History of Mortgage Finance With an Emphasis on Mortgage Insurance

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Chapter 1 – Introduction

This is a history of mortgage guarantee insurance in the United States. In order to understand the essence of this, it is crucial to understand:

- who is lending the money that is being guaranteed,
- who is regulating the lender, and
- who is regulating the mortgage insurer.

Hence, we need to examine, at least briefly, the history of banks and banking regulation in the United States. Here we begin with the establishment of the First Bank of the United States in 1791. The first federal banking regulator was the Office of the Comptroller of the Currency, within the U.S. Department of the Treasury. Finally, we are able to trace the existence of the first mortgage guarantee insurance company as back as far as 1900 or so.

The private mortgage insurers are typically regulated by one or more state insurance department, particularly by the one in whose state the company is domiciled. The Federal mortgage insurers — the FHA and the VA — operate under Federal statute and so are outside the purview of state insurance departments.

Since 1900, private mortgage insurers have had a wild ride. In 1930, there were 50 such companies in New York State alone. In 1934, there were effectively none. Private mortgage insurers reappeared in 1957, and in 1981 there were 15 private mortgage insurance companies in the United States. During the early 1980s, the business cycle turned against them, and a number of companies either declared bankruptcy or ceased writing new insurance business. Most of those that have survived to this day are being severely challenged by the current downturn in the housing market, and it is not clear how many will remain as ongoing concerns.

Chapter 2 – Banks: From the Revolutionary War to the Great Depression

In this chapter we discuss Federal banking regulation prior to the start of the New Deal in 1933.

Early American History of Banks

Students of American history are familiar with the history of:

- The First Bank of the United States (1791-1811); and
- The Second Bank of the United States (1816-1836).

The First Bank of the United States

The First Bank of the United States received a 20-year charter in 1791. It was the creation of George Washington's Secretary of the Treasury, first occupied by Alexander Hamilton. Both the First Bank of the United States and the Second Bank of the United States (whose Congressional charter ran from 1816-1836) were privately-owned entities headquartered in Philadelphia. The bank's private ownership was not particularly unusual as the Bank of England — the bank on which Hamilton modeled the First Bank of the United States — was privately owned from its founding in 1694 until it was nationalized in 1946. Hamilton envisioned the First Bank of the United States as having a pivotal role in managing the country's currency and money supply and thereby helping the U.S. economy to grow and thrive. Hamilton felt that the effective utilization of the vast natural resources of the United States "required abiding management and strategic organization at the national level."[1] President Washington felt that the country needed a financially strong central government to support the nation's armed forces.

According to Ellis [2000, page 63], the bank's opponents, of whom Thomas Jefferson and James Madison were most prominent, "seemed to think that economic policy consisted of getting out of the way to allow the natural laws of economic recovery and growth to proceed." They were concerned that the Bank would create a privileged class of individuals who got rich manipulating interest rates at the expense of the farmer toiling in his field. Jefferson and Madison "were psychologically incapable of sharing Hamilton's vision"[2] of the economy.

According to Ellis [2000, page 65], "The issue was agrarian versus commercial sources of wealth."

The Second Bank of the United States

The Second Bank of the United States received a 20-year charter in 1816. In 1819, the Second Bank of the United States survived a legal challenge to its charter that was finally resolved by the U.S. Supreme Court. Opponents (known as strict constructionists) argued that the bank was illegal because it was not explicitly authorized by the U.S. Constitution. In ruling on behalf of the Bank, the Supreme Court argued that the elastic clause of the Constitution allowed

[1] See Ellis [2000; page 63].
[2] See Ellis [2000; page 65].

Congress to do whatever it deemed necessary for the well-being of the country. Because the Second Bank of the United States served as a depository for the federal government its charter made it a highly profitable enterprise. In 1832, four years before the scheduled date of the charter's expiration the bank's president, Nicholas Biddle, applied for a re-charter.

President Andrew Jackson, carrying the agrarian banner of Jefferson and Madison, led the fight against the renewal of the Bank's charter during the early 1830s by vetoing the legislation to re-charter the Bank. While living in Tennessee, Jackson found it difficult to pay his debts for a time. As a consequence, "he developed a lifelong hostility to banks that were not 100 percent completely backed by gold or silver. This meant, above all, the Second Bank of the United States."[3]

After the Second Bank of the United States' failure to get its charter renewed, its reorganization was effected by the Pennsylvania state legislature. Biddle relinquished his position as bank president in 1839. The reorganized bank failed in 1841 and was liquidated in 1856. Moreover, there were no more nationally chartered U.S. banks until after the start of the Civil War. Instead, each of the individual states provided charters for banks within its borders. At the start of the Civil War there were about 1,500 state-chartered banks within the individual states. Most of these were small and undercapitalized.

Early Banking Regulation (Prior to Great Depression)

National Banking Act of 1863

In 1863, in response to the urging of Treasury Secretary Salmon P. Chase, the Congress passed legislation establishing a new system of nationally chartered banks. The act also established the Comptroller of the Currency, within the Department of the Treasury, as the regulator of such banks. The passage of this legislation during the Civil War was facilitated by the absence of senators and representatives from the South and Mississippi Valley.

Panic of 1907 – Aldrich-Vreeland Act – National Monetary Commission

The Aldrich-Vreeland Act of 1908 created a National Monetary Commission composed of nine U.S. Senators and nine U.S. Representatives with Senator Nelson Aldrich of Rhode Island as its chairman. This legislation was a response to the Panic of 1907 which was the first U.S. banking panic to affect Wall Street and the eastern establishment. The commission's proposed legislation, released in 1911, was known as the "Aldrich Plan" and primarily represented the perspective of financially conservative Republicans. Aldrich himself was a "connoisseur and collector of paintings [who] maintained a luxurious estate and consorted almost exclusively with the social and economic elite."[4] His daughter, Abby, was the wife of John D. Rockefeller, Jr. The two met when he was a student at Brown University in Providence, R.I. They had a daughter and five sons including David Rockefeller, the long-time president of the Chase-Manhattan Bank and Nelson Aldrich Rockefeller, a two-term governor of New York and

[3] See Wikipedia entry for Nicholas Biddle.
[4] See http://www.answers.com/topic/nelson-w-aldrich.

vice president of the United States under President Ford. Mrs. Rockefeller would be the driving force behind the establishment of the Museum of Modern Art in New York City.

Some of the key features of the Aldrich plan were:

- Sound money — without Federal Reserve Notes,
- Power concentrated in a strong central bank,
- No public control of the central bank,
- Deposit insurance.

Because the Democrats won the Presidential election of 1912 and also controlled both houses of Congress, Aldrich's plan was never considered by a committee of either branch of Congress. After his inauguration in 1913, President Woodrow Wilson called a special session of Congress to enact legislation creating a Federal Reserve System. The legislation that passed was largely the work of Congressman Carter Glass, the Chairman of a subcommittee of the House Banking and Currency Committee, whose task was to "devise a reserve banking scheme." In this work, Glass maintained close contact with President Wilson. In a sense, this seemed like a repeat of the battles over the First and Second Banks of the United States. This time we have Carter Glass, representing rural southwestern Virginia, facing off against Nelson Aldrich, an eastern establishment money-interest.

Federal Reserve Act of 1913

"The Federal Reserve System was created, in 1913, for many reasons but the underlying reason was that people no longer trusted private bankers to shepherd the financial markets." (See Lowenstein [page 185].) Other reasons were "to protect the functioning of markets" and "to accommodate the credit needs of commerce, banking, and industry." (See Timberlake [1990; page 1].) Finally, this act gave the Federal Reserve System the authority to supervise and regulate (1) state banks that are members of the Federal Reserve System and (2) national banks that have branches outside the United States. Some of this supervisory/regulatory role overlapped with that of the Office of the Comptroller of the Currency.

The Federal Reserve Act of 1913 established the Federal Reserve *System*. The emphasis is on the word system because the legislation did not establish a single central bank but a system composed of as many as 12 regional banks — the number later selected. Congressional Democrats were keenly opposed to the creation of "a central bank of banks, for banks and by banks."[5] The Democrats were worried that such a bank "could … grip the Republic in the tyranny of centralism."[6] The Democrats represented the views of farmers and Westerners as opposed to the eastern financial establishment which the Democrats did not trust. For example, Glass [1927; page 78] wrote that "there has come about an extraordinary and very sinister concentration in the control of business in the" United States.

[5] See Glass [1927; page 30].
[6] See Glass [1927; page 219].

Under the legislation, Washington guidance was to be provided by a Federal Reserve Board composed of seven members including two *ex officio* members — the Secretary of the Treasury and the Comptroller of the Currency. The authority of the Board was minimal. The real power resided with the 12 regional banks. Each of these banks was run by a board consisting of nine directors. The Board in Washington appointed three directors. The member banks chose the other six members only three of whom were allowed to be bankers. All national banks had to join the System. "State banks of minimal repute were allowed to join." (Galbraith [1978; page 124]).

The Federal Reserve System set up a highly efficient system for cashing and clearing checks at par — i.e., at no cost. "Previously, when the check of one bank was brought to another, a charge was automatically levied — a small tax, in effect, on every expenditure of money."[7]

The legislation lacked even a rudimentary form of deposit insurance. Former Rhode Island Senator Nelson Aldrich was instrumental in getting a provision for such insurance into the Senate version of the legislation in his position as Chairman of the National Monetary Commission, but the provision was removed from the final bill by the Senate and House conferees at the insistence of Congressman Glass — the primary author of this legislation. Although Glass [1927] provides extensive documentation on his role in the formulation of this legislation, he fails to provide his reason(s) for being opposed to this provision. FDIC [online; page 40] contains the following rationale, circa 1934, for this perspective:

- "Arguments offered against deposit insurance reflected both practical and philosophical considerations. Opponents asserted that deposit insurance would never work. They pointed to the defunct state-level deposit programs to substantiate their argument. Another widely held view was that deposit insurance would remove penalties for bad management. Critics also charged that deposit insurance would be too expensive and that it would represent an unwarranted intrusion by the government into the private sector."

Eccles [1966; page 167] summarizes a view of the Federal Reserve System 20 years after its inception when Eccles came to Washington at the onset of the Roosevelt Administration:

"When the Federal Reserve System was formed in 1913, its main objective was to avoid money panics and the recurrent periods of credit stringency that had plagued the nation. Thus a regional credit pool was established within each of the 12 autonomous Federal Reserve Bank districts, along with an interregional check and currency clearing system. Member banks could bring their commercial paper to the Federal Reserve banks in the area and, at a rediscount, [obtain] from the Reserve Banks the means to supply temporary, seasonal, and emergency needs of customers who wanted credit and currency."

As shown in Tables 1 and 2, during the 20 years (1894-1913) immediately preceding the Fed's creation 1,742 banks failed in the United States while during the Fed's first 20 years (1914-1933) a total of 15,502 banks failed. After the advent of federal deposit insurance (see

[7] See Galbraith [1978; page 119].

Chapter 2), the number of bank failures fell precipitously; over the next 37 years, as shown in Table 3, there were only 625 bank failures.

"As [the] representative of the public interest, the Federal Reserve Board in Washington was given a general supervisory role over the System, expressed in general directives toward which it was to point operations. The real control over these operations was entrusted to the impersonal, pervasive, automatic, and impartial workings of the gold standard. The mechanics of the gold standard, and not any arbitrary decision by a human being, would determine the amount of currency and bank credit that could be made available to the economy at any given time.

"These assumptions on which the System was based were outmoded soon after the System was created. First, with the outbreak of World War I the gold standard was abandoned by virtually all parties in the war. Thus this automatic determinant of economic conditions was rendered useless. Second, while the public debt at the time the System was created stood at less than $1 billion, when the war ended, the debt was about $27 billion.

"Of these factors, the growth of the public debt was to have special significance for future developments. It gradually became evident to the autonomous Federal Reserve banks, to the Federal Reserve Board, and particularly to Benjamin Strong, the governor of the New York Reserve Bank, that when they bought and sold the government securities expressing this debt of $27 billion, they directly influenced not only market conditions but also the reserves of the member banks. Through the reserves they influenced the volume of deposits; through the deposits, the volume of loanable funds made available to commercial banks; and through the commercial banks they influenced the minutest operations in the economy.

"These influences were not merely regional or local. They were national in scope. Thus the bankers came to realize that the principle of regional autonomy, expressed in the organization of the Reserve System, would have to be modified so that the purchases and sales of government securities could be coordinated on a national scale."[8]

Roaring '20s

The Roaring '20s were characterized by a laissez-faire economics system whose lack of government regulation eventually led to rampant speculation and excessive leverage on Wall Street. During the 1928 presidential election campaign, Herbert Hoover promised "a chicken in every pot and a car in every garage." Under his administration, the stock market crashed and the unemployment rate soared to 25 percent.

Reconstruction Finance Corporation (RFC)

This agency was created by legislation signed by President Hoover during January 1932. Its original mission was to lend money to banks, railroads, and insurance companies in order to help them avoid bankruptcy. During July of 1932, Congress expanded the RFC's mission to include lending to farmers (via the Farm Credit Administration), states, and public works projects (via the Works Progress Administration). During 1932, the RFC disbursed about $1.5

[8] See Eccles [1966].

billion of which almost $900 million was lent to help over 4,000 banks attempting to stay in business. "The RFC might have assisted more banks had Congress not ordered it to disclose publicly the names of the borrowers, beginning in August 1932. Appearance of a bank's name on the list was interpreted as a sign of weakness and frequently led to runs on the bank. Consequently, many banks refrained from borrowing from the RFC."[9] During each of the years 1933 and 1934, the RFC lent $1.8 billion. Almost all of the money lent was eventually repaid.

Federal Home Loan Bank Act of 1932

In 1932, President Hoover became concerned with the down-turn in residential construction. He asked Congress to do something to encourage home building, reduce foreclosures and increase home ownership. The result was the Federal Home Loan Bank Act that President Hoover signed on July 22, 1932. The primary purpose of this legislation was to increase the amount of funds available to local financial institutions that supplied home mortgages.

At the July 22, 1932, signing ceremony, President Hoover said, in part:[10]

> "[The] purpose [of this legislation] is to establish a [system] of discount banks for home mortgages, performing a function for homeowners somewhat similar to that performed in the commercial [banking] field by the Federal Reserve banks through their discount facilities.
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> "There are to be eight to 12 such banks established in different parts of the country with a total capital of $125 million to be initially subscribed by the Reconstruction Finance Corporation. [These banks are to be supervised by a five-member Federal Home Loan Bank Board.] Building and loan associations, savings banks, insurance companies, etc. are to be eligible for membership in the system. Member institutions are required to subscribe for stock of the home loan banks and to absorb gradually the capital, and they may borrow from the banks upon their notes to be secured by the collateral of sound home mortgages.
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> "The home loan banks are in turn to obtain the resources required by them through the issue of debentures and notes. These notes have back of them the obligation of the members, the mortgages pledged as securities of such obligations and the capital of the home loan banks themselves. The debentures and notes thus have a triple security.
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> "The creation of these institutions does not involve the Government in business except in the initial work of the Reconstruction Finance Corporation, and the setting up of the board in Washington to determine standards of practice. The cost of this board in Washington is to be paid by the home loan banks and the banks are to be owned and run by their

[9] See FDIC [on line; pages 36-37].
[10] See Wooley and Peters [online].

members. In effect it is using the good offices of the Government and the Reconstruction Finance Corporation to set up cooperative action amongst these member institutions to mobilize their credit and resources. There are several thousand institutions eligible for membership.

"The purpose of the system is both to meet the present emergency and to build up homeownership on more favorable terms than exist today. The immediate credit situation has for the time being in many parts of the country restricted the activities of building and loan associations, savings banks, and other institutions making loans for home purposes, in such fashion that they are not only unable to extend credit for the acquirement of new homes, but in thousands of instances they have been unable to renew existing [balloon] mortgages with resultant foreclosures and great hardships.

"A considerable part of our unemployment is due to stagnation in residential construction. There has been overbuilding in certain localities in boom years, but there has been far less than normal construction of new homes for three years in pace with the increase of population, and there is thus a shortage which, while now obscured by present huddling, will become evident with the first stage of recovery. Nearly 200,000 new homes are erected annually in normal times which with initial furnishing contribute $2 billion to construction and other industries. A survey by the Department of Commerce shows that there are localities in which there is today an immediate demand for homes amounting from $300 million to $500 million which could be undertaken at once if financing were available. Thus the institution should serve to immediately increase employment.

"In the long view we need at all times to encourage homeownership and for such encouragement it must be possible for homeowners to obtain long-term loans payable in installments. These institutions should provide the method for bringing into continuous and steady action the great home loaning associations which is so greatly restricted due to present pressures."

However, "the credit program was a complete failure. While 41,000 homeowners applied for FHLB loans in the first two years after [the enactment of the Federal Home Loan Bank Act], the government agency administering the program approved just three applications."[11]

Where Are We Now?

