets. In the originate-to-distribute business model, banks instead originate the loans, but, then, repackage them and sell them to investors. This means that the interest income is transferred to these investors together with the risk. In this latter model, banks generate income from fees and from selling the loans.

DeYoung and Roland (2001) argue that the rise in non-interest income has substantially changed the risk-return profile of U.S. commercial banks. They show that non-deposit fee income at commercial banks is linked with greater revenue volatility, higher operating leverage, and higher earnings volatility. The originate-to-hold model generates a greater interest income and is based on a long-term relationship between the lender and the borrower. The fees generated by originating and distributing loans are a non-repeated transaction. Thus, these fees respond to developments in interest rates and the housing market. These factors make them more volatile. Additionally, other sources of non-deposit fees are equally volatile. Fees from brokerage are usually linked to the value of assets. They have, thus, an undiversifiable risk due to market fluctuations.

DeYoung and Rice (2004b) corroborate these results. They found that marginal increases in non-interest income are associated with a worsening of the risk-return trade-off for commercial banks.

3.2 Concentration

In the U.S., there has been a sharp decline in the number of commercial banks. As figure 5, the number of commercial banks in the U.S. dropped from about 14,000 in 1984 to 4,652 in 2019. This trend was clearly started in the 1980s. As we can see in table 5, the number of U.S commercial Banks decreased from 12,463 in 1979 to 7,926 in 1994. This reduction came mostly from the reduction of the number of small banks.

Moreover, following the deregulatory process of the 1980s, there was a wave of mergers and acquisitions of commercial banks. This decade also witnessed the liberalization of antitrust policy towards banks (Berger et al., 1995). Excluding acquisitions orchestrated by the FDIC to find a solution for failing banks, there were around 3500 bank mergers in the 1980s and almost 5000 in the 1990s (DeYoung, 2010). This increased the size and geographical reach of U.S. commercial banks, while reducing the overall number of banks.

Furthermore, regulators closed more than 1,500 insolvent banks in the late 1980s and early 1990s. This was the largest number of bank failures in the U.S. since the Great Depression (DeYoung, 2010).

This increased concentration, however, appears to have had some positive results. DeYoung and Rice (2004a) found that increases in the size of U.S. commercial banks up to $500 million improved their risk-return trade-off. This means that their expected returns increased while their volatility decreased. However, increases beyond $500 million were associated with the common risk-return trade-off, meaning as returns increased, so did risk.

3.3 Deposit Insurance

In the aftermath of the financial crisis of 2007-08, there was a lot of discussions about the incentives faced by bankers and the policies that led to moral hazard (Calomiris, 2009). Most of these distorted incentives and moral hazard originated in the 1980s. While the national deposit insurance scheme was not established in the 1980s (Calomiris and White, 1994), it was in this decade that it became one of the main tools to achieve financial stability in the short-term.

This reliance on deposit insurance to be an important tool to achieve short-term financial stability in the banking sector has continued beyond the 1980s. In 2008, as part of the response to the ongoing financial crisis, the Emergency Economic Stabilization Act increased deposit insurance from $100.000 to $250.000.

The choice to have deposit insurance has created a moral hazard problem in the banking sector. It removed the incentives depositors had to monitor bank risk. Thus, it has led to greater risk-taking by banks and a misallocation of resources.

3.4 Failure Resolution - The "too-big-to-fail" doctrine

The "too-big-to-fail" doctrine instituted in the 1980s set the blueprint for the resolution of troubled financial institutions until the present. The 1990s saw it being used to rescue Long-Term Capital Management. It was once again one of the main policy tools used to deal with troubled financial institutions during the 2007-08 financial crisis, when most large financial institutions received aid from the federal government or from a financial regulator.

The use of the "too-big-to-fail" doctrine has created an implicit guarantee for banks. This has in turn reduced lender monitoring and allowed banks to take excessive risk. Thus, this policy has contributed to the instability observed in the financial system since the 1980s.