In this chapter, we have covered a lot of ground. We have discussed the demise of two national banks and the recent birth of the Federal Reserve System. We have seen President Hoover promoting the home building industry to no avail. We have two federal bank regulators

[11] See http://www.enotes.com/major-acts-congress/federal-home-loan-bank-act/print.

but no deposit insurance. In the ensuing chapters, we discuss the banking and securities regulation that emanated from the New Deal before discussing the early forays into mortgage guarantee insurance.

Chapter 3 — The New Deal Banking/Finance Regulation

In this chapter we discuss some of the Federal banking and securities legislation that was enacted during the early days of the New Deal.

In order to get the country's economy moving again and to prevent future financial meltdowns, the Roosevelt administration crafted a variety of legislation during its first term. These included the Securities Act of 1933, the Securities Exchange Act of 1934, the Banking Act of 1933 (also known as the Glass-Steagall Act), the Banking Act of 1935, the Home Owners' Loan Act of 1933, and the National Housing Act of 1934. In this chapter, we summarize the major provisions of all of these acts except the National Housing Act, which we discuss in Chapter 3.

Securities Act of 1933

The Securities Act of 1933 had two main provisions:

- It requires that investors receive financial and other significant information concerning securities being offered for public sale. This deprived bankers of their monopoly on such information.
- It prohibits deceit, misrepresentations, and other fraud in the sale of securities to the public.

Securities Exchange Act of 1934

The Securities Exchange Act of 1934 created the Securities and Exchange Commission (SEC) and empowered the SEC with broad authority over all aspects of the securities industry. This includes the power to register, regulate, and oversee brokerage firms, transfer agents, and clearing agencies as well as the nation's securities self-regulatory organizations. The Act also identifies and prohibits certain types of conduct [e.g., anti-fraud] in the markets and provides the SEC with disciplinary powers over regulated entities and persons associated with them. The Act also empowers the SEC to require periodic reporting of information by companies with publicly traded securities.

This legislation also gave the Federal Reserve Board the power to regulate margin requirements on the purchase of common stocks.[12] The idea here was to reduce the amount of leverage by requiring the purchaser to use a sizable portion of his/her cash to purchase such assets instead of relying on borrowed funds. The original margin requirement on common stocks was set at 50 percent and became effective on Oct. 1, 1934. Between that date and Jan. 2, 1974, the Fed changed the margin requirements 23 times. However, these requirements have not been changed since Jan. 2, 1974. These changes from Oct. 31, 1934 through Jan. 2, 1974, are summarized in Table 4. Later, separate margin requirements for bonds convertible into common stocks were also established by the Fed and initially became effective on March 11, 1968.

[12] The amount has been reset at various times, but in recent years, the Federal Reserve has maintained a 50 percent margin requirement with a $2,000 minimum.

Banking Act of 1933 (Glass-Steagall Act)

The Banking Act of 1933 — written by Senator Carter Glass of Virginia and Representative Henry Steagall of Alabama — had two main provisions:

- It separated commercial banks (those that accept deposits and lend money) from investment banks (those that underwrite securities), establishing them as separate lines of commerce.
- It established the Federal Deposit Insurance Corporation (FDIC) as a temporary federal agency. (It became a permanent agency in 1935.) The FDIC had two goals. The first was to insure bank deposits and to thereby totally eliminate runs on all of the commercial banks in the United States — be they member or non-member banks, National-charted banks or state-charted banks. "The certainty that money could be got, took away all desire to have it."[13] The second goal was reduce the disruptions to the U.S. economy engendered by bank failures.

The idea behind the separation issue was to (1) remove/prevent "excessive concentration of financial power" in a small number of large entities and (2) keep naïve investors who want to place their funds in (what are today called) money-market accounts "from being sold risky investments" instead. (See Gruver [2008; page 1].)

Subsequent legislation (The Bank Holding Company Act of 1956) additionally prohibited commercial banks from performing insurance underwriting. This 1956 legislation also prohibited bank holding companies that owned two or more banks from buying banks in another state. These additional prohibitions were again aimed at removing/preventing "excessive concentration of financial power" in a small number of large entities.

The Glass-Steagall Act also moved control of the Federal Reserve System's open-market interventions from the Federal Reserve Bank of New York to the Board's Washington headquarters. It was hoped that this change would lead to improvements in "monetary management."

The Glass-Steagall Act eased slightly the prohibition on interstate branch banking imposed by the McFadden Act of 1927. However, those advocating for strong national banks and extensive interstate branch banking were disappointed. Such advocates were hoping widespread interstate branch banking would (1) reduce the number of failures among the multitude of small, undercapitalized banks and (2) promote increased lending, thereby helping to stimulate a moribund economy.

Insurance of Individual Bank Accounts

The Glass-Steagall Act also authorized the FDIC to provide deposit insurance for bank depositors and to regulate banks that participated in this insurance program. Effective on Jan. 1, 1934, individual accounts were insured for amounts up to $2,500.

[13] See page 336 of Andreades [1909] as cited in Galbraith [1978].

The second Glass-Steagall Act also known as the Banking Act of 1935 was enacted into law on August 23, 1935.

"The Banking Act of 1935 … continued to limit insurance coverage to a maximum of $5,000 for each depositor at an insured institution."[14]

Regulatory Role of FDIC

"Apparently the political compromise that led to the creation of the FDIC did not permit taking any supervisory authority from existing federal or state agencies, so in 1933 the FDIC became the third federal bank regulatory agency, responsible for some 6,800 insured state nonmember banks. [See Table 5 below.] The [FDIC] also had more limited regulatory responsibility relating to its role as insurer of national and state member banks. In addition to the supervisory goals of the other federal and state banking agencies, the FDIC had the more clearly defined goal of minimizing the risk of loss to the deposit insurance fund."[15]

"While part of the supervisory role of the FDIC relates to overseeing the bank activities to ascertain compliance with the law, the principal purpose continues to be to assess the solvency of the insured banks to better protect insured depositors and guarantee the continued solvency of the deposit insurance fund."[16]

Other Goals of FDIC Regulatory Authority

"The Banking Act of 1935 required the FDIC to prohibit the payment of interest on demand deposits [i.e., checking accounts] in insured nonmember banks and to limit the rates of interest paid on savings and time deposits. The FDIC was also required to prohibit insured nonmember banks from paying any time deposit before its maturity except as prescribed by the FDIC.

In granting these and other regulatory powers to the FDIC, Congress sought to prevent unsound [cut-throat] competition among banks. The prevailing philosophy was that unfettered competition in the past had resulted in excesses and abuses in banking as well as in other industries. The restrictive powers contained in the Banking Act of 1935 were thus consistent with the tenor of other New Deal legislative programs."[17]

Federal Reserve System and Banking Act of 1935

The Banking Act of 1935 "remodeled the Federal Reserve System" according to Timberlake [1990; page 1]. After 1935, the Treasury Secretary effectively compelled the Fed to maintain an "orderly" market for several classes of government securities. This meant that the Fed was instructed to buy securities to keep interest rates unchanged.

[14] See FDIC [online, page 51]. Today's limit is $250,000.
[15] See FDIC [online; pages 112-113].
[16] See FDIC [online; page 113].
[17] See FDIC [on line; page 53].

TABLE 5
Banking Regulatory Agencies and their Functions

Regulatory Agency	Year Created	Created to Regulate	Supervision/Examination	Deposits Insured By
State Agencies	Varies by State	State Banks and S&Ls	State Banks and S&Ls	
OCC	1863	National Banks	National Banks	FDIC
FRB	1913	National and State-member Banks	State-Member Banks	FDIC
FHLBB	1932	S&Ls	S&Ls	FSLIC from 1934
FDIC	1934	State Non-Member Banks and State-Chartered Mutual Savings Banks	State Non-Member Banks and State-Chartered Mutual Savings Banks	FDIC
NCUA	1935	National Credit Unions	All Insured Credit Unions	NCUSIF
OTS	1989	Federal Savings Associations and Mutual Banks	Federal Savings Associations and Mutual Banks	FDIC

Source: FDIC: The 1930's [online, pages 5-6], available at http://fdic.gov/about/learn/learning/when/1930s.html.

Where Are We Now?

In this chapter, we have discussed the banking and securities regulations enacted during the early days of the New Deal. We have discussed the establishment of the FDIC and its role vis-à-vis the Federal Reserve Board and the Office of the Comptroller of the Currency. In the next chapter, we discuss the early history of mortgage insurance in the United States.

Chapter 4 – Establishment of Federal Housing Administration (FHA)

The primary purpose of this chapter is to discuss the establishment of the Federal Housing Administration (FHA) and its Mutual Mortgage Insurance Fund for insuring single-family home mortgages against the risk of foreclosure. In order to explain how this came to be, we discuss the private mortgage insurance business in the United States prior to the Depression as well as some of the events during the start of the New Deal that led to the creation of the FHA. We conclude this chapter with a brief discussion of the mortgage guarantee program of the Veterans Administration.

Early Mortgages in United States[18]

Prior to 1916, national banks as well as many state banks were prohibited from making real estate loans. "Even after 1916, many commercial banks refused to make real estate loans on the grounds that they were 'illiquid.' Those that were willing to make such loans believed it was 'bad business' to lend more than 50 percent of the appraised value of a home. Building and loan associations loaned up to 80 percent or more of the appraised value, but at [higher] interest rates ranging between 8 and 12 percent of the loan."

"The conventional wisdom about the elements of a 'sound mortgage' [prior to the depression] was sealed in state laws." In almost every state in the nation, state law "restricted banks and insurance companies to a maximum loan of 50 percent of the appraised value of a home, and limited" the maximum term of the loan to five years for a national bank and 10 years for an insurance company. Of course, few homebuyers could afford to make a down-payment of 50 percent when purchasing a home. So, most homebuyers took out second and third mortgages at high interest rates to make up the difference. Moreover, because the mortgages were relatively short-term mortgages, they were not fully amortizing. This meant that at maturity the typical borrower would have to obtain a new mortgage to rollover his debt. Not surprisingly, during the Depression, when home prices fell and "first mortgages went into default…second and third mortgages were wiped out."

The Origin of Private Mortgage Guarantee Insurance in the United States

The business of guaranteeing mortgages in the United States against the risk of foreclosure apparently had its origin in the state of New York, particularly in the environs of New York City. The nature of this mortgage insurance business was quite different from what it is today. Today's companies only sell mortgage insurance. The companies operating prior to the Great Depression not only guaranteed the payment of principal and interest but also sold mortgages.

The first private mortgage guarantee insurance company in New York — the Title and Guarantee Company of Rochester, New York — was started in 1887. Three other private mortgage guarantee insurance companies began operating in New York prior to 1904 even

[18] This section is based on Hyman [1978, page 145].

though an intensive study by Alger [1934; page 13] concluded that the New York state legislature had not contemplated giving such companies authority to do "anything more than the guarantee of titles." However, in 1904 the New York state legislature did indeed extend the authority of such companies to allow them to "guarantee or insure *the payment* of bonds and mortgages." Moreover, according to Alger [1934; page 13], a 1911 amendment to the Insurance Law "increased the powers of the companies by giving them the … further right 'to invest in, purchase and sell, with such guarantee (of payment) or with guarantee only against loss by reason of defective title or incumbrances, such bonds and mortgages as are lawful investments for insurance companies under this act.'"

According to Alger [1934; page 10], "[t]he companies confined themselves originally, in addition to their title business, to the guarantee of whole mortgages until about 1906. At that time the guaranteed participation certificate was devised, and the companies began to issue in comparatively small amounts participation certificates covering participations in groups of mortgages." Such certificates were sold to a group of investors who were provided with "periodic payments based on the interest income and principal repayments generated by the underlying mortgages."[19] These companies were the direct forebears of such modern entities as Ginnie Mae, Fannie Mae, and Freddie Mac, as well as, the mortgage-backed securities departments of Wall Street firms such as Salomon Brothers and First Boston.

Four additional companies that provided private mortgage insurance "were incorporated between 1904 and 1920." "The guaranteed mortgage business done by these companies was not very substantial until [after] World War [I], when a building boom stimulated by a decline in interest rates, triggered a huge increase in demand for private mortgage insurance. At the end of 1920, the active private mortgage insurance companies had aggregate outstanding guarantees of $529 million and an aggregate capital and surplus of approximately $60 million. As shown in Table 6, the number of companies and the total guarantees outstanding increased over the next decade, both peaking in 1930. This occurred because the rising property values "made it possible for most mortgaged properties that were in default to be sold without a loss."[20] However, as real estate values began to fall with the onset of the Great Depression, so did the reserves of the private mortgage insurance companies. During August of 1933, the New York State Superintendent of Insurance took over 14 of the mortgage guaranty insurance companies domiciled in New York State. "These companies had guaranteed approximately two-thirds of all the guaranteed mortgages held in the state of New York."[21] By the end of 1933, there were apparently no companies guaranteeing mortgages in New York State, or for that matter anywhere else in the United States.

Nature of the Risk of Mortgage Guarantee Insurance

Kulp and Hall [1963] define risk as the uncertainty of financial loss. They distinguish between two types of risk — fundamental and particular. Particular risks are due to special or particular causes that operate in particular cases and are essentially personal in origin as well as in consequences. Fundamental risks, on the other hand, are essentially group risks. The hazards that

[19] See Canner and Passmore [1994; page 884].
[20] See Canner and Passmore, page 884.
[21] See Alger [1934, page XIV].

cause them are not the fault of any single individual. Most fundamental risks are economic, social or political in source; they result from the interdependence of economic, social or political groups. The results that flow from fundamental risks are broadly social and impersonal.

While the distinction between particular and fundamental risks is often not readily apparent, individual life insurance (in the absence of a war, epidemic, or other major disaster) would be considered by most to be a particular risk since it is based on the health and well-being of individual policyholders. Thus, for actuarial purposes, it is usually reasonable to assume that individual life insurance policyholders are "statistically independent" of one another. This crucial assumption allows the risk to be "spread" among the members of a large homogeneous group of policyholders. This is because under the assumption that there is a large homogeneous group of independent events, certain laws of probability (i.e., the law of large numbers) can be reasonably applied.

There are elements of fundamental risk in other types of insurance as well. For example, the risk of loss due to fire in residential properties would not be independent for two adjacent houses; if one caught fire, the flames might well spread to the neighboring house. In order to spread their risks, fire insurers often limit the number of properties insured on an individual block or in an individual neighborhood, either by refusing to write additional fire insurance or, more typically, by reinsuring some portion of the risk with another fire insurance company (companies). By doing this, the insurer avoids the potential problem of having a large number of interdependent risks and can, in practice, avail itself of the use of the law of large numbers.

Alger [1934; page 19] summarized the nature of the risk inherent in the relatively conservative type of mortgage insurance which imposed a maximum loan-to-value ratio of 66.67 percent on single-family mortgages and was sold between 1887 and the start of the Great Depression:

> "[I]t must have been obvious to anyone who ever considered that matter, that any substantial losses by a mortgage guarantee company would be caused by a general depression in the real estate market which would weaken all mortgages and render them for a time at any rate illiquid."

The point here being that the risk inherent in these mortgage insurance contracts is unlike the risk in life insurance whereby you have a collection of effectively *independent* risks; instead, the risks of these mortgages are highly interdependent because they all depend on the continued health of the real estate market. Hence, the basic concept of insurance — the pooling of independent risks — is violated. Using the language of statistics, we say that because of this interdependence, the critical independence assumption of the law of large numbers is invalid and so the law of large numbers is inapplicable to mortgage insurance. Moreover, mortgage insurance risk cannot be "spread" to the degree that fire insurance can.

Home Owners' Loan Act of 1933

This act established the Home Owners' Loan Corporation (HOLC) as an emergency agency under the FHLBB. The HOLC provided low-interest rate, long-term, fully amortizing

mortgages to homeowners unable to procure financing through normal channels. This established the Federal government as a mortgage lender — at least during this emergency period.

Public Works Administration (PWA)

The National Recovery Act of June of 1933 created the Public Works Administration (PWA). The PWA's role, under the direction of Secretary of the Interior Harold Ickes, was to spend money on the construction of public works as a means of providing jobs, increasing consumer purchasing power, and reviving industry. Between July 1933 and March 1939, the PWA spent more than $6 billion funding over 34,000 projects including highways, bridges, airports, schools, hospitals and electricity-generating dams. In order to maximize employment, as required by Congress, the PWA projects used human labor "in lieu of machinery wherever practicable." The main complaint against the PWA was that Ickes planned too meticulously thereby delaying projects and the creation of new jobs. As Hyman [1978; page 123] wrote:

- "Ickes, a Chicago reformer and a Bull Moose Progressive Republican who had backed Theodore Roosevelt in 1912, was a very careful, deliberate administrator, who took pains to examine personally every detail of every project and the disposition of every nickel that it cost, whether it be a village post office or [the] Triborough Bridge [linking the boroughs of Manhattan, Queens, and the Bronx in New York City]. He brought to each problem the approach of a hard-headed businessman as well as that of a conscientious public servant. He was concerned about the return on the taxpayer's investment and thought primarily of the finished job. This was hardly to his discredit. Yet, the Ickes approach had the vice of slowing down to a trickle the number of public works projects that were launched, when what was called for was a tidal wave of projects in a race against time itself."

PWA projects such as the Triborough Bridge, the Bonneville Power and Navigation Dam in Oregon, and the Grand Coulee Dam on the Columbia River ("the largest structure erected by humans since the Great Wall of China"[22]) are still in use today.

Civil Works Administration (CWA)

At the urging of one of his advisors, Harry Hopkins, President Roosevelt established the Civil Works Administration (CWA) during November of 1933 under Hopkins' direction. The CWA was a Federally funded program whose goal was to create temporary market-rate construction jobs for 4 million unemployed workers in order to get them through the winter of 1933-1934. According to Peters and Noah [2009]:

> "The CWA laid 12 million feet of sewer pipe and built or made substantial improvements to 255,000 miles of road, 40,000 schools, 3,700 playgrounds, and nearly 1,000 airports (not to mention 250,000 outhouses still badly needed in rural America). Most of the jobs involved manual labor, to which most of the population, having been raised on the farm, was far more accustomed than it

[22] See Kennedy, Cohen, and Bailey [2002; page 788].

would today. But the CWA also provided considerable white-collar work, employing, among others, statisticians, bookbinders, architects, 50,000 teachers, and 3,000 writers and artists."

Because the CWA cost $200 million per month, Roosevelt's fiscally conservative Budget Director, Lewis Douglas, "was concerned that if the CWA was not ended in short order, [its] costs would [bankrupt] the [Federal] government because there would be no chance of ever getting CWA workers off the" Federal payroll.[23] In addition, "Republicans and conservative Democrats in Congress screamed bloody murder about Roosevelt's dalliance with state socialism and the segregationist Georgia Gov. Eugene Talmadge was apoplectic to learn that black laborers were being paid as much as white ones."[24] The CWA program was terminated at the end of March of 1934 after five successful months of operation.

At the end of 1933, around the time Roosevelt was getting ready to terminate the CWA, there was a meeting of the National Emergency Council held at the White House. During this meeting John H. Fahey, the Chairman of the Federal Home Loan Bank Board, requested an additional $2 billion to fund future HOLC mortgages. Upon "hearing this request for more money, Roosevelt is said to have thrown up his hands in horror." Roosevelt asked if "there was a way to get the government out of the lending business. Someone present at the meeting suggested that a new housing program was at least a partial answer to the President's question."[25]

A few months later, a subcommittee of this Council was established to draft legislation to establish such a housing program. The subcommittee was headed by Marriner Eccles, a banker from Salt Lake City who would later become the Chairman of the Federal Reserve Board. The secretary of the subcommittee was Winfield Riefler who had a Ph.D. in economics from the Brookings Institute and had previously served as an economist with the Federal Reserve Board in Washington. Riefler would soon become the Head of the Economics Department at the Institute for Advanced Study at Princeton. Eccles and Riefler were assisted by Albert Deane, an executive with General Motors and an authority on consumer credit; J. M Daiger, an expert on money and banking who had penned a recent series of articles for *Harpers Magazine* (see Daiger [1931, 1932, and 1933]) and would later be (1) special assistant to Marriner Eccles in his role as Chairman of Federal Reserve Board and then (2) financial advisor to the Federal Housing Administration; and Frank Watson, a young attorney on the staff of the Reconstruction Finance Corporation. This was the group that crafted the legislation that would lead to the creation of the Federal Housing Administration.

Creation of Federal Housing Administration (FHA)

By his own account, Eccles [1956; pages 148-149] "felt that in a depression the proper role of government should be that of generating a maximum degree of private spending through a minimum amount of public spending. This was the basic justification for deficit spending."

[23] See page 145 of Hyman [1978].
[24] See page 2 of Peters and Noah [2009].
[25] See page 145 of Eccles [1966].

"I wanted the housing program to be private in character, with all financing done on the grass-roots level by credit institutions of a community for the individuals who lived there. I felt that every kind of credit agency in the country with idle money on its hands should have a right to participate in the financing program. In particular, if banks that held excess reserves made loans for home construction, they would in the nature of things create the basis for new money and thereby build up the [money] supply, which had been greatly contracted as a result of the deflation from 1929 onward. But how could the sources that held idle funds be induced to put that money in the modernization and construction of homes? How could banks be induced to make loans of this sort?"

"The answers to these questions" could be found in the various sections of the National Housing Act that the subcommittee drafted.

The National Housing Act of 1934 created the Federal Housing Administration (FHA) and the Federal Savings and Loan Insurance Corporation (FSLIC). Two of the main goals of this legislation were (1) to make housing and home mortgages more affordable and (2) to provide depositors in Federal savings and loans deposit protection similar to that the FDIC provides depositors in commercial banks.[26] This legislation was also intended to create a situation whereby (1) the loans would be made by the private sector rather than the Federal government and (2) the income from mortgage insurance premiums would be sufficient to cover the cost of the program, thus avoiding financial support from the government.

In addition, in order to rapidly increase the flow of money into the economy, Title I of this legislation allowed FHA to insure losses up to $2,000 on "loans and advances of credits … for the purpose of financing alterations, repairs, and improvements upon real property."

Federal Housing Administration

Title II of the National Housing Act permitted the Federal Housing Administration to insure mortgages against the risk that the borrower, for whatever reason, will be unable to continue making payments on his/her mortgage. In exchange for such insurance benefits, FHA receives mortgage insurance premiums. This type of insurance is unusual because there are actually three parties (the borrower, the lender and the insurer) whereas most other types of insurance typically only have two parties. Moreover, in the event that the borrower stops making required mortgage payments and the mortgage is foreclosed, virtually all of the lender's losses, if any, would be reimbursed by FHA. This obviates the need of the lender to build additional risk premiums into the interest rate of the mortgage and thereby improves the affordability of FHA-insured mortgages. Of course, such mortgages have to meet FHA's underwriting guidelines and get FHA approval. Losses on foreclosed properties can be large especially on mortgages with high loan-to-value ratios. Interest charges accumulate during the delinquent period, as well as during foreclosure, a period that can last a year or more. Other costs include legal fees, home maintenance and repair expenses, real estate brokers' commissions and closing costs. These costs frequently total at least 15 percent of the loan amount. Additional expense is incurred if the foreclosed property is resold for less than the mortgage's outstanding balance.

[26] This was provided for under Title IV of the 1934 National Housing Act.

Before FHA

Before the creation of FHA, only balloon mortgages were available to finance the purchase of a single-family home. These balloon mortgages were interest only and their term was typically between five and 10 years, at the end of which the entire loan amount became due. The last feature caused severe problems during the depression when many homeowners were unable to obtain new financing to rollover their mortgage debt.

FHA Single-family Mortgages — The Early Years

Title II of the National Housing Act of 1934 authorized FHA to "provide a system of mutual mortgage insurance" for mortgages on both single-family homes (i.e., on one- to four-family homes) and on apartment projects having at least five units. The single-family mortgages were subject to the provisions of Section 203(b) and had the following features at inception:

- They were fully amortizing mortgages with a (fixed) annual contract interest-rate of 5.5 percent.
- They required a minimum down-payment of 20 percent of the appraised value of the property.
- They had a maximum term of 20 years.
- They had a maximum mortgage amount of $16,000.
- The annual mortgage insurance premium was 0.5 percent of the original amount of the loan.
- The mortgages were freely assumable.
- There was no prepayment penalty. (However, a 1935 amendment to the National Housing Act of 1934 authorized a prepayment penalty equal to the lesser of (1) one percent of the original mortgage amount or (2) the amount of premium payments the borrower would have been required to pay if her FHA-insured mortgage had remained in-force through its maturity date.)

Although this type of mortgage was considered very radical in 1934 because of the "low" down-payment amount and the full-amortization feature, it was highly successful.

FHA Multifamily Housing Projects

Section 207 of Title II of the National Housing Act of 1934 permitted FHA to provide insurance on multifamily apartment projects up to a maximum loan amount of $10 million per project.

Mutuality Feature of FHA's Mutual Mortgage Insurance Fund (MMIF)

"Mortgages insured were required to 'be so classified into groups that the mortgages in each group shall involve substantially similar risks and have similar maturity dates.' All premiums and other income received on account of a given mortgage were to be credited to a group account, and all expenses and losses incurred were to be charged against the group account."

"In addition, the [FHA] Administrator was instructed to establish a 'general reinsurance account' which was to be available to cover charges against such group accounts where the amounts credited to such accounts are insufficient to cover such charges.'" The Reconstruction Finance Corporation advanced $10 million to establish the general reinsurance account.

In practice, the MMIF has grouped its policyholders by endorsement year and term group and paid dividends at the termination (excluding default termination) or maturity of the insurance contract. For example, insureds having 30-year term mortgages endorsed in 1970 and terminating in 1980 received a dividend of almost 10 percent of the total (nominal) premiums paid. For loans endorsed in 1965 that terminated in 1980, the dividend was almost half of the total premiums paid. On the other hand, had the MMIF had less favorable experience during this period, it would have had the flexibility to use this money to pay off additional claims and/or to make up for lost premium income due to an acceleration of non-claim terminations. Therefore, despite the fundamental risk inherent in mortgage insurance, the system of mutuality provided by the MMIF assures that MMIF mortgagors are treated equitably. By contrast, we know of no private mortgage insurance company that offers mutual or participating insurance.

Between 1943 and May 1992, according to Housing's Office of Mortgage Insurance and Accounting Systems, more than 4.2 million distributive shares have been paid totaling $1.66 billion. Effective Nov. 5, 1990, the MMIF ceased paying distributive shares on cases that had not already been processed for payment of a distributive share.

Steagall National Housing Act of 1938

During 1936, 270,000 new housing units were constructed in the United States. Experts estimated that between 400,000 and 450,000 new housing units would be built during 1937. However, during the first part of 1937 activity fell as did the overall economy, inducing the Roosevelt Administration to propose changes in legislation to stimulate "home construction for both home ownership and rental" via the use of "private enterprise and private capital."[27] The end result was the Steagall National Housing Act of 1938 that passed Congress on Jan. 31, 1938, and was signed by the President on Feb. 4, 1938.

This act eased the underwriting criteria for FHA-insured single-family mortgages as follows:

- For homes costing no more than $6,000, the maximum loan-to-value ratio was increased from 80 percent to 90 percent.
- For homes costing between $6,000 and $10,000, the maximum loan-to-value ratio was increased to 90 percent of the first $6,000 and 80 percent of the remainder.
- The maximum term of the mortgage was increased from 20 years to 25 years.
- The annual mortgage insurance premium was reduced from .5 percent to .25 percent of the original amount of the mortgage.
- The nominal annual interest rate of the mortgage was reduced from 5.5 percent to 5 percent.

[27] See Eccles [1966; page 303].

On the multifamily side, the act removed the Section 207 multifamily housing program from the Mutual Mortgage Insurance Fund.

FHA – the First Twenty Years[28]

From its inception in 1934 through Dec. 31, 1954, the FHA insured a total of 2.9 million mortgages with an aggregate principal amount of $18.3 billion, or an average of about $6,300 per property. Through Dec. 31, 1954, 9,253 properties had been foreclosed upon; FHA acquired 5,712 of these properties and paid insurance claims on them. Of these 5,712 properties, 5,282 had been disposed of by Dec. 31, 1954, resulting in a net loss to FHA of $3.0 million or an average loss of only $562 per property acquired and disposed of. From its inception through June 30, 1954, the MMIF had income of $494 million and expenses of $246 million.

As of June 30, 1954, its accumulated statutory reserves and earned surplus totaled $192 million.

VA Home Loan Guarantee Program

The VA Home Loan Guaranty Program was authorized by The Servicemen's Readjustment Act of 1944 — commonly known as the GI Bill of Rights. It was initiated to help veterans returning to the United States from WWII purchase single-family homes and to help stimulate the post-war economy. From 1944 to 1952, VA[29] backed nearly 2.4 million home loans for World War II veterans. Since its inception in 1944, the VA has guaranteed more than 18 million mortgages.

At the onset of the program, loans for homes were officially being encouraged to help avert a post-war economic recession. Sixty-two years later, the program has expanded to include veterans of all succeeding wars, peacetime veterans, men and women on active military duty, surviving spouses and reservists.

Loan guaranty program legislation establishing rules on eligibility, financial coverage and types of loans has changed over the years along with the changing economy and military force structure. When the loan guaranty program began in 1944, the maximum amount of guaranty was limited to 50 percent of the loan, for a maximum of $2,000. Loans were limited to a maximum term of 20 years and a maximum interest rate of 4 percent.

The law specified that the purchase price, including the value of the land, could not exceed its "reasonable normal value." Loans could be used for the purchase, construction, improvement or repair of residential property that veterans intended to occupy as their homes.

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[28] This section is based on Fisher and Rapkin [1956].

[29] According to Canner and Passmore [1994], "The Veterans Administration became the cabinet-level Department of Veterans Affairs on March 15, 1989. Technically, the VA offers loan guarantees rather than mortgage insurance." As a practical matter, the VA loan guarantees are equivalent to mortgage insurance and so will be treated as such in this work.

Veterans were required to have served in the active U.S. military forces for a period of 90 days or more, anytime on or after Sept. 16, 1940, and before official termination of World War II. A veteran had to apply for this benefit within two years after separation from the service or two years after the official end of the war. No applications were accepted five years after the end of the war.

Changes and enhancements to the program started to be adopted almost immediately after its inception. In 1945, the delimiting period was increased to 10 years; the maximum guaranty amount doubled to $4,000 and the maximum term of the mortgage was increased to 25 years. The Housing Act of 1950 authorized a direct loan program that provided mortgages to veterans in areas where a VA-guaranteed mortgage was not available.

The Veterans' Readjustment Benefits Act of 1966, also known as the "Cold War GI Bill," allowed post-Korean War veterans (i.e., those who served as active duty members of the Armed Forces after Jan. 31, 1955) to obtain VA-guaranteed mortgages as well as direct loans. However, for the first time, the VA imposed a guarantee fee (i.e., a mortgage insurance premium) of one half of one percent of the face amount of the loan. The income from this fee was used to establish a reserve fund to cover claim payments incurred under this program. This guarantee fee was discontinued effective Oct. 23, 1970. It would be reinstituted in 1982 during the first term of the Reagan administration.

Where Are We Now?

In this chapter, we have discussed the early years of (1) the private mortgage insurance in the United States, (2) FHA, and (3) VA. In the next chapter, we discuss the early years of Fannie Mae, Ginnie Mae, and Freddie Mac. We then go on to discuss more recent experience of all of these entities.

Chapter 5 – Mortgage Markets

In this chapter, we discuss the history of the government agencies and quasi-government agencies involved in creating a market for mortgages and, more recently, mortgage-backed securities.

Mortgage Markets Before the Depression

"During the period preceding the Depression, the industry developed a business similar to the current one for mortgage-backed securities. The companies offered 'participations,' which involved the issuance of certificates to a group of investors who were entitled to receive periodic payments based on the interest income and principal repayments generated by the underlying mortgages. However, one significant difference between current and former market practices was that issuers of participations retained the right to substitute mortgages underlying a specific certificate so long as the substitute had the same face value as that of the original loan. The abuse of this right contributed to investor losses during the Depression."[30]

Fannie Mae

Title III of the original National Housing Act of 1934 authorized "the establishment of national mortgage associations … (1) to purchase and sell first mortgages … and (2) to borrow money for such purposes through the issuance of notes, bonds, debentures, or other such obligations." The Federal National Mortgage Association (Fannie Mae) was chartered in 1938 as the first such national mortgage association. Fannie Mae was also set up as a government agency. Although initially limited to FHA loans, Fannie Mae was tasked with expanding the supply of credit beyond depository institutions which both originated mortgages and held them in their portfolio. After World War II, Fannie Mae's authority was extended to mortgages guaranteed by the Veterans' Administration. FNMA created the mortgage banking industry — a new source of mortgage loans — that competed with savings banks and commercial banks.

"In 1954, Fannie Mae was restructured as a mixed ownership (part government, part private) corporation."[31]

Splitting Fannie Mae

The Housing and Urban Development Act of 1968 directed that Fannie Mae be split into two pieces — Ginnie Mae and a new Fannie Mae. The split-off was done for budgetary reasons — to raise money to help pay for the Vietnam War and President Johnson's Great Society initiatives. Fannie Mae's transformation to private ownership was completed during 1970. "Using the proceeds from the sale of subordinated debentures, Fannie Mae paid the Treasury $216 million for the government's preferred stock, which was retired, and for the Treasury's

[30] See Canner and Passmore [1994; page 884].
[31] See page 1339 of http://www.whitehouse.gov/omb/budget/fy2010/assets/gov.pdf.

interest in the corporation's earned surplus. As a result, [Fannie Mae] was taken off the Federal budget."[32]

The new Fannie Mae is a stockholder-owned government-sponsored entity (GSE).