3.5 Further Real Estate Lending Deregulation

The deregulatory trend of the 1980s repealed the restrictions on teaser rates. The lift of this restriction allowed banks to enter the subprime loans market. This gave banks a new market with consumers that previously were not accessible. These type of subprime loans became one of the main financial arrangements used to inflate the real estate bubble of the early 2000s (Brunnermeier, 2009).

The loose regulation of the real estate lending market was one of the main causes of the 2007-08 financial crisis (Brunnermeier, 2009). This point was achieve because regulators continued the trend started in the 1980s towards deregulation in this market. Examples of this continuing deregulation include the Housing and Community Development Act of 1992 and the American Dream Downpayment Act passed in 2003 (Cunha, 2020).

3.6 Derivatives Investment

Derivatives products did not receive much attention from regulators throughout the 1980s. This is an example of a deregulated market reached by regulatory omission. This attitude towards loose regulation in the derivatives market, continued throughout the 1990s. Brooksley Born was the Chair of the Commodity Futures Trading Commission (CFTC) between 1996 and 1999. During her tenure, she attempted to introduce regulation to tame the over the counter (OTC) derivatives market. However, this was opposed by Alan Greenspan (then Federal Reserve chairman), Robert Rubin and Lawrence Summers (Treasury Secretaries during her tenure).

Born lost this political battle. In 2000, after she left the CFTC, the Commodity Futures Modernization Act of 2000 was implemented. It did not allow the CFTC to have functional regulation powers in the over the counter derivatives market. It allow this institution only to supervise this market. Born (2011) believes that the deregulation of the financial markets was one of the major causes of the 2007-08 crisis.

This outcome was not surprising to at least one experienced investor who witnessed the lack of regulatory action in this market in the 1980s. In 1982, Warren Buffett sent a letter to congressman John Dingell warning him about the dangers of a growing, but deregulated derivatives market. He compared the deregulated market in derivatives to gambling, because of the "large prize versus a small entry fee" (Lenzner and Johnson, 2010).

Moreover, he also stated that "the net effect of high-volume futures markets in stock indices is likely to be overwhelmingly detrimental to the security-buying public and, therefore, in the long run to capital markets generally" (Lenzner and Johnson, 2010).

3.7 Monetary and Fiscal Policies

The goals of financial deregulation in the 1980s aligned with the goals of fiscal and monetary policies. Krippner (2011) argues that they all tried to leave the economic outcomes more to the markets and less to the state.

The postwar abundance of the 1950s meant that fiscal policy-makers did not have to make tough choices during this period, because the rapid economic growth of the postwar allowed everybody to be better off. With the end of the postwar abundance, policy-makers had to again choose who their policies would favour. However, after the initial wave of financial deregulation, there was an increase of the inflows of foreign capital to the U.S.. This allowed the government, in particular during the Reagan presidency, to run a budget deficit to satisfy the demands of the major groups in the American society, without having to make difficult policy choices. However, it came at the expense of increasing public debt.

Krippner (2011) argues that the intention of letting the markets play a more important role in the economic outcomes was also clear in monetary policy. According to her, the goal of monetary policy-makers in this period became to follow the market rather than to lead it. She claims that "Greenspan's lax monetary policy was a culmination of a much longer term evolution in which policy makers gradually abdicated control over credit to the market".

3.8 Continuing Deregulation

The trend of deregulation has continued after the 1980s. In 1994, Congress passed the Riegle-Neal Interstate Banking and Branching Efficiency Act. This repealed existing restrictions on opening bank branches across state lines (Cunha, 2020). In 1999, the Gramm–Leach–Bliley Act repealed the remaining barriers to the conglomeration of banking, securities and insurance companies under the same holding company.

The early 2000s witnessed the deregulation of the derivatives and real estate lending markets. Examples of this deregulatory process include the Commodity Futures Modernization Act of 2000 and the American Dream Downpayment Act of 2003 (Cunha, 2020).