Ginnie Mae

The Government National Mortgage Association (GNMA), known as Ginnie Mae, is a wholly owned government corporation within HUD. GNMA is tasked with supporting the market for mortgages that are originated by private institutions and insured by (1) FHA, (2) HUD's Office of Public and Indian Housing, (3) the Department of Veterans' Affairs (VA) Home Loan Program for Veterans, or (4) the U.S. Department of Agriculture's Rural Development Housing and Community Facilities programs. Ginnie Mae does this by guaranteeing the timely payment of principal and interest on collections (or pools) of such mortgages. These are called mortgage-backed securities. Ginnie Mae developed and guaranteed the first mortgage-backed security in 1970. In exchange for this guarantee, GNMA charges an annual guaranty fee — of 6 basis points or, equivalently, .06 percent of the aggregate outstanding balance of the non-defaulted portion of the issuer portfolio. From its inception in 1970 through September 30, 2008, GNMA guaranteed roughly $2.9 trillion in mortgage-backed securities (MBS). During fiscal year 2008, GNMA guaranteed 96.9 percent of eligible FHA-insured single-family mortgages. GNMA offers two core MBS products.[33]

"Ginnie Mae I MBS require all mortgages in a pool to:

- be of the same type,
- be issued by the same entity, and
- have the same fixed interest rate.

Ginnie Mae II MBS are restricted to single-family mortgages, but allow multi-issuer coupons to be assembled containing a range of interest rates."

The original Fannie Mae did not provide a mortgage-backed security facility. This greatly limited the potential reach of the secondary market. The new one did, starting in 1981.

Freddie Mac

Beginning with the Emergency Home Finance Act of 1970 an attempt was made to free the secondary market from its dependence on FHA's decreasing primary market activity and to help alleviate a critical shortage of housing at that time. This act:

- Created the Federal Home Loan Mortgage Corporation (Freddie Mac) to provide a secondary market for conventional and privately insured mortgages in order to increase the supply of money available for mortgage lending on home purchases and refinancings.

[32] See page 1339 of http://www.whitehouse.gov/omb/budget/fy2010/assets/gov.pdf.
[33] See GNMA [2008; page 3].

- Authorized Freddie Mac to purchase, hold, and sell such mortgages to investors on the open market. In other words, Fannie Mae was set up to operate as a portfolio lender — just like a savings and loan.

Like Fannie Mae, Freddie Mac was, until recently, a stockholder-owned government sponsored entity (GSE).

During the early '70s, these two agencies launched successful campaigns to standardize conventional loan documents and to establish procedures for the purchase of and sale of conventional home mortgages.

In 1971, Freddie Mac began issuing a mortgage-backed security collateralized by conventional and privately-insured mortgages. These securities (called "participation certificates") were direct "pass-throughs" of principal and interest that were classified as investments in mortgages for tax purposes, but, because of the agency guarantee, represented little risk to the investor. However, like standard mortgages, they included monthly payments and uncertain life spans. In 1973, Freddie Mac developed and initially issued "Guaranteed Mortgage Certificates" — securities that were backed by conventional mortgages but included semi-annual interest payments (just like bonds), annual principal payments, and a guarantee by the Agency to repurchase the certificate at 100 percent of its outstanding balance on its 15th anniversary.

Fannie Mae functioned strictly as a portfolio lender during the 1970s and, as mentioned earlier, waited until 1981 to issue its first mortgage-backed security.[34]

"The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) significantly changed the corporate governance of Freddie Mac. The company's three member board of directors, which had corresponded with the Federal Home Loan Bank Board, was replaced with an 18-member board of directors. In addition, FIRREA converted Freddie Mac's 60 million shares of non-voting, senior participating preferred stock into voting common stock."[35]

Housing and Urban Development Act of 1968

Although this act split FNMA into two pieces, its main purpose was to ensure that every American family has "a decent home and a suitable living environment." In order to accomplish this goal, this act authorized new FHA housing programs "designed to assist families with incomes so low that they could not otherwise decently house themselves, [with] the highest priority and emphasis given to meeting the housing needs of those families for which the national goal has not become a reality."[36]

[34] Source: Page 8 of Integrated Financial Engineering, Inc [2006].
[35] See page 1340 of http://www.whitehouse.gov/omb/budget/fy2010/assets/gov.pdf.
[36] See page 1 of Housing and Urban Development Act of 1968.

This act created the FHA's Special Risk Insurance Fund whose purpose is to serve "as a revolving fund for carrying out the mortgage insurance obligations of" single-family mortgages insured under the following sections of the National Housing Act:

- Section 223(e) – "Mortgage insurance to purchase or rehabilitate housing in older, declining urban areas."
- Section 233(a) – Mortgage insurance to purchase or rehabilitate dwellings which involve the utilization and testing of advanced technology in design, material, or construction.
- Section 235 – Mortgage insurance on mortgages on which HUD is making periodic assistance payments on behalf of the borrower.
- Section 237 – "Mortgage insurance and homeownership counseling for low- and moderate-income families with a credit history that does not qualify them for insurance under normal underwriting standards."

Activity Under the Special Risk Insurance Fund

Section 233(a) had very limited use as far as we can tell.

Section 235 was a successful program in the sense that it had relatively low claim rates. However, its heavy subsidies were expensive and so the program was substantially modified in the mid-1970s in order to reduce its cost to the government. Approximately 370,000 mortgages were insured under its provisions between 1968 and 1977.

Section 237 was terminated in the early 1970s. Over its brief existence, less than 1,300 mortgages were insured under its provisions.

Activity Under Section 221(d)(2)[37]

Under Section 221(d)(2) a borrower could purchase a house with a down-payment of as low as "$200 (in cash or its equivalent) all or any part of which could be applied in payment of closing costs." As shown in Table 7, activity under this program increased dramatically after George Romney became HUD Secretary in 1969. Business peaked in 1971 when 115,337 mortgages were originated under this program. Such mortgages with minimal down-payments proved to be extremely risky. For example, on the Section 221(d)(2) loans originated during 1970, FHA ended up paying insurance claims on more than 36 percent of the loans.

Where Are We Now?

In this chapter, we have described how Fannie Mae, Ginnie Mae, and Freddie Mac came into being. In the next chapter, we describe how President Reagan attempted to have their functions taken over by private business entities.

[37] Section 221(d)(2) is one of the programs under FHA's General Insurance Fund — a fund that was established in 1965.

CHAPTER 6 – De-regulation of the Financial Industry Under Reagan

In this brief chapter, we discuss Federal regulation and economic policy under the Nixon and Carter administrations as well as at the start of the Reagan administration.

Nixon[38]

Interestingly, the Nixon administration was a high-water mark for Federal regulation. After an initial dalliance with monetary policy, Nixon lost patience with monetary policy and pronounced himself a "Keynesian." Nixon felt that his narrow loss to John Kennedy in the presidential election of 1960 was due in part to the weak economic conditions of that year. To ensure that his 1972 reelection campaign would not be conducted during an economic downturn, beginning in 1970, Nixon "embarked on an expansionary" economic policy "that combined" increased government spending "with a move by the chairman of the Federal Reserve, Arthur Burns, Nixon's long-time ally, to pump money into the economy. The strategy worked. The gross domestic product grew at a stunning [annual] rate of 9.8 percent in the second quarter of 1972, with a healthy pace of 5.3 percent for the year as a whole. But with spending on the Vietnam War still rising and the economy already near or at maximum capacity when he had begun the strategy, the inflationary impact was horrendous. By the end of the third quarter of 1973, inflation was galloping at an annual rate of nearly 7.5 percent. Then OPEC began its embargo of oil shipments to protest U.S. support for Israel in the Six-Day War, quadrupling the price of oil." This caused other commodity prices to soar, driving up the cost of both manufactured goods and labor. Unemployment rose while the annual inflation rate increased to nearly 9 percent during the fourth quarter of 1973 and to 11 percent for all of 1974. In addition, during the early 1970s, corporate America began a campaign to scale back the clout of labor unions and to reduce the role of the government in regulating business.

Carter

The main victim of this was President Jimmy Carter who assumed office on Jan. 20, 1977. In order to try to get the economy to improve a bit, President "Carter, desperate to control inflation in the second year of his presidency, decided to rein in the economic regulations that he felt were the most detrimental to the economy while strengthening the social regulations that he viewed as most vital to the health and safety of citizens. He deregulated airlines, trucking companies, and bus companies and began the deregulation of banking. In March 1978, he issued an executive order requiring government agencies to do an economic [i.e., cost-benefit] analysis before enacting any new regulations. He set up a Regulation Analysis Review Group headed by Charles L. Schultze, chairman of his Council of Economic Advisors, thus injecting an economist into a discipline that had previously been dominated by lawyers. Carter, a populist, was buying into a discipline dictated by the nation's corporate elite."[39]

[38] This section is based on Kleinknecht [2009; pages 84-86].
[39] See Kleinknecht [2009; page 96].

The Reagan Administration and the Politics/Economics of De-regulation

According to Kevin Phillips [2008, page 38], the Reagan administration "embraced a policy of returning to the old-time economic religion." Phillips cited the following quote from Reagan's Secretary of the Treasury, Donald Regan, former Chairman of the Board of Merrill Lynch:

> "We're not going back to high-button shoes and celluloid collars. But the President does want to go back to many of the financial methods and economic incentives that brought about the prosperity of the Coolidge period."

The Reagan administration believed that "the economic ills of the 1970s — the decline of manufacturing and the twin evils of high unemployment and galloping inflation — were the result of excessive regulation of business, out-of-control public spending, and a tax system that was choking our entrepreneurial spirit."[40] So, the Reagan administration was philosophically on the same wave-length as those advocating supply-side economics, who believed (1) as did Calvin Coolidge that "the chief business of the American people is business," and (2) that "the way to carry out that business was to implement a plan for the disembowelment of the public sector."[41] In 1981, Reagan was able to effect a large reduction in the marginal tax rate charged those at the top of the income distribution. This caused some concern among Reagan's economic advisors about the Federal budget deficit. One result of this was an increase in payroll tax rates although the Reagan administration would have preferred to reduce Social Security program benefits instead. In addition, during 1982, the Reagan administration reinstituted the VA funding fee of one half of one percent of the face amount of the mortgage.

By Galbraith's account, the main tenet of the supply-siders was that by reducing the highest tax bracket "on personal income from (say) 70 percent to (say) 30 percent," individuals would dramatically reduce the amount of money that they spent and correspondingly increase the amount of money that they saved, and that this savings would then go to investment in productive enterprises. In particular, the supply-siders wanted federal income tax rates reduced on dividend income and capital gains. At this point, Galbraith [2005; page 26] asks two questions of the supply-siders:

- "Is there a good theoretical reason to believe this?"
- "Is there any actual evidence that it is true?"

Galbraith [2005; page 26], then, answers his own questions: "The answer, it turns out, is no on both counts. Simply put, the conservative faith in tax cuts [and hence in supply-side economics] is based on a mirage."

[40] See Kleinknecht [2009; pages xvi-xvii].
[41] See Kleinknecht [2009; page 70].

President Reagan's Commission on Housing

On June 16, 1981, less than five months after he took office, President Reagan ordered the creation of a President's Commission on Housing. One of the goals of the commission was to "seek to develop housing and mortgage finance options which strengthen the ability of the private sector to maximize opportunities for home-ownership and provide adequate shelter for all Americans."[42]

Recommendations of the President's Commission on Housing

The Commission issued its final report on April 29, 1982. On page xix of the overview section of this report, the Commission stated that President Reagan established this Commission because of (1) his concern "that continuation of past policies would deny future generations their 'opportunity to live in decent, affordable housing'" and (2) his desire "to help chart a new path for the rest of the century."

Regarding FHA, the Commission stated on page xxiv that:

- "Like so much else that is 50 years old, FHA has become a prisoner of its own habits, and the Commission recommends that more agile private mortgage insurance institutions take over many FHA functions relating to single-family homes."

In Chapter 7, we describe the experience of the private mortgage insurers in the 1980s. In Chapter 8, we describe the FHA experience during the ensuing decade.

The Commission was highly disposed to the desire of Salomon Brothers (see Chapter 9) to sell private label (or non-agency) mortgage-backed securities. So, in order to promote this concept the Commission included the following on pages xxix and xxx:

> "The current crisis in housing is primarily a crisis in the financing of housing. [A] broader-based and more resilient system will be needed to supply the funds a strengthened housing industry will require.
>
> "Looking toward the development of the new system, the Commission proposes an integrated package of recommendations designed to reduce the nation's reliance on specialized lenders and a single type of mortgage instrument. Thrift institutions will continue to play an important part in this system, but the thrift industry will need broader operating powers to function effectively in tomorrow's market environment. In the future, housing will not be as dependent as it has been on this limited sector of the capital market; housing will draw more funds from a wide range of private institutions including pension funds, insurance companies and commercial banks. To encourage greater participation in housing finance by such institutions, the Commission recommends the removal of various tax, legal and regulatory impediments to widespread private investment in mortgages and mortgage-backed securities."

[42] See http://www.presidency.ucsb.edu/ws/index.php?pip=43963.

Chapter 7 – Private Mortgage (Guarantee) Insurance Companies (PMIs)

In this chapter, we discuss the history of private mortgage insurance companies from the establishment in 1957 of the first private mortgage insurer since the depression through the rough times the private mortgage insurers experienced during the 1980s.

The Nature of Modern Private Mortgage Insurance

Like FHA, private mortgage guarantee insurance companies insure mortgages against the risk of foreclosure. Like FHA, they charge mortgage insurance premiums. Unlike FHA, they only cover a portion of the mortgage. For example, Fannie and Freddie typically require private mortgage insurance on a conventional mortgage when the homebuyer makes less than a 20 percent down-payment. The mortgage insurance is required to cover the additional risk from this low down-payment. So, to illustrate, if Jane Doe bought a house for $100,000 and made a $7,000 down-payment, then the private insurance company would cover the first $13,000 of the loss in the event that Jane's home was foreclosed and ended up causing an insurance claim. Because Fannie and Freddie want to limit their risk, they want the private mortgage insurer to have sufficient funds to cover potential losses. Hence, Fannie and Freddie require the private mortgage insurers to have a minimum crediting rating to do business with them. Finally, private mortgage insurance companies are supervised by the Insurance Department of the state in which they are domiciled.

The first private mortgage-guarantee insurance company, MGIC, was started in 1957 by Max Karl, a one-time real estate lawyer. MGIC was headquartered in Milwaukee and so was under the purview of the Wisconsin Insurance Department. MGIC was started for two reasons. First, Mr. Karl felt that MGIC could expedite the process of closing the loans because he would not be constrained by federal red tape. Second, the interest rate ceiling on FHA- and VA-insured mortgages, that was meant to protect home buyers from usurious lending, had in practice made it impossible for some homebuyers to obtain financing unless the seller agreed to pay several "points" to compensate the lender for providing a mortgage with a below market interest rate.

"Karl believed that a private company that insured only the top portion — 25 to 30 percent after the homebuyer's 5 percent down payment — presented lenders with a" cheaper and more efficient means of financing the home purchase of borrowers unable or unwilling to make a down payment of at least 20 percent of the cost of acquiring a new home.[43]

"MGIC, which went public in 1961, provided speedy service using the information collected by the lending institution and approved insurance applications within a day or two of filing" [versus four to six weeks for FHA]. MGIC's mortgage insurance premiums cost the borrower about half as much as FHA insurance. Karl's business plan worked, "and beginning in 1958, the company's profits increased every year."

"From 1967 to 1973 [MGIC's] profits more than quadrupled every year. This explosive growth was, in part, the result of changes in federal regulations. In 1971 regulatory authorities"

[43] See page 4 of Answers.com entry for MGIC.

reduced down-payment requirements, allowing "savings and loan associations to make mortgages up to 95 percent of appraised value (compared to 90 percent before) as long as loans were insured." Maximum mortgage amounts were also increased. MGIC more than doubled the [dollar amount] of its home loan insurance from $2.8 billion in 1971 to $7.5 billion in 1972," thereby surpassing FHA; "about 40 percent of this increase occurred in the 95 percent loan category. Karl was quoted in the *Wall Street Journal* in 1973 as saying, 'I've always felt the proper role for the government was helping lower income groups acquire housing which would be unsound for us to insure anyway. ... Most of the business, it seems to me, would be better served by private companies.'"

"Having succeeded in the home mortgage field, MGIC moved to diversify its business by making more services available to lenders. In 1967 the company's first move had been to form a unit to insure mortgages on commercial buildings, which it marketed as a tool to enable builders and developers to get financing on more liberal terms. 'It made sense to me that if mortgage insurance improved the ability of buyers to finance homes, it could do the same thing for owners of factories, warehouses, apartments and other commercial buildings,' Karl said in the 1973 *Wall Street Journal* article. Soon thereafter, MGIC extended the concept of private insurance to mobile homes."

"Another move toward diversification occurred in 1970 when MGIC acquired two homebuilding and land development companies in Florida, Janis Properties Inc. and LaMonte-Shimberg Corp., and added a unit to provide temporary construction financing to builders whose projects were a potential source of home mortgage insurance. In a more radical move in 1971, the company [formed a subsidiary] American Municipal Bond Insurance Corp. (AMBAC) to insure the principal and interest of municipal bonds against default. MGIC formed another [subsidiary] in 1972 to provide the first nonfederal secondary market for buying and selling conventional mortgages, allowing lenders to free funds tied up in mortgages for further lending. This subsidiary augmented activities of the [Fannie Mae] and [Freddie Mac]. In 1973 the company introduced a program to insure the principal and interest of subordinated debentures issued by savings and loan associations, and began to offer directors' and officers' liability insurance."

"With growth came competition. In 1973, MGIC had 10 private-sector competitors, although MGIC dwarfed its competitors. "Of approximately $11 billion in private residential mortgage insurance written in 1972, MGIC wrote $7.5 billion, and the number of claims it had to pay annually — foreclosure on losses — remained a negligible $2 million or less annually. Then suddenly in 1974, problems began to surface. First, its mobile home mortgage and commercial property mortgage ventures began to sour. MGIC also found itself borrowing short-term to finance its Secondary mortgage market inventory. After a $1.9 million net loss in 1974, MGIC engaged in a major reorganization. Karl became chairman and Gerald Friedman, his nephew, assumed charge of operations as president. The company stopped writing insurance on mobile homes and closed down its secondary market operation."

After the 1973-1975 recession, "[t]he private mortgage insurance industry continued to grow [and prosper]. [The amount of insurance claims paid continued to be negligible and so it should not be surprising that during this period some of the PMIs viewed themselves more as

providers of a service than as insurance underwriters or risk managers. Moreover, all charged insurance premiums that were roughly equal to those of MGIC, the industry leader.] By 1977 private mortgage insurers were responsible for 12 percent of all new mortgages — up from 3.7 percent in 1970 — and were writing some $21 billion in [annual] new coverage. Mortgage-backed pass-throughs or certificates — a security built on pools of mortgages with monthly payments passed on to investors — were gaining ground in the industry, and Bank of America turned to MGIC for insurance when it became the first private lender to package such a certificate. This move as well as MGIC's longstanding position at the head of its industry attracted much positive attention to the company and made it ripe for a takeover."[44]

ARMs

In 1981, the FHLBB permitted federally chartered, member thrifts, by regulation, to offer alternative, variable-rate mortgage instruments.[45] Then the next year, according to Garcia et al of the Federal Reserve Bank of Chicago [1983], the Garn-St. Germain Depository Institutions Act of 1982, empowered "state banks and thrifts … to offer the alternative, variable-rate mortgage instruments that are permitted to their federal counterparts."

Option ARMs

Option ARMs were created in 1981 by Herb and Marion Sandler who owned Golden West Financial Corp. and its subsidiary World Savings Bank.[46] In particular, the Sandlers are credited with the invention of the "Pick-A-Pay" mortgage that allowed borrowers to pay less than the interest due on their loan each month. For many years, option ARMs were marketed to well-heeled buyers who wanted the option of making low payments most months and then paying off a big chunk all at once. For these borrowers, option ARMs offered flexibility. For the lender, affluent borrowers were not of great concern as they were unlikely to default on their mortgages. This was not the case for financially strapped borrowers during the housing bubble of 2004 to 2007. For such borrowers, option ARMs were lethal.

Financial Results for the Private Mortgage Insurance Industry During the 1980s

Because some of the private mortgage insurers viewed themselves more as service providers than as risk managers, they began insuring riskier loans. During 1984, about 50 percent of PMI loans had loan-to-value ratios above 90 percent and roughly 60 percent of these were ARMs or other loans with negative amortization. Some PMIs had heavy concentrations of risk in overbuilt markets of states that (1) were energy-producers and/or (2) had problem S&Ls. Between 1985 and 1989, the industry had direct incurred losses in excess of $5.7 billion.

The financial results of the private mortgage insurance industry during the 1980s are summarized in Table 8. The combined ratio[47] is the principal indicator of a private insurer's

[44] See MGIC entry on Answers.com.
[45] See Black [2005; page 30].
[46] See Hibbard [2006].
[47] The source of these data is Moody's Investor Services, Inc., as reported in MGIC[1992: page 21].

profitability on its insurance written. During each of the years 1982 through 1989 the combined ratio of the entire industry was above 100 percent. This essentially means that during all eight of these years, expenses incurred exceeded net premiums earned.[48]

One consequence of this was that the number of private mortgage insurance companies actively writing new business dropped from 14 in 1980 to nine in 1994. Two of the private mortgage insurance companies ran into serious financial trouble: Ticor and MGIC. Two others — Verex, and Investors Mortgage Insurance Company (IMI) — ceased operating because their parent companies decided against putting in additional capital.

Verex

Verex was a wholly owned subsidiary of Greyhound Corporation. Verex did not meet capital requirements at the end of 1987. Greyhound decided against adding capital. Greyhound reclassified Verex as a discontinued operation and let its mortgage insurance business run off. Verex ended up in the black.

IMI

In 1986, IMI stopped writing new business and began running off its book of business. As with Verex, it was mainly a result of the parent company's unwillingness to add capital. IMI would have been able to maintain a single "A" rating without parent support, but at that time Fannie and Freddie had a stricter "AA" requirement for private mortgage insurers. To be more specific, Fannie and Freddie would only purchase mortgages that were insured by a private mortgage insurer that had at least an "AA" rating. Other competing private mortgage insurers were able to secure parent company capital support to meet this requirement.

EPIC

The Equity Programs Investment Corporation was a nationwide seller of real estate tax shelters. When their plan to borrow $1.4 billion to buy and then rent out 20,000 model homes in the Southwest collapsed due to falling energy prices and problems in the savings and loan industry, EPIC filed for bankruptcy in 1985. This bankruptcy required Ticor, MGIC, and Republic Mortgage Insurance Company to cover the losses as per their insurance policies.

Perhaps the epitome of poor underwriting during this period involved the nine private mortgage insurance companies who collectively insured more than $1 billion dollars worth of non-recourse mortgages on investor-owned properties. Many of these mortgages had 95 percent loan-to-value ratios and so were very risky. All of these mortgages were originated by EPIC, Equity Programs Investment Corporation. EPIC was created in 1974, and in 1982 became a wholly owned subsidiary of Community Savings and Loan, an institution insured by Maryland.

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[48] More precisely, the combined ratio is equal to the sum of the loss ratio and the expense ratio where:
(1) the loss ratio is the ratio (expressed as a percentage) of incurred losses to net premiums earned, determined in accordance with statutory accounting practices, and
(2) the expense ratio is the ratio (expressed as a percentage) of underwriting expenses to net premiums written, determined in accordance with statutory accounting practices.

The original idea behind EPIC was simple. EPIC would buy model homes from developers and then lease them back to the developers. EPIC packaged the homes into limited partnerships and sold partnership interests. Investors reaped tax benefits and profits if the homes had appreciated in value by the time they were sold, usually after two years. EPIC made money by collecting fees for its services and later by selling mortgages. As the housing market in many parts of the United States deteriorated in the early 1980s, EPIC began buying production homes. So, EPIC's product mix went from 100 percent model homes in 1980 to 91 percent production homes in 1983, with the bulk of these in the depressed energy-producing states.

"Because conventional 95-percent mortgages need mortgage insurance to be sold in the secondary market, mortgage insurers became a critical part of the EPIC equation. As a lawyer for Dominion Federal Savings and Loan[49] once said, 'No one would have purchased an EPIC product unless it was insured.'"[50]

"EPIC was made up of 357 limited partnerships that represented 6,000 investors who owned 20,804 houses and condominium units in 31 states."[51] In order to meet its financial obligations, EPIC needed its properties to appreciate in value (by at least 8 percent per year according to one estimate). When its properties' values fell, EPIC was doomed. In August, 1985, EPIC defaulted on $1.2 billion of its mortgages and mortgage-backed securities. These were "held by financial institutions across the country. Ninety-four federally insured thrifts held more than $703 million in EPIC mortgages and mortgage-backed securities, [three thrifts insured by Maryland held] $82 million, 18 federally insured banks held $249 million, and six large institutional investors held $206 million. On the day that EPIC filed for bankruptcy — a move that raised the specter of a massive sell-off of assets — these financial institutions faced as much as $500 million in losses, according to one estimate. In addition, nine private mortgage insurance companies that had insured EPIC mortgages against default faced up to $400 million in potential losses. At least two of them, including Ticor,[52] were themselves in danger of a meltdown."[53]

Community Savings and Loan

One casualty was Community Savings and Loan. On Sept. 5, 1985, the governor of Maryland named the Maryland Deposit Insurance Fund to be the receiver of Community. Community's demise cost Maryland $106 million in order to clear Community's books prior to its sale to Mellon Bank. Of this, less than a third of the loss will be recovered. Thousands of small individual Community depositors were denied access to their money for years. A number of other banks, including Silverado of Colorado, that lost money on EPIC loans were later taken over by either the Resolution Trust Corporation or the Federal Deposit Insurance Corporation. Thus, EPIC's cost to the U.S. taxpayer resulting from other bank failures could well be several billion dollars, although it is impossible to calculate exactly.

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[49] Dominion Federal Savings and Loan "was caught holding $60 million in EPIC's securities and loans" and was eventually closed by the Resolution Trust Corporation (RTC). See Girard [1988; page 93].

[50] See Girard [1988; page 93].

[51] See Girard [1988; page 81].

[52] Presumably, the second one was MGIC.

[53] See Girard [1988; page 123].

Ticor

One of the two private mortgage insurance companies in danger of a meltdown from its EPIC problems as well as those in the energy-producing states was Ticor Mortgage Insurance Company, a subsidiary of Ticor Title Insurance Company, then the largest title insurance company in the United States. Ticor's mortgage insurance company did indeed collapse. It had a high concentration of exposure in the energy-producing states. In addition, in 1985 it had an estimated potential loss from EPIC of $165 million. The combination proved deadly. On Sept. 5, 1985, Ticor obtained permission from the Insurance Department of the State of California, its home state, to separate its troubled mortgage insurance business from its lucrative title insurance company. This meant that the parent company was in no way subject to the consequences of the EPIC default. Some of Ticor's biggest creditors, including the Federal National Mortgage Association which bought more than $150 million worth of securities and whole loans from EPIC, accused the parent Ticor of improperly shielding subsidiaries from the losses. Eventually, Ticor stopped paying insurance on mortgages in default, prompting some lenders to repossess 6,600 EPIC homes in the Southwest with $485 million in mortgages in arrears. On Sept. 5, 1985, Ticor announced that it would accept no new applications for mortgage insurance after Sept. 10, 1985, but would honor all commitments that were outstanding. During the spring of 1986, the California Insurance Department placed Ticor under its conservatorship and renamed Ticor's mortgage insurance subsidiary as TMIC. Finally, in April of 1988, the California Superior Court ordered TMIC's liquidation and cancelled insurance coverage on TMIC's roughly 203,000 non-delinquent mortgages representing about $10.8 billion of mortgage insurance. TMIC eventually paid its creditors about 80 percent of what they are owed. In addition, because the adverse effects of its mortgage insurance subsidiary were so severe, and so depleted its surplus, the parent title insurance company, Ticor, was eventually rescued by acquisition when the Chicago Title Insurance Company purchased Ticor in 1991.

MGIC

MGIC, like TMIC, suffered heavy losses on EPIC and other insured mortgages on properties in the energy-producing states. It had other troubles too. MGIC was sold to Baldwin-United Corporation in 1982 for $1.2 billion. This transaction required Baldwin-United to borrow $584 million from a consortium of eight banks. The Baldwin-United Corporation arose from the 1977 merger of the Baldwin Piano Company with the United Corporation, a Cincinnati-based investment company.

The Baldwin Piano Company traced its roots back to 1862. Because of Baldwin's decades-long "experience financing pianos, the company's late 1960s diversification into other financial services seemed quite logical."[54] Baldwin-United's September 1983 bankruptcy led to the separation of the operation of MGIC from Baldwin-United. During 1984, a new MGIC Investment Corporation was formed. This was made possible by (1) an infusion of $5 million in new capital from MGIC's senior managers and $250 million from Northwestern Mutual Life Insurance Company as well as (2) a number of reinsurance agreements with foreign reinsurers. This new

[54] See http://www.fundinguniverse.com/company-histories/Baldwin-Piano-amp;-Organ-Company-Company-History.html.

corporation acquired certain assets and businesses of the old MGIC on Feb. 28, 1985. On March 1, 1985, the new MGIC started writing new business.

"With the fresh cash, the executives began a new holding company that included the old one."[55] The new MGIC took 20 percent of risk of the old policies; the other 80 percent was placed with a group of Swiss reinsurance companies who ended up with substantial losses.
The question naturally arises as to why a piano manufacturer would buy a private mortgage insurer.

How did Baldwin-United Come to Buy MGIC?[56]

As mentioned above, "[g]iven Baldwin's decades of experience financing pianos, the company's late 1960s diversification into other financial services seemed quite logical. Lucien Wulsin [the CEO of the Baldwin Piano Company] got the ball rolling with the 1968 acquisition of Denver's Central Bank & Trust Company. He was joined in this quest by Morley P. Thompson, appointed president of [Baldwin] in 1970. Having graduated from the Harvard Business School in 1950, Thompson had started out as a door-to-door piano salesman. His skill at shuffling money among subsidiaries to limit corporate taxes and generate acquisition funds won him a reputation as a financial 'wizard.'"

"Thompson would not be satisfied with a mere sideline in finance; he wanted to fashion a major conglomerate out of the nation's largest keyboard company. Under his guidance, Baldwin acquired literally dozens of financial services firms in the 1970s and early 1980s. At its peak, the company controlled over 200 insurance companies, savings and loan institutions, and investment firms. Some of its larger deals included a 1977 merger with Cincinnati investment company United Corp. to form Baldwin-United Corp. and the October 1981 acquisition of Sperry & Hutchinson, best known for its 'S&H Green Stamps'. Baldwin's most popular financial product was its single-premium deferred annuity (SPDA), a life insurance policy that amassed interest tax-free until withdrawals began. From 1980 to 1983, Baldwin sold 165,000 of these policies" with a face amount of insurance in excess of $4 billion. On these policies, Baldwin paid its policyholders interest at rates between 7.5 percent and 14.5 percent. "By 1982, keyboard instruments constituted a mere 3 percent of Baldwin-United's $3.6 billion revenues."

"Although Thompson employed a complex array of transactions to maximize income and minimize costs, several factors fouled up his plans. Fundamentally, the company was paying higher interest rates [to its policyholders] than it was earning on its own investments. Thompson's fiscal juggling allowed the company to generate tax credits on the losses, but with little profit against which to count those credits. Thompson began to register some tax credits as profits in 1979."

"In the absence of net income at his own companies, Thompson set out on a quest to acquire companies with positive cash flow. In March 1982, Baldwin" purchased MGIC for $1.2 billion. "Baldwin-United took out nearly $600 million in short-term loans from eight banks to help" finance this purchase. "When MGIC's profit slid more than 20 percent, Thompson started siphoning liquid

[55] See Dresang [1995] available at http://findarticles.com/p/articles/mi_qn4207/is_19950305/ai_n10187718/.
[56] This section is based on http://www.fundinguniverse.com/company-histories/Baldwin-Piano-amp;-Organ-Company-Company-History.html.

assets from insurance subsidiaries reserve funds to service the debt, a move that drew the attention of insurance regulators in three states." In particular, MGIC was being closely monitored by the Wisconsin Department of Insurance because MGIC was domiciled in Wisconsin. The other two states were apparently Arkansas and Indiana.

Unfortunately for him, Thompson could not "come up the $440 million short-term debt payment that finally came due March 1983," leading the way to one of the largest bankruptcies in U.S. history. During July 1983, the Arkansas and Indiana insurance departments "seized control" of six of Baldwin-United's insurance companies, "effectively freezing the vast majority of the company's assets."

Where Are We Now?

In this chapter, we have described the grave financial difficulties that the private mortgage insurance industry experienced during the 1980s. This is the same industry that President Reagan's Commission on Housing felt was so "agile." In the next chapter, we describe the experience of the FHA during both Ronald Reagan's presidential years and Jack Kemp's tenure as HUD secretary. It is important to keep in mind that these financial difficulties in the mortgage industry resulted in the loss of homes by large numbers of American families. In many cases, both the homeowners and their children suffered varying degrees of psychological damage. So, leaders of the housing industry need to continue to focus on not just the need to put people in houses but, more importantly, on the need to keep them in their homes.

Chapter 8 – FHA: A Time Bomb or a Dud?

In this chapter, we discuss the MMI fund's experience as well as the major policy changes that affected it during the period from 1981 through 1992.