3.9 Increasing Instability

At the same time, the U.S. also witnessed financial turmoil with greater frequency. This is particularly true if compared with the period between the end of the Great Depression and the end of Bretton Woods. The late 1980s witnessed the S&L crisis in which around one third of the savings and loan associations in the U.S. failed. The early 2000s saw a recession and a stock market crash linked with the collapse of the speculative dot-com bubble.

A few years later, the 2007-08 crisis started due to the collapse of the housing bubble on the heels of the subprime mortgage crisis. This crisis was the worst banking and global financial crisis since the Great Depression. It also set the U.S. and the world for the Great Recession.

According to Krippner (2011), this increase in financial fragility was due to the turn to the markets, which hampered policy making, introduced "a number of fragilities into the economy", and, thus, created conditions for a financial crisis.

4 International Comparison - Canada

Bordo, Redish, and Rockoff (2015) argue that the deregulatory movement in the U.S. was an attempt to develop universal banks that resembled the ones created in Canada. They argue, however, that given the different starting points of this deregulatory process, the outcomes were different. In Canada, it led to bigger banks, while in the U.S., it led to shadow banking. The comparison between the two countries is made due to their political, cultural and historical similarities.

Canada started the decade of the 1980s with large nationwide commercial banks. When they were allowed to merge with mortgage banks and investment dealers, commercial banks dominated the new consolidated institution, an universal bank in which the commercial bank arm was the dominant. This distinct quality of the Canadian banking system paired with tighter regulation contributed to the stability of their financial system.

The U.S., however, started the decade with small local commercial banks. Deregulation led to the expansion of shadow banking and a greater reliance on financial markets. This was evident in the rise of the securities markets, investment banks and money market mutual funds.

Additionally, the authors argue that the multitude of regulators also contributed to the growing instability of the U.S. system. They argue that this allowed the banks to shop for the most favourable regulatory environment, which led to a decline in the regulatory oversight. In Canada, however, all activities of the universal banks fell under the jurisdiction of one entity, the Office of the Superintendent of Financial Institutions. They argue that together with tougher regulation, it led to the containment of an unregulated shadow banking system, higher capital requirements, lower leverage and less securitization.

5 Lessons

There are a few lessons to learn from the deregulatory process that occurred in the U.S. financial system in the 1980s.

1. Real estate borrowers must be carefully selected and most contracts should not have unconventional features. Exotic loans have led us to a housing bubble with dire consequences. Additionally, regulators must require that banks only lend to those who are able to repay the loans.

2. In the future, capital requirements must be set taking into account their unintended consequences. Risk-based capital requirements are associated with

an increase in securitization. This, in turn, is linked with a decrease in loans' standards and monitoring, and a substitution of interest income with fees.

3. Based on the evidence presented here, regulators and bankers should try to have interest income as the main source of operating income for banks. This leads to a more stable operating income and allows banks to focus on business areas with less systemic (undiversifiable) risk.

4. Policy-makers must be careful so that their actions do not lead to moral hazard. Deposit insurance schemes and "too-big-to-fail" policies create moral hazard. Thus, these actions from policy-makers may be inadequate and produce an adverse outcome in the long-run.

5. A deregulated and more competitive banking system is usually also a more unstable system. Thus, it is important to implement sound mechanisms to deal with failures of financial institutions. A sound resolution mechanism should not lead to moral hazard, like deposit insurance and "too-big-to-fail" policies do.

6 Conclusion

In this chapter, I argued that the 1980s saw a structural change in the profile of the U.S. financial sector. In this decade, this industry went from a not very competitive, but stable one to a competitive, but unstable one. This was achieved through a process of deregulation in several areas of the banking sector. This deregulatory process included loosening of regulation on the type of businesses in which commercial banks could be involved, repeal of Regulation Q, and lifting restrictions on branch banking and real estate lending.

The argument proposed here is associated with the idea of a regulatory cycle in the U.S. financial sector. In this case, it links with the view of a long cycle. Before the 1980s, financial regulation was tighter since the Great Depression. The 1980s marked the turn of this cycle to a period of looser regulation.