Background

During the 1980s, researchers at conservative policy institutes, such as the Heritage Foundation and the American Enterprise Institute, continued to propound the Reagan Administration's de-regulation policies in the mortgage finance field. They continued to argue that the federal government's housing agencies should either have no future role or a vastly diminished one. One example of this perspective is Moore [1986]. His paper had the following title: *How Congress Can Defuse the Federal Housing Administration Time Bomb*. He argued that "the FHA has strayed far from its legislative mandate … to provide mortgage protection to those of low and moderate income possibly underserved by the private mortgage industry." Moore [1986; page 5] added that in 1986 "FHA seems intent on stifling the private mortgage insurance market." This is all somewhat curious. In 1934, when FHA was created, there were no private mortgage insurance companies writing new business. As noted earlier, they had all effectively ceased operations during the Depression. Moreover, from FHA's inception in 1934 until MGIC's founding in 1957, there were no companies offering private mortgage insurance in the United States. Furthermore, because of the nature of the risk inherent in mortgage insurance, it was unclear during the 1980s how much the country should be relying on private mortgage insurance. As noted above, during the 1980s, two of the largest private mortgage insurers went bankrupt and several others decided to go into run-off mode rather than raise new capital.

FHA During the 1980s

Like other mortgage market participants, FHA incurred substantial insurance claims on the single-family mortgages it insured during the early 1980s. In part, this was simply due to the workings of the business cycle because FHA typically has fewer insurance claims in rising interest rate environments than in falling ones because of the assumability of its mortgages. In part, it was due to how the savings and loan crisis was handled by the Reagan administration. Specifically, easy lending standards increased demand for single-family homes and thereby pushed up their prices. Eventually, after the easy money dried up, the house prices had to fall. This created problems for many participants in the housing industry, including FHA.[57] Finally, during the Reagan administration, HUD was subjected to "widespread abuses, influence peddling, blatant favoritism, monumental waste, and gross mismanagement."[58] "[U]nscrupulous business executives took advantage of an agency in disarray." For example, the "sale of foreclosed HUD properties was so poorly managed that closing agents were able to steal millions simply by not turning over the proceeds of the home sales, a scam that cost the taxpayers more than $50 million. One agent, Marilyn Harrell of Prince George's County, Maryland, was

[57] For more details, see Black [2005].

[58] This is taken from a report of the Employment and Housing Subcommittee of the Committee on Government Operations of the House of Representatives as report in Kleinknecht [2009; page 192].

nicknamed 'Robin HUD' because she diverted part of the $5.6 million she pocketed to charities."[59]

During the second half of Reagan's tenure, HUD Secretary Pierce established a task force whose mission was to tighten single-family underwriting standards in order to reduce credit risk. This task force was headed by Judith Tardy Hoffman, HUD's Assistant Secretary for Administration. The result, according to Chappelle [1991], was that "FHA has tightened its underwriting policies since 1986 with over 30 different measures (e.g., buydown restrictions, elimination of risky programs and stricter compensating factors for borrowers above credit ratio guidelines) to reduce credit risk."

FHA Audited Financial Statements — FY 1988 Through 1991

Despite all its problems the FHA's MMI Fund appeared to be in fine shape during this period, at least based on FHA's audited financial statements for fiscal years 1988 through 1991 as summarized in Table 9 below.

TABLE 9
MMI Fund Capital Resources
FY 1988 Through FY 1991

End of Fiscal Year Audit	Total Capital Resources (Dollars in Billions)
1988	$8.35
1989	$8.13
1990	$8.48
1991	$8.94

Source: FHA Audited Financial Statements for FY 1988-1991.

In fact, Table 9 shows that although the total capital resources of the MMI Fund declined slightly during FY 1989, they increased by almost 10 percent from the end of FY 1989 to the end of FY 1991. (At the end of FY 2008, the total capital resources of the MMI Fund had increased to $27.3 billion.)

The MMI Fund under HUD Secretary Jack Kemp

In 1989 Jack Kemp became HUD secretary. Kemp was a leading proponent of supply-side economics. Although President Bush had famously ridiculed supply-side economics as being "voodoo economics" during the 1980 Republican presidential primaries, this did not deter him from appointing Kemp to the HUD position. In 1989, three years after the publication of Moore's paper, Kemp decided to move forward under Moore's view that the FHA's MMI Fund was indeed "a time bomb needing to be defused." To this end, HUD hired the accounting firm of Price Waterhouse to conduct a series of annual actuarial reviews of the MMI Fund. The first two

[59] See Kleinknecht [2009; page 202].

studies — completed, respectively, on June 6, 1990, and during March 1992 — concluded that the MMI Fund was in dire financial straits and was in desperate need of remedial action. Their third review, completed on Nov. 6, 1992 — three days after President Bush was defeated in his bid for reelection — was considerably more sanguine about the health of the fund.

In Table 10 below, we summarize Price Waterhouse's predicted ultimate claim rates by endorsement year as they appeared in each of these three reviews.

TABLE 10
Predicted Ultimate Claim Rates for MMI Fund Mortgages

Endorsement Fiscal Year	PriceWaterhouse Review – Fiscal Year			Actual Data Through March 31, 2008
	1989	1990	1991	
1985	15.34%	17.57%	14.29%	17.16%
1986	10.98	16.40	13.20	13.32
1987	10.78	12.19	9.58	9.80
1988	12.76	14.59	10.32	10.00
1989	12.72	15.51	10.57	10.41
1990	-	13.65	10.39	8.26

Sources: Price Waterhouse MMI Fund Actuarial Review for 1989-1991 and Integrated Financial Engineering, Inc, MMI Fund Actuarial Review for 2008.

The predictions in the 1991 review are amazingly close to the actual results for endorsement years 1986 to 1989. These results are hardly indicative of an explosive situation. While FHA did indeed suffer large underwriting losses on its 1985 to 1986 books of business as well as those from years 1980 to 1984, it incurred relatively small underwriting losses, if any, on its 1987 to 1990 books of business.

Nevertheless, despite (1) the sanguine financial statements and (2) the recently tightened underwriting standards, and using one or both of the first two Price Waterhouse Reviews as its rationale, the Kemp administration increased the insurance premiums charged on single-family, 30-year term mortgages insured under the MMI Fund by adding a one-half percent annual premium to the 3.8 percent upfront mortgage insurance premium on mortgages closed on or after July 1, 1991.

As an immediate consequence, according to Chappelle [1991; page 96]: "Applications for FHA insurance … dropped 28 percent from April to August 1991."

Chappelle went on to add that: "HUD has increased the likelihood of adverse selection in the FHA program. Because of the increased cost [of FHA mortgage insurance], lower risk borrowers who are the backbone of the FHA program are now opting for private mortgage insurance because of lower cost and less red tape. FHA is, therefore, in effect becoming the lender of last resort." The bad news for low- and moderate-income homebuyers was that they were being forced to pay higher mortgage insurance premiums to compensate for the mismanagement of the private mortgage insurance companies during the 1980s.

Chappelle [1991; page 96] concluded his article by noting that based on the tightened underwriting described above, "it is ironic that it now appears that FHA faces greater risk to its future solvency from the implementation of measures designed in the spirit of reform than it does from the performance of its existing portfolio."

An Alternative Perspective on Single-family Mortgages Insured During 1982-1993

Let's reexamine the 1982-1993 period from a different perspective. In Table 11, we summarize the proportion of originations of insured single-family mortgages in the United States by type of insurance. The VA's market share was roughly one-sixth of the market over the entire period, bottoming at 14.1 percent during 1984 and peaking at 20.6 percent during 1987. For the 1983 origination year, FHA's market share was roughly one quarter of the market while the private insurers had about half of the market. As noted earlier, the private insurers were very aggressive during 1984 and grabbed over 70 percent of the market share that year. Unfortunately for them, these loans did not perform very well and their losses were substantial. As a consequence, starting in 1985, a number of private insurers either stopped writing new business or scaled back on their operations. This pushed FHA's share up to 55.5 percent during 1987; while over the entire 1986 to 1990 period FHA's market share was around a half with the private insurers only garnering about one third of the market. The private insurers were not happy about this and complained to the federal government that, as noted earlier, FHA was an unfair competitor and "seems intent on stifling the private mortgage insurance market." In response, the Kemp administration raised the FHA single-family mortgage insurance premiums with the result that in 1993, FHA's market share dropped to about one third while that of the private insurers rose to about one half. So, to repeat the conclusion of the previous section, low- and moderate-income homebuyers were being forced to pay higher mortgage insurance premiums to compensate for the mismanagement of the private mortgage insurance companies during the 1980s.

Having examined the experience of (1) private mortgage insurers during the 1980s in the previous chapter and (2) FHA from 1980 through 1992 in this chapter, in the next chapter we explore the experience of private (i.e., non-agency) mortgage-backed securities.

Chapter 9 – Mortgage Instruments

First Private Issue of Mortgage-Backed Securities

During 1977, Salomon Brothers "persuaded the Bank of America to sell [them] the home mortgages it had made — in the form of bonds. [Salomon Brothers then] persuaded investors, such as insurance companies, to buy the new bonds. When they did, the Bank of America received the cash it originally lent the homeowners, which it could then relend. The homeowner continued to write his mortgage payment checks to the Bank of America, but the money was passed on to the Salomon Brothers clients who had purchased the Bank of America bonds."[60] Thus, the first private label mortgage-backed security was created.

While Salomon Brothers was convinced that this approach was "the wave of the future," it was only legal in three of the 50 states. Specifically, most states had laws barring pension funds and other financial custodians from purchasing securities that had not been officially registered with state agencies and been sold by an approved GNMA issuer. Such laws were enacted to "prevent the sale of bogus securities"[61] and to ensure that the issuer met minimum capital requirements. The SEC required reams of documentation for every mortgage pool and the Internal Revenue Service was intent on taxing all such transactions. So, Salomon Brothers put together a team of lawyers and lobbyists in Washington, D.C. to get Congress to pass legislation to (1) preempt the state laws and thereby "go over the heads of the states" and (2) eliminate the potential difficulties posed by the SEC and the IRS.[62] Fortunately for Salomon Brothers, once President Reagan took office on Jan. 20, 1981, Salomon Brothers had a highly sympathetic audience in the oval office. Reagan was a firm believer in de-regulation economics that favored a limited role for the government, the opportunity for the private sector to pursue lucrative ventures, and federal override of state laws/regulations.

During the ensuing 20 years, there were a number of federal legislative acts and regulatory changes that removed various safeguards for investors established after the Depression. In particular, these acts/changes undid most of the provisions of the Glass-Steagall Act. These acts/changes are the subject of the rest of this chapter.

Secondary Mortgage Security Enhancement Act of 1984

During the Reagan administration, at least two new federal statutes and two regulatory changes facilitated the market in private-label mortgage-backed securities. The new statutes were the Secondary Mortgage Market Enhancement Act (SMMEA) of 1984 and the Tax Reform Act of 1986. The two regulatory changes were instituted in 1983 — one by the SEC and the other by the Federal Reserve Board.

[60] See Lewis[1989;pages 88-89].
[61] See Katz[2009;page16].
[62] See Fabozzi and Modigliani [1992; pages 32-34] for details.

The principle provisions of the Secondary Mortgage Market Enhancement Act were as follows:

- The SMMEA permitted "nationally recognized statistical rating organizations" (in 1984, Moody's and Standard & Poor's) to rate mortgage pools. Such pools could then be sold as mortgage-related securities if at least one of the rating organizations placed the pool in one of its two top rating categories.
- The legislation permitted "federally chartered financial institutions, including credit unions, to invest in mortgage-related securities subject only to limitations that the appropriate regulating board might impose."
- The legislation preempted "state blue sky and legal investment laws and regulations so that investment grade mortgage-related securities may be purchased by state-chartered and regulated financial institutions, insurance companies, pension funds, trustees, or other regulated entities. However, the legislation gave the individual states up to seven years (until Oct. 3, 1991) to override this provision. Twenty-one states chose to do so.
- This legislation also exempted MBS from the state laws requiring that they be registered with the individual states.

Meanwhile, the 1986 Tax Reform Act eliminated the issues with the IRS.

Prior to 1983, brokerage firms and dealers could accept agency pass-throughs, but not private pass-throughs, from their customers as collateral for margin transactions. The Federal Reserve Board changed that during January 1983 when it rewrote Regulation T to treat private pass-throughs in the same fashion as agency pass-throughs. (See Fabozzi and Modigliani [1992, page 34].)

According to Katz [2009; page 19], at a 1984 Congressional hearing, Democratic "Representative Tim Wirth [of Colorado] voiced a lone and passionate cry of skepticism. Why set up private investment banks to do the same thing that [Ginnie, Fannie, and Freddie] already could legally accomplish. And why trust the inscrutable, unaccountable rating agencies, which had already shown a tendency to give high scores to failing bonds?"

Private Label Residential Mortgage-Backed Securities

The actions described above enabled private firms — commercial banks or other mortgage originators — to pool residential mortgages and sell them as pass-throughs without any government guarantees. Such *non-agency or private label residential mortgage-backed securities (RMBS)* traditionally have some form of credit enhancement[63] to obtain a triple-A credit rating. Credit enhancement fees would be subtracted from mortgage cash flows along with servicing fees.

[63] By credit enhancement we mean: Something that reduces credit risk by requiring "collateral, insurance, or other agreements to provide the lender with reassurance that it will be compensated" in the event that the borrower defaults. (Source: InvestorWords.com.)
This content can be found on the following page: http://www.investorwords.com/5489/credit_enhancement.html.

In Table 12, we summarize the dollar amount of such originations from 1998 to 2008. We observe that prior to 2004, non-agency RMBS accounted for approximately 20 percent of the originations. In 2004, this jumped to 45.9 percent. Then, during both 2005 and 2006, the market share increased to over 55 percent. Finally, in 2008, after the housing crises had taken full effect, the market share plummeted to less than five percent — a negligible amount.

Collateralized Mortgage Obligations

A *collateralized mortgage obligation* (CMO) is a financial debt vehicle that was introduced during June 1983 by investment banks Salomon Brothers and First Boston for Freddie Mac.

Legally, a CMO is a special purpose entity that is wholly separate from the institution(s) that create(s) it. The entity is the legal owner of a set of mortgages, called a *pool*. Investors in a CMO buy bonds issued by the entity, and receive payments according to a defined set of rules. The mortgages themselves are called the *collateral*, the bonds are called *tranches* (also called classes), and the set of rules that dictates how money received from the collateral will be distributed is called the *structure*. The legal entity, collateral, and structure are collectively referred to as the *deal*. GNMA calls its version of a CMO a *Real Estate Mortgage Investment Conduit* or *REMIC*. Legally, a CMO structure starts with a stand alone, special purpose entity, which is intended to protect the investor from the credit risk of the originator/mortgagor and issuer. The entity is the legal owner of a specified set of mortgages, or other mortgage-related collateral called a *pool*. Investors in a CMO buy bonds issued by the entity, and receive payments according to a defined set of rules. The mortgages themselves are called the *collateral*, the bonds are called *tranches* (also called classes), and the set of rules that dictates how money received from the collateral will be distributed is called the *structure*.

Changes in the 1986 Tax Act placed restrictions on the ability to issue CMOs without entity level taxation. *Real Estate Mortgage Investment Conduits* or REMICs were created by the same Act. If the statutory specifications are satisfied, a REMIC will not be treated as a taxable entity. After this legislation, GSEs and other issuers of mortgage-backed securities used REMICs instead of CMOs. Other than the tax election, REMIC structures were very similar to CMOs, especially at first.

1998 Merger of Citicorp and Travelers Produced "CitiGroup"

The 1998 Merger of Citicorp and Travelers produced a new company known as "CitiGroup." CitiGroup combined (1) a commercial bank, Citicorp, with (2) a company whose subsidiaries included an insurance company (Travelers), a retail brokerage and asset management company (Shearson Lehman) that had recently been merged with Smith Barney, and a major bond trader and investment bank (Salomon Brothers).

In 1998, federal law forbade commercial banks from merging with either investment banks or insurance underwriters. This meant CitiGroup had between two and five years to divest any prohibited assets — unless Congress changed the law.

Gramm-Leach-Bliley Financial Services Modernization Act

According to Gruver [2008], by 1999, the idea that an individual financial institution should be prohibited from both selling risky investment products and accepting deposits from the public "had become an anachronism of the New Deal. Foreign banks like UBS and Deutsche Bank engaged in both" (1) the underwriting of securities and (2) "lending and deposit-taking, which put American banks at a competitive disadvantage in the global marketplace."

In order to address this problem, Congress passed the Gramm-Leach-Bliley Financial Services Modernization Act in 1999. This subsequently became law when President Clinton signed it. This legislation accomplished the following:

- Repealed the sections of the 1933 Glass-Steagall Act mandating the legal separation of (i.e., the firewalls between) commercial banking and investment banking.
- Eliminated the Bank Holding Company Act of 1956's prohibition on bank underwriting of insurance (helping CitiGroup).
- Established the Federal Reserve Board as the primary regulator of financial holding companies.
- Permitted financial holding companies to conduct activities that are "complementary" to banking.
- Grandfathered for 10 years the nonfinancial activities of firms engaged in financial business.