Deregulation was an important part of the economic policy followed in the 1980s and, thus, it never left the policy and legislative agendas. This deregulatory process continued in the following decades and had a profound impact in the economic performance of the U.S., including in the increasing instability experienced in the banking sector.

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Appendix

Tables

Table 1: Bank Failures and Deposit Insurance Losses 1940-1999

Decade	Number of Bank Failures	Deposit Insurance Losses ($ million)
1940-1949	99	6
1950-1959	28	3
1960-1969	43	8
1970-1979	76	117
1980-1989	1086	22961
1990-1999	509	13769

Source: White (2002)

Table 2: Year of Deregulation of Restrictions on Geographical Expansion, by State - Year in which a state entered into an interstate banking agreement with other states

State	Year	State	Year	State	Year
Alabama	1987	Kentucky	1984	North Dakota	1991
Alaska	1982	Louisiana	1987	Ohio	1985
Arizona	1986	Maine	1978	Oklahoma	1987
Arkansas	1989	Maryland	1985	Oregon	1986
California	1987	Massachusetts	1983	Pennsylvania	1986
Colorado	1988	Michigan	1986	Rhode Island	1984
Connecticut	1983	Minnesota	1986	South Carolina	1986
Delaware	1988	Mississippi	1988	South Dakota	1988
DC	1985	Missouri	1986	Tennessee	1985
Florida	1985	Montana	1993	Texas	1987
Georgia	1985	Nebraska	1990	Utah	1984
Hawaii	1997	Nevada	1985	Vermont	1988
Idaho	1985	New Hampshire	1987	Virginia	1985
Illinois	1986	New Jersey	1986	Washington	1987
Indiana	1986	New Mexico	1989	West Virginia	1988
Iowa	1991	New York	1982	Wisconsin	1987
Kansas	1992	North Carolina	1985	Wyoming	1987

Source: Stiroh and Strahan (2003)

Table 3: Checkable Deposits

Year	Amount at all depository institutions (billions of dollars)	Percentage at commercial banks
1978	5.3	46.9
1979	14.5	74.1
1980	21.8	76
1981	65.7	81.4
1982	90.4	79.2
1983	121.2	74.9
1984	139.2	72.9
1985	159	71

Source: Gilbert (1986)

Table 4: Time Deposits at Commercial Banks as a Percentage of Deposits at all Depository Institutions

Year	Small time deposits	Small time and savings deposits plus MMDAs
1978	36.6	40.7
1979	36	40.1
1980	38.6	41.4
1981	40.9	42.5
1982	43.8	44.4
1983	44.7	48
1984	44.3	48.7
1985	43.7	50.7

Source: Gilbert (1986)

Table 5: Number of U.S. Commercial Banks

	1979	1994
Total number of banking organizations	12,463	7,926
Small Banks	10,014	5,636

Source: Berger et al. (1995)