After President Clinton's negotiators and Congressional Republicans had agreed on the final form of the bill, Clinton issued the following statement:

- "When this potentially historic agreement is finalized, it will strengthen the economy and help consumers, communities and businesses across America."

The problem, according to Gruver [2008], was that although Congress thereby sanctioned the existence of financial giants like CitiGroup, "they did not follow through on the logical implication of their idea — fusing the [financial] industry's [Federal] regulatory overseers into a similar colossus. Instead, Congress allowed the government's financial regulatory structure to remain stuck in the 1930s, split among an array of agencies."

Commodity Futures Modernization Act

This legislation, also championed by Senator Phil Gramm prohibited both the SEC and the Commodity Futures Trading Commission (CFTC) from regulating credit default swaps — and thereby accomplished Senator Gramm's goal to (1) "protect financial institutions from overregulation" and (2) "position our financial services industries to be world leaders into the new century."

It didn't quite work out the way Senator Gramm had hoped. For starters, the legislation contained a provision — lobbied for by Enron — that exempted energy trading from regulatory

oversight. This allowed Enron to run rampant, wreck the California electricity market, bilk California consumers out of billions of dollars before Enron collapsed and wipe out Enron stockholders after Enron collapsed.

Because of the default swap-related provisions of Gramm's bill, a market that ultimately reached about $62 trillion remained utterly unregulated, meaning no one made sure the banks and hedge funds had the assets to cover the potential losses they guaranteed.

Where Are We Now?

We described in Chapter 5 how the Reagan administration wanted to encourage the private sector to take over various activities that were being performed by government or quasi-government agencies. In this chapter, we detailed various federal legislative and administrative actions that were taken to facilitate this. We also showed that during 2006, non-agency RMBS constituted nearly 56 percent of RMBS originations; however, in 2008, the non-agency share of the market had dropped below five percent. In Chapter 11, we argue that predatory lending was used to help push this share so high. In Chapter 11, we also examine the recent experience of all of the mortgage insurers. In the meantime, in Chapter 10, we discuss some of the financial models that contributed to this unfortunate situation and also describe the actions of some of the people involved in this problem.

Chapter 10 — Long Term Capital Management and the Misapplication of Finance Models [64]

The developers of the Black-Scholes options pricing model won a Nobel prize in 1997 for their work. Subsequent events have highlighted its mis-application in real-life situations (e.g., the stock market crash of 1987 and the implosion of Long Term Capital Management) by practitioners who have ignored/violated the model's assumptions and/or limitations. Others have been highly critical of the so-called "efficient market theory" that is a key assumption of the Black-Scholes model. In this chapter, we discuss the crash of 1987 and the demise of Long Term Capital Management as well as the underlying economic models and theories.

It is not surprising that "[r]egulators had worried about the potential risk of [derivatives] which linked the country's financial institutions in a complex chain of reciprocal obligations."

Experience of Portfolio Insurance during the 1987 Stock Market Crash

According to Lowenstein [2000; pages 68-69], during "1987, so-called portfolio insurance was marketed (with absurd ballyhoo) to institutional investors as a technique of limiting losses via continuous selling when markets fall." In order for this to work, the theoretical underpinnings of portfolio insurance required that "prices would trade … without any jumps" or discontinuities. This required the markets to behave as if they "were as smooth as well-brewed java, in which prices would indeed flow like cream. [They required], for instance that the price of a share of IBM [common stock] would never directly plunge from 80 to 60 but would always stop at 79 ¾, 79 ½, and 79 ¼, along the way." On Black Monday — the day the market crashed in 1987 — "the market was highly *discontinuous*. Portfolio insurers who had counted on nimbly limiting their losses couldn't keep pace with the panic that broke out on Wall Street and, indeed, lost their shirts."

Implosion of Long Term Capital Management

Long Term Capital Management (LTCM) was a private investment partnership that was engaged in bond-trading and was headquartered in Greenwich, Conn. and founded in 1993. It "managed money for only one hundred investors" and had slightly less than 200 employees, mostly quantitative analysts. Many had doctorates in mathematics or economics. Two of its partners, Robert Merton and Myron Scholes, were awarded the 1997 Nobel Memorial Prize in Economic Science for their work [with Fischer Black] in the development of the "Black-Scholes" option pricing model. In early, 1994 LTCM also hired David Mullins, former number two to Greenspan at the Fed They were highly leveraged — at 100-to-1.

[64] This section is based on Lowenstein [2000].

Merton's Words of Caution

On Dec. 9, 1997, Robert Merton delivered a lecture in Stockholm, Sweden to the Royal Swedish Academy of Sciences at the event honoring his award of the Nobel Memorial Prize in Economic Science. Merton [1998] closed his lecture with the following words of caution:

> "Even this brief discourse on the application to finance practice of mathematical models in general and the option-pricing model in particular would be negligently incomplete without a strong word of caution about their use. At times we can lose sight of the ultimate purpose of the models when their mathematics become[s] too interesting. The mathematics of financial models can be applied precisely, but the models are not at all precise in their application in the complex real world. Their accuracy as a useful approximation to that world varies significantly across time and place. The models should be applied in practice only tentatively, with careful assessment of their limitations in each application."

Despite Merton's words of caution, at the end of 1997, Long Term Capital Management's balance sheet was in its best shape ever — sporting a leverage ratio of 18-to-1. However, at that point, the LTCM partners decided to return $2.7 billion to their outside investors, leaving them with a leverage ratio of 28-to-1, excluding derivatives. [These numbers appear to be inconsistent but are those in Lowenstein's book.] The partners did this so that they could raise the leverage of their personal investments in LTCM and thereby increase their profits, or so they hoped.

They were not concerned about excessive risk. They assumed that financial markets would behave in the future as they had in the recent past. They assumed that all financial markets would remain open, that these markets would remain highly liquid, and that there would be no "outlier" events. So, they went in full-bore with no fear. To paraphrase Lowenstein [2000; page 59]: They thought they could hedge further and leverage further than anybody else. They were convinced that they could do this because, as noted above, they assumed (Lowenstein [2000, page 68]) "prices would trade … without any jumps" or discontinuities. Under this assumption, "[a]t each infinitesimal moment in time, traders would readjust the price of [stock] options … keeping them in synchrony with the price of the [underlying] stock." This assumption was fine on days during which the markets were calm — but not during the summer of 1998.

The problem for LTCM was in a number of countries they had massive positions in which they had shorted safer (lower-yielding) bonds and purchased riskier (higher-yielding) bonds with the firm conviction that such credit spreads would narrow. "During the second week of August [of 1998], Russia's markets snapped. On August 13, with dollars fleeing the country, its reserves dwindling, its budget over-tapped, and the price of oil, its chief commodity, down 33 percent, the [Russian] government imposed controls on the ruble. The banking system froze for lack of reliable and solvent banks. The Moscow stock market briefly halted trading. It ended the day down 6 percent — and down 75 percent for the year. Short-term interest rates surged to almost 200 percent. Long-term Russian bonds fell to half their price of only two months earlier."[65] With a number of other crises buffeting investors around the world at that time,

[65] See Lowenstein [2002; pages 140-141].

investors fled to the safety of U.S. Treasuries. Since April, the spread between A-rated bonds and Treasuries increased from 60 points to 90 points. On one day — Aug. 21, 1998 — LTCM lost $553 million or 15 percent of its capital. During the rest of August, the markets continued to go against LTCM. LTCM was well-aware that it needed to dispose of some of its positions, but everybody wanted to head for the exit at the same time and there were no buyers. While LTCM viewed the market as irrational in the long-term, they had to survive the short-term. Because LTCM's leverage ratio was now at an "untenable" 55-to-1, it was only a matter of time before LTCM would expire.

Leverage of Other Market Participants During This Time Period

Moreover, LTCM wasn't the only financial firm sporting a high leverage ratio during this time. According to Cassidy [1999]: "At the end of 1998, the five biggest commercial banks in the country had $14 of borrowings for every dollar of capital. The average leverage ratio at the five biggest investment banks was a remarkable 27 to one."

AIG and Their Credit Default Swaps

Credit default swaps are essentially unregulated insurance policies covering the losses on securities in case a triggering event occurs. Such an event could be a fire, a plane crash, or a mortgage foreclosure. Financial institutions buy credit default swaps to protect themselves against the adverse effects of such events. In this sense default swaps are similar to fire insurance in the sense that a homeowner buys fire insurance to protect his investment in case his house burns down. However, unlike fire insurance, credit default swaps can also be used as a purely speculative "investment." In this case, credit default swaps are like buying insurance against the risk that my neighbor's house burns down. Whereas with my own house, I have what insurance professionals call an "insurable interest," with my neighbor's house I do not. The situation with credit default swaps is similar to bookies trading bets, with banks and hedge funds gambling on whether an investment (say, a collection of subprime mortgages bundled into a security) will succeed or fail.

Insurance giant AIG was one of the largest issuer of credit default swaps, issuing about $440 billion of such. AIG is essentially a holding company. AIG owns 71 U.S. insurance companies. New York State is the primary regulator for 10 of these companies. AIG's private mortgage insurance company, United Guarantee, is domiciled in North Carolina whose insurance department is United Guarantee's primary regulator. The main cause of AIG's financial difficulty was its unit known as AIG Financial Products (headquartered in London with a branch office in Wilton, Conn.) that was responsible for the development of AIG's default swap products.

Where was Greenspan on This? Where was the Congress? Where were the Regulators?

After the collapse of LTCM, why didn't the U.S. Congress, the Federal Reserve Board, or other financial regulators do something to prohibit future LTCMs? Why didn't someone do something to prohibit financial institutions from taking on such high amounts of leverage?

Instead, we had Phil Gramm leading the way with legislation that dramatically **reduced** federal regulation of financial institution and activities.

Greenspan and the Bubbles

The dilemma facing regulators during bubbles is that if you act and cause a precipitous market decline, then you may well be the one who gets blamed. On the other hand, if you just allow market forces to let the bubble burst on its own, then (1) the losses are larger, (2) more people are adversely affected, and (3) it takes longer to return the market to something approaching a long-term equilibrium position. This was the dilemma facing Greenspan with the technology bubble during the 1990s. Greenspan was on the high moral road when he gave his famous "irrational exuberance" speech in 1996. However, Greenspan never followed up on this. In particular, Greenspan never used his authority to increase margin requirements on common stocks of technology companies or those of other companies.

The verdict is equally harsh on Greenspan for the housing bubble. Greenspan [March 26, 2009] writes that "I opined in a federal [reserve board] open market committee meeting in 2002 that 'it's hard to escape the conclusion that … our extraordinary housing boom … financed by very large increases in mortgage debt, cannot continue indefinitely for the future.'" But in testimony at an October 23, 2008, hearing of the House Committee on Oversight and Government Reform, Greenspan stated that:

- "In recent decades, a vast risk management and pricing system has evolved, combining the best insights of mathematicians and finance experts supported by major advances in computer and communications technology. A Nobel Prize was awarded for the discovery of the pricing model that underpins much of the advance in derivatives markets. This modern risk management paradigm held sway for decades. The whole intellectual edifice, however, collapsed in the summer of last year because the data inputted into the risk management models generally covered only the past two decades, a period of euphoria. Had instead the models been fitted more appropriately to historic periods of stress, capital requirements would have been much higher and the financial world would be in far better shape today, in my judgment."[66]

Greenspan apparently failed to learn from either 1) the failure of portfolio insurance to protect investors against losses in the stock market crash of 1987 or 2) the collapse of Long Term Capital Management in 1998. In both instances, investors had relied heavily on the same types of risk management models. Greenspan apparently continued to put too much faith in history-based models running on high-speed computers and capable of being transmitted electronically at the speed of light. Greenspan should have been concerned with the mortgage market because tables issued by his own agency showed that consumer mortgage debt (including home equity loans) exceeded $10 trillion in 2007. He could have gotten a clearer picture of what was happening by venturing into the real world by going out and "kicking some tires;" i.e., by talking to low-to-

[66] See "Testimony of Alan Greenspan," **Committee of Government Oversight and Reform**, U.S. Congress, Oct. 23, 2008, online at http://oversight.house.gov/documents/20081023100438.pdf.

moderate income homebuyers and by asking realtors and mortgage originators how their customers were financing their home purchases. He could have read the Alger [1934] Report.

Moreover, according to Kleinknecht [2009; page 126], "Edward Gramlich, who was a Federal Reserve Board governor from 1997 to 2005, told the *Wall Street Journal* that he personally warned Greenspan about irresponsible mortgage lending around 2000 and suggested that bank examiners increase their scrutiny of consumer finance lenders acting as extensions of Fed-regulated bank holding companies. Gramlich, a Democrat appointed by Bill Clinton, said he never raised the issue with the full board because Greenspan felt such oversight was unworkable. 'He was opposed to it, so I didn't really pursue it,' he said."

Alternatively, he could have consulted with senior staff at other government agencies whose primary task was providing mortgage guarantee insurance. In particular, there were a number of people at the Department of Veterans Affairs and the Federal Housing Administration advising that house prices were a bubble about to pop. The senior staff at the FHA were well aware of:

- the severe difficulties a number of U.S. housing markets experienced in the 1980s due to falling energy prices and overly aggressive savings and loans (According to Herzog [2009] about 50 percent of the FHA mortgages originated in the Houston area between 1981 and 1984 ended up in an FHA insurance claim.) and

- FHA's experience (under HUD Secretary George Romney) in the early 1970s, when FHA insured mortgages to low-to-moderate income homebuyers who made 2 percent down payments and ended up paying insurance claims on over 36 percent of such mortgages originated during 1970.

Buffett on the Practical Application of Option Pricing Models

The following statement of Warren Buffett [2009; page 15] shows much deeper understanding than do Greenspan's statements:

- "Investors should be skeptical of history-based models. Constructed by a nerdy-sounding priesthood using esoteric terms such as beta, gamma, sigma and the like, these models tend to look impressive. Too often, though, investors forget to examine the assumptions behind the [models]. Our advice: Beware of geeks bearing formulas."[67]

Buffet [2009; page 20] went on to specifically address the application of Black-Sholes formula:

- "The Black-Sholes formula has approached the status of the holy writ in finance, and we use it when valuing our equity put options for financial statement purposes. Key inputs to the calculation include a contract's maturity and strike

[67] See page 15 of Buffett [2009].

price, as well as the analyst's expectations for volatility, interest rates, and dividends. If the formula is applied to extended time periods, however, it can produce absurd results. In fairness, Black and Sholes almost certainly understood this point well. But their devoted followers may be ignoring whatever caveats the two men attached when they first unveiled their formula."

Buffett [2009; page 16] also opined on derivatives, Fannie, and Freddie:

- "Derivatives are dangerous. They have dramatically increased the leverage and risks in our financial system. They have made it almost impossible for investors to understand and analyze our largest commercial banks and investment banks. They allowed Fannie Mae and Freddie Mac to engage in massive misstatements of earnings for years. So indecipherable were Fannie and Freddie that their federal regulator, OFHEO, whose more than 100 employees had no job except the oversight of these two institutions, totally missed their cooking of the books."

Finally, it is both instructive and amusing to get Buffet's take on the efficient market theory — a principal assumption of options pricing models, in particular, and finance theory, in general:

- "I'd be a bum in the street with a tin cup if the markets were efficient."

Where Are We Now?

In this chapter, we described how portfolio insurance failed to protect investors during the 1987 stock market crash. We also discussed the collapse of Long Term Capital Management in 1998. We also discussed some of the misapplications of sophisticated financial models. The key issue, however, was the failure of business leaders and federal regulators to limit the amount of leverage of financial institutions. This was the principal lesson of the Great Depression. In fact, the goal of much of the New Deal financial/securities regulation was to limit such leverage. In the next chapter, we discuss the financial/housing crisis of the 2000s, focusing on the experience of those providing mortgage guarantee insurance.

Chapter 11 – Financial Crisis of 2000s

It was the policy of both the Clinton and Bush administrations to increase homeownership in the United States. This helped fuel the U.S. economy for a number of years. However, after a while, highly qualified homebuyers became harder and harder to find. Some banks tapped an army of unregulated mortgage brokers to keep the money flowing, even if it meant putting dangerous loans (e.g., option ARMs) in the hands of people who couldn't handle or didn't understand the risk. Some of these homebuyers had no job, no income, and no assets. Some homebuyers did not have checking accounts. Some homebuyers were not even legal residents. Some of this lending was predatory. Goulet and Herzog [2009] describe in great detail specific cases of predatory lending. They found evidence that predatory lending was targeted to the elderly and minority groups, especially those with limited fluency in the English language.

In any case, as discussed in Chapter 9, Wall Street greased the skids by taking on much of the new risk that the banks were creating. The rating agencies then blessed everything.

In this chapter, we first discuss the increase in home mortgage debt and the increase in the homeownership rate in the United States. We then discuss the recent experience of the private mortgage insurers and the FHA.