Figures

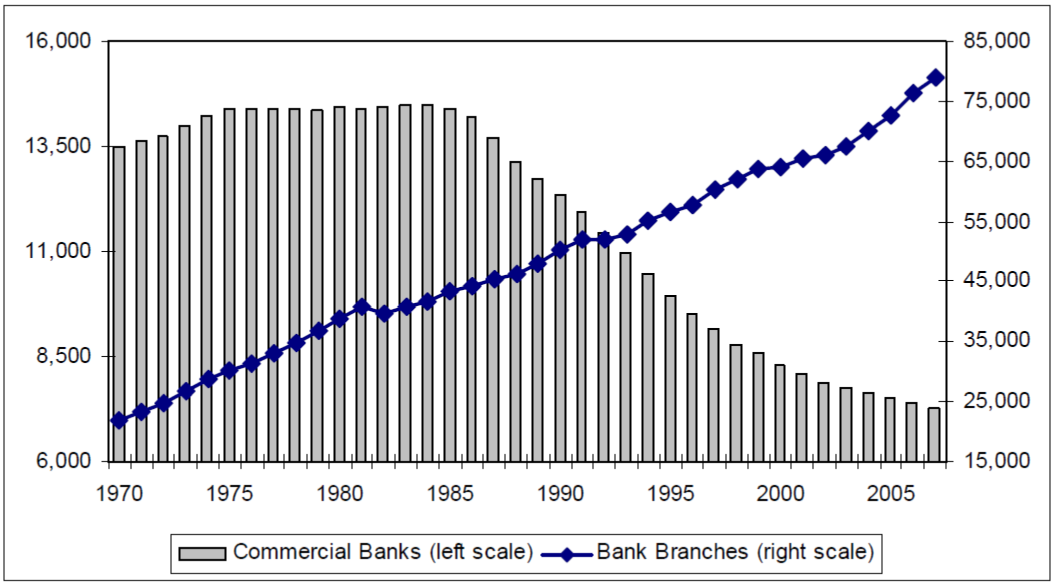

Figure 1: Number of Commercial Banks and Commercial Bank Branch Offices in the U.S. between 1970 and 2007.

Source: DeYoung and Rice (2004a)

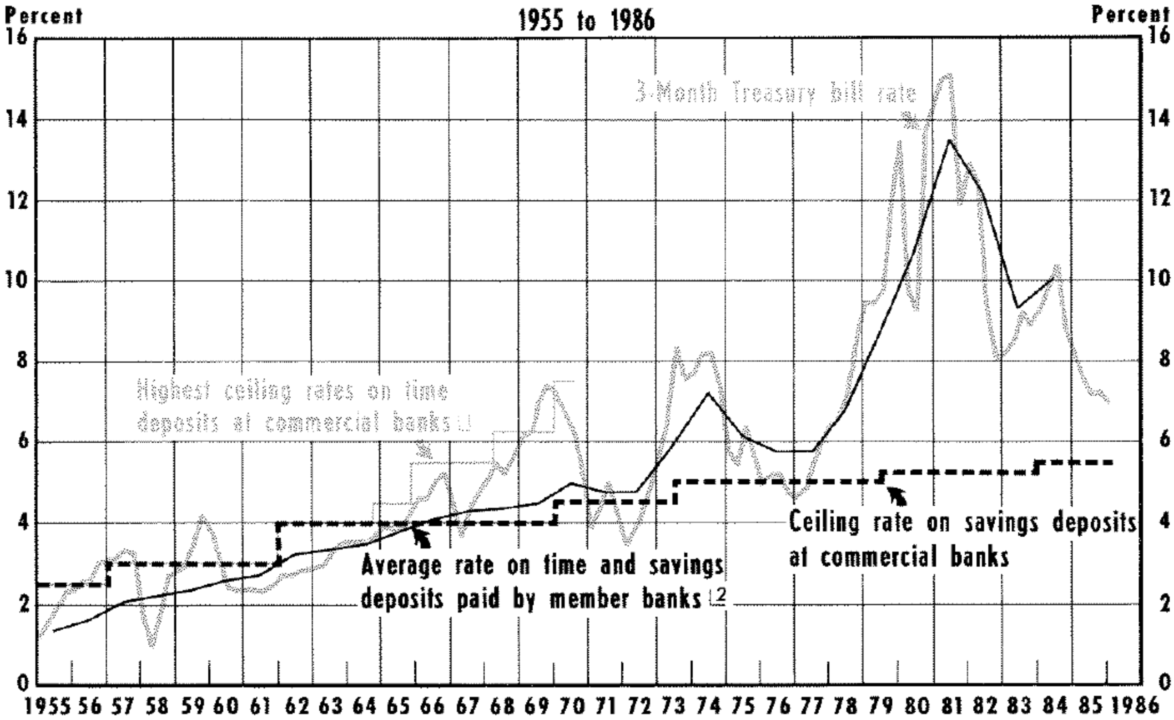

Figure 2: Interest Rates and the Ceiling Rates on Time and Savings Deposits.

Source: Gilbert (1986)

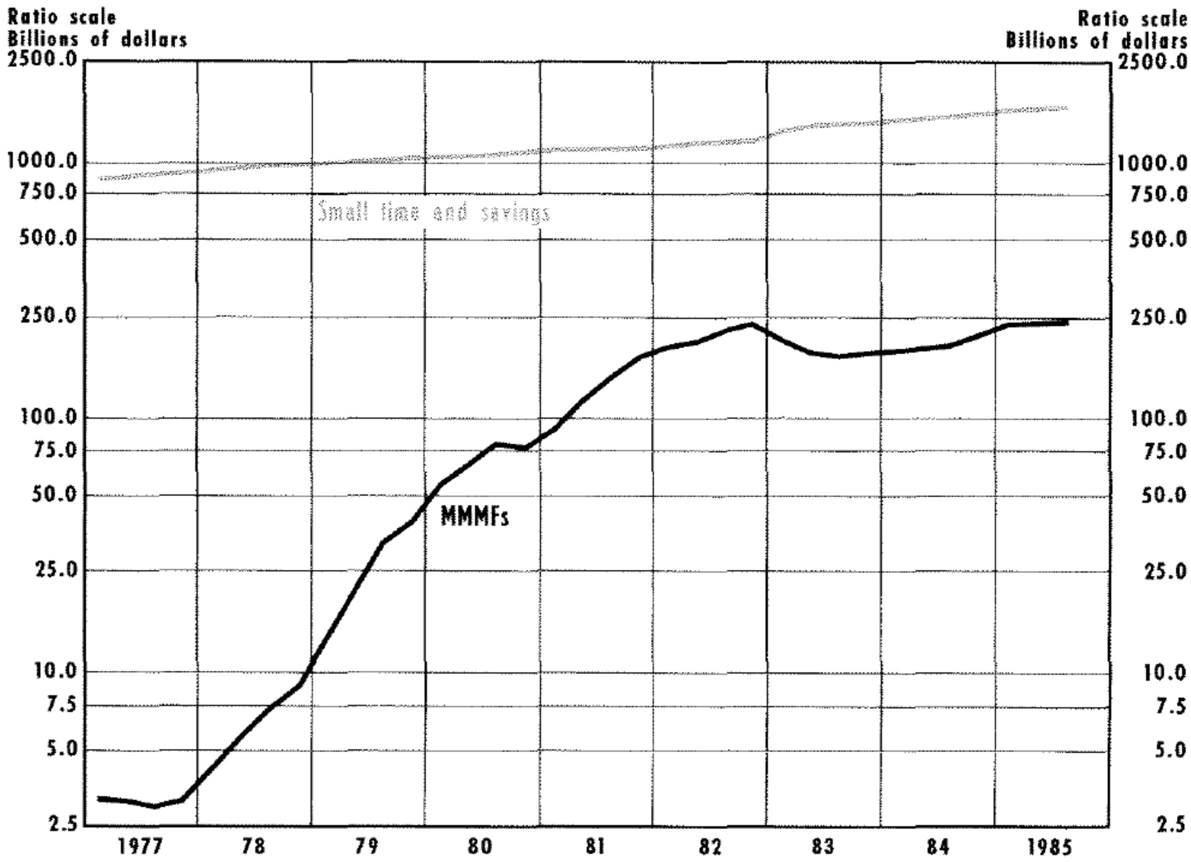

Figure 3: Savings Deposits at all Depository Institutions and Investments on Money Market Mutual Funds.

Source: Gilbert (1986)

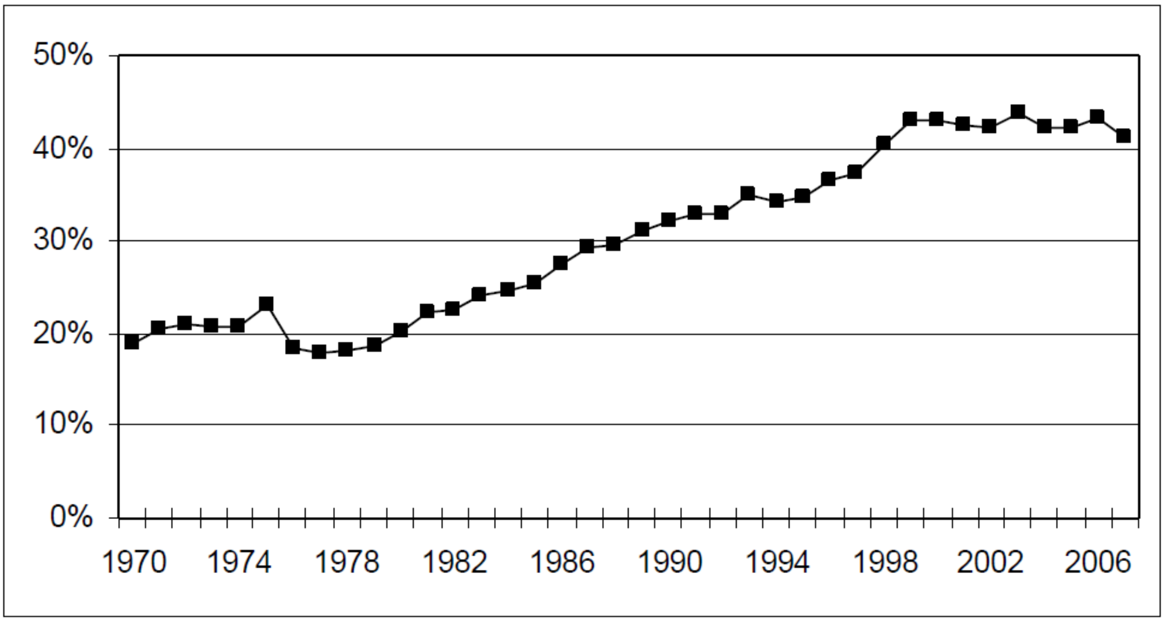

Figure 4: Aggregate non-interest income as a percent of aggregate operating income of U.S. commercial banks, 1970 to 2007.

Source: DeYoung and Rice (2004a)

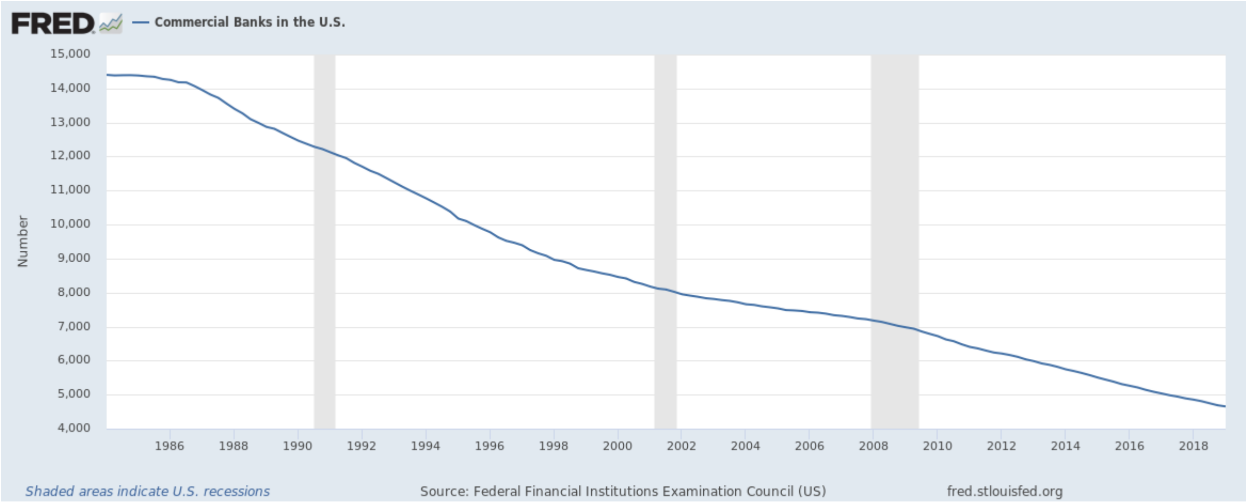

Figure 5: Commercial Banks in the U.S.