Outstanding Household Home Mortgage Debt

In Table 17, we summarize the amount of outstanding household home mortgage debt in the United States. This includes first liens as well as second liens, including home equity loans. As shown, this figure increased from less than $1.5 trillion in 1985 to more than $10.5 trillion in 2006 — a six-fold increase. While some of this was due to inflation and an expanding economy, as shown in the last column of Table 17, between 1985 and 2007 the amount of mortgage debt as a proportion of GDP more than doubled.

U.S. Homeownership Rate

In Table 18, we summarize the homeownership rate in the United States between 1976 and 2008. We first observe that during the presidency of Jimmy Carter — represented by the data from 1976 to 1980 — the homeownership rate rose slightly from 64.8 percent to 65.5 percent. However, the homeownership rate then fell during the Reagan administration from 1980 to 1988. As shown in Table 19, the homeownership rate fell markedly in the Midwest region during this period. This was in part due to a precipitous drop in the price of farm land that in turn had an adverse effect on the manufacturing industry in the Midwest. It was only likely adversely affected by the Reagan tax policy of cutting tax rates for the wealthy and increasing the payroll tax on workers.

The home ownership rate then rose slightly when George H.W. Bush was president, although it ended up below where it had been at the end of the Carter administration. There followed a large increase when Bill Clinton was president and the high technology industry was in its ascendancy. Under President George W. Bush homeownership rose to 69.2 percent at the

end of 2004. This turned out to be unsustainable as it was accomplished in part by allowing individuals with limited means of paying their mortgages to purchase homes.

To Lend or Not to Lend?

Originating lenders, mortgage insurers and other housing market participants faced choices during the 2000s. Should they sit on the sidelines and leave the risky and predatory mortgages and short-term profits to the competition? Or should they go for the short-term profits and jeopardize the long-term viability of their company? Wall Street and big lenders told the MI's and Fannie/Freddie either you assist us with the origination of these high-risk mortgages or we will do 80/20 loans ourselves and take away all of your business. At that point, the private mortgage insurers' share of mortgage originations was down to 9 percent and the Fannie/Freddie share was down to 30 percent. As a consequence, Fannie, Freddie, and some or most of the MIs as well as many of the Wall Street firms and the big lenders eventually suffered severe losses on such mortgages.

Recent Experience of Private Mortgage Insurance Companies

Table 12 summarizes the activity of the private mortgage insurance industry from 1996 through 2007. The amount of net premiums written increased steadily from $2.3 billion in 1996 to $3.8 billion 2002, but then dipped to $3.5 billion in 2003. It remained at around $3.5 billion through 2006 and then jumped to $4.2 billion in 2007. We now proceed to explain this. As noted above, the private mortgage insurers have historically teamed with Fannie and Freddie to insure loans whose loan-to-value ratio is in excess of 80 percent and that are packaged into Fannie or Freddie mortgage-backed securities. At the start of the 21st century, Wall Street firms became very aggressive in doing private label mortgage-backed securities at the expense of Fannie, Freddie, Ginnie, FHA, and the private mortgage insurers. This explains the dip in the MI business from 2002 through 2006. Towards the end of this period, the MIs as well as Fannie and Freddie were given the choice of 1) accepting high-risk mortgages or 2) seeing their business drop further and letting their competitors bypass them by doing so-called "80/20" loans. In the "80/20" loans, the borrower 1) puts no money down, 2) gets a conventional first mortgage with an 80 percent loan-to-value ratio, 3) gets a second mortgage for the remaining 20 percent, and 4) avoids private mortgage insurance. Instead of letting their business drop even further, the private mortgage insurers decided to underwrite more high-risk mortgages.

As a consequence, the loss experience of the private mortgage insurance companies, as shown in Table 14, took a turn for the worse in 2007 after a number of healthy years of experience. Specifically, according to MICA [2009], the six members of MICA had a combined ratio[68] of 153.9 percent during 2007.

[68] According to AllBusiness.com, the combined ratio is defined as the sum of the loss ratio and the expense ratio where $\text{Loss Ratio} = \frac{\text{Incurred Losses + Loss Adjustment Expense}}{\text{Earned Premiums}}$ and $\text{Expense Ratio} = \frac{\text{Incurred Expenses}}{\text{Written Premiums}}$.

During the first decade of the 21st century, at least one private mortgage insurer has gone into run-off mode and most, if not all, of the other private mortgage insurers have drastically scaled back their activities. In most cases, the reason for this retrenchment is that they are capital-constrained. Finally, during the first decade of the 21st century, some Wall Street firms wrote a large amount of private label mortgage backed securities without mortgage insurance on the underlying mortgages — i.e., by self-insuring the loans or by using credit default swaps. Again, as did some of the private mortgage insurers in the 1980s, some of these Wall Street firms were aggressive in insuring risks that, alas, could not be well-diversified. Not surprisingly, Lehman Brothers ended up in bankruptcy, Bear Stearns was purchased by JP Morgan Chase at a fire-sale price of $10 per share of common stock, and Merrill Lynch was forced to sell itself to the Bank of America. With private mortgage insurance companies forced to take a greatly reduced role and private issue mortgage-backed securities virtually non-existent, the continued existence of the government housing agencies is keeping the housing industry from coming to a dead stop.

Triad Guaranty Insurance Corporation

Triad Guaranty Inc. is a holding company that since 1987 has provided private mortgage guaranty insurance in the United States through its wholly owned subsidiary, Triad Guaranty Insurance Corporation (Triad). Because Triad is domiciled in Illinois, its primary regulator is the Division of Insurance within the Illinois Department of Financial and Professional Regulation (the Division). Effective July 15, 2008, Triad ceased issuing new commitments for mortgage guaranty insurance and began operating in run-off mode. As of Dec. 31, 2008, Triad "reported a deficit in assets of $136.7 million." This means that "recorded liabilities exceed recorded assets." "The deficit in assets is primarily the result of an increase in loss reserves of more than $800 million since Dec. 31, 2007." Also, during 2008, Triad paid more than $230 million in claim losses. Moreover, Triad "expect[s] to report a deficit in assets" at least through 2011. Although Triad expects that its "run-off will ultimately be successful," Triad is concerned that its deficit could cause the division to begin "receivership proceedings against Triad if not corrected." If Triad is "unable to gain approval for a corrective plan that addresses this issue, the division could place [Triad] into receivership proceedings, which could force [Triad] to seek protection from creditors through a voluntary bankruptcy proceeding." Under this set of circumstances, Triad "would likely be unable to continue as a going concern." (See Triad [March 16, 2009, pages 27 to 30].)

Radian

Another private mortgage insurance company, Radian, as shown in the table below, has tightened its underwriting severely. As of March 15, 2009, Radian is basically just offering one flavor instead of 31. Specifically, for new purchase mortgages, it is offering to insure mortgages subject to the following criteria:

Criterion	Limit Effective March 15, 2009	Limit Effective March 31, 2008
Maximum Mortgage Amount	$417,000	$900,000
Minimum FICO Score	720	620
Maximum Debt-to-Income Ratio	41%	50
Maximum Loan-to-Value Ratio	90%	97
Minimum Investment by Borrower	10%	3%
Borrower Reserves	Two Months' Reserves	On full doc loans will rely on AUS response and corresponding reserve requirement
Number of Units	1	1-4
Type of Unit	Detached PUD Detached Condominium	Various other types as well

Source: In addition, effective March 15, 2009, Radian stopped insuring the following types of loans: second homes, interest-only loans, loans to borrowers with "non-traditional" credit, cooperatives, manufactured housing, attached condominiums, attached PUDs, rate/term refinancings and cash-out refinancings.

PMI Mortgage Insurance Company

Another private mortgage insurance company, PMI Mortgage Insurance Company, has decided to severely limit the amount of new business that it plans to write during 2009 to only $10 to $12 billion. This compares to 2008 when PMI wrote $22.7 billion in new insurance. (See transcript of PMI Group Q4 2008 Earnings Call, March 16, 2009.) It plans to accomplish this by tightening its underwriting standards, although, not going as far as Radian.

It is anticipated that, when reported, the combined ratio for 2008 will be similar to that of the disastrous result obtained for 2007.

Old Republic Mortgage

Mortgage insurance company is just one piece of a big insurance company, Old Republic International Corporation. The company reported a cumulative loss ratio of 190 percent for the 18-month period from July 1, 2007, through Dec. 31, 2008, on its mortgage guaranty insurance business. They expect to continue to be under pressure for another four to six quarters. Their new MI business "has been somewhat declining, particularly since the second quarter of 2008." They own about 15 percent of MGIC and about 10 percent of PMI. Old Republic has 10-11 percent share of market through its own business and another 5 to 6 percent through its ownership

interests in MGIC and PMI. Although they aver they could raise capital to increase market share, they seemingly want to continue running their business at current levels of market share.

MGIC

During the fourth quarter of 2008, MGIC insured $5.5 billion in new commitments. This represented a drop of 40 percent from the $9.7 billion figure of the third quarter of 2008 and a 75 percent decline from that of the fourth quarter of 2007. Nevertheless, MGIC continues to maintain a market share of about 24 percent. Hence, the entire private mortgage insurance industry has apparently seen its new business drop by about 75 percent on a year-over-year basis. (See MGIC [Jan. 20, 2009; pages 2, 6, and 11].)

Genworth[69]

Genworth is the parent company of what was once General Electric's mortgage insurance subsidiary. During 2008, Genworth's U.S. mortgage insurance operation "pulled back sharply on products and geographies as part of [its] risk management rigor." Genworth expects that this tightening will reduce the amount of new business commitments for 2009 compared to 2008. Genworth's goal is to remain "capitalized at levels well below the statutory limit of 25-to-1." This means that if market conditions worsen, Genworth is prepared to tighten its underwriting standards further in order to preserve its capital. Finally, Genworth is "contemplating having less exposure to housing markets" over time.

FHA Single-family Activity in the 2000s

Because FHA operates under federal statutes, it was unable to aggressively compete with other market participants for zero-down-payment mortgages. As a consequence, as shown in Table 15, FHA's market share of single-family home purchases dropped from a high of almost 8 percent in both fiscal years 1993 and 1999, to less than 2 percent in both fiscal years 2005 and 2006. During FY 2007, FHA's market share barely exceeded 2 percent. However, as the housing crisis intensified in 2008 and beyond, FHA's market share jumped to 8.14 percent during FY 2008 and soared to over 13 percent for the first five months of FY 2009.

In Table 16, we take a slightly different perspective in that we look at market share in terms of the dollar amount of the mortgages at their origination. Such mortgages include refinancings. Here, we see that FHA's share dropped from 11.9 percent in 1994 to 1.8 percent in both 2005 and 2006 and then rebounded to 16.9 percent in 2008. The private mortgage insurers saw their share peak in 1995 at 17.1 percent and then drop to 8.6 percent in 2005. Because of the previously mentioned pressure from other industry participants, the private mortgage insurers increased their market share to 14.7 percent in 2007; only to have it fall back to 12.9 percent in 2008 as the private mortgage insurers were forced to retrench due to their capital constraints.

In the next two sections, we summarize FHA's current premium rate structure and its mortgage limits, respectively.

[69] See Genworth's Q4 2008 Earnings Call Transcript online at http://seekingalpha.com.

2009 MMI Fund Mortgage Insurance Premiums

In the table below we summarize the mortgage insurance premium rates that FHA currently charges for (forward) single-family mortgages insured under its MMI Fund.

2009 MMI Fund Mortgage Insurance Premiums				
Loan-to-Value Ratio	Type of Loan			
	Purchase Mortgage or Regular Refinancing		Streamline Refinancing	
	Premium		Premium	
	Up-front	Annual	Up-front	Annual
At least 96.5%	1.75% of Face Amount of Loan	.55 percent of average annual scheduled outstanding balance	1.5% of Face Amount of Loan	.5 percent of average annual scheduled outstanding balance
Less than 96.5%		.5 percent of average annual scheduled outstanding balance		

FHA Mortgage Limits

The standard maximum single-family mortgage amount that FHA will insure during 2009 is $417,000; although, in high-cost areas within the 48 contiguous states, this amount can be as high as $729,750.

VA Loan Funding Fee[70]

Instead of a mortgage insurance premium, the VA charges most homebuyers what it calls a "funding fee." The fee is payable at the origination of the mortgage and varies according to (1) the type of military service, (2) the loan-to-value ratio of the mortgage, and (3) the number of times the individual has taken out a VA-backed mortgage. We summarize the fee structure in the two tables below:

Funding Fee for Veteran or Regular Active Duty Military		
Type of Mortgage		
Loan-to-Value Ratio	Number of Prior VA Mortgages	VA Funding Fee
≤ 90%	Any	1.25%
> 90% but ≤95%	Any	1.50%
>95%	None	2.15%
>95%	One or more	3.30%

[70] The source of the material in this section is http://www.valoans.com/va_facts_funding.cfm.

Funding Fee for Reserves or National Guard		
Type of Mortgage		
Loan-to-Value Ratio	Number of Prior VA Mortgages	VA Funding Fee
≤ 90%	Any	1.50%
> 90% but ≤95%	Any	1.75%
>95%	None	2.40%
>95%	One or more	3.30%

"Cash-out refinancing loans for regular military requires a 2.15 percent fee for first-time users and a 3.3 percent fee for subsequent users. For Reserves/National Guard, the requirement is a 2.4 percent fee for first time users and a 3.3 percent fee for subsequent users. On interest rate reduction loans [also known as streamline refinancings], the VA funding fee is .50 percent and it is 1.0 percent on manufactured home loans."

In addition, there are three conditions under which veterans and surviving spouses "are exempt from paying the funding fee:

- Veterans receiving VA compensation for service-connected disabilities.
- Veterans who would be entitled to receive compensation for service-connected disabilities if they did not receive retirement pay.
- Surviving spouses of veterans who died in service or from service-connected disabilities (whether or not such surviving spouses are veterans with their own entitlement and whether or not they are using their own entitlement on the loan)."

VA Maximum Guarantee Amount

While the VA does not have an upper limit on the size of a mortgage it insures, it does have an upper limit on the amount of money it pays in the event of an insurance claim. This limit is known as the *maximum guarantee amount*. The current maximum guarantee amount is a function of the mortgage amount as specified in the following table.

VA Maximum Guarantee Amount	
Loan Amount	Maximum Guarantee Amount
$45,000 or less	50% of loan amount
$45,000.01 to $56,250.00	$22,500
$56,250.01 to $144,000.00	Lesser of $36,000 and 40% of loan amount
More Than $144,000	25% of loan amount up to 25% of area loan limit*

* Standard area loan limit is $417,000. High-cost area loan limit can be as high as $1,094,625. For more details see http://www.homeloans.va.gov/loan_limits.htm.

So, for example, if the mortgage amount is $400,000, then the maximum claim that the VA will pay is $100,000 or 25 percent of $400,000. However, if the standard loan limit of $417,000 applies and the original mortgage amount is $500,000, then the maximum claim that the VA will pay is $106,250 or 25 percent of $417,000.

Chapter 12 – Concluding Remarks and Summary

In this work, we have briefly sketched the history of banking from the inception of the First Bank of the United States to the present day. We have briefly discussed some of the regulatory functions of the three federal banking regulators — the OCC, the Federal Reserve Board, and the FDIC — as well as the SEC.

We have also provided a capsule summary of the history of the mortgage guarantee insurance industry in the United States. At the end of the Roaring '20s, there were 50 private mortgage insurance companies in New York State. In 1934, there was effectively zero. About half of the private mortgage insurance companies that were in business during the early 1980s were effectively out of business at the end of the decade. Almost all of the private mortgage insurance companies in business today are facing extreme financial challenges due to the risks they accepted in recent years. Meanwhile, FHA and VA have had a large increase in their market share.

A passage from the Bible's Book of Genesis provides a concise history of the mortgage insurance industry. In that passage, Jacob, son of Joseph, "interpreted Pharaoh's dream as foretelling that seven years of abundance would be followed by seven years of famine and advised the king to appoint some able man to store the surplus grain during the period of abundance." (See Wikipedia entry for "Joseph.")

Implications for Future

Return to more heavily regulated financial industry? Federal regulators should guide companies, help them to (1) adhere to sound principles of risk management and (2) avoid imprudent business practices, and thereby reduce the risk of financial bubbles and crises. Gruver [2008]: "Carter Glass saved American capitalism through prudent regulation that prevented past excesses without stifling innovation. The [Obama] administration will have to accomplish that feat again."

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TABLE 1
Number of Suspended Banks
1894-1913

Year	Number of Suspensions
1894	89
1895	124
1896	155
1897	145
1898	67
1899	36
1900	36
1901	69
1902	54
1903	52
1904	128
1905	80
1906	53
1907	91
1908	155
1909	79
1910	63
1911	87
1912	80
1913	105
Total	1,742

Source: US Census Bureau, *Historical Statistics of the United States: Colonial Times to* 1970, Part 2, page 1038, available at:
http://www2.census.gov/prod2/statcomp/documents/CT1970p2-11.pdf.

TABLE 2
Number of Suspended Banks
1914-1933

Year	Number of Suspensions
1914	151
1915	152
1916	52
1917	49
1918	47
1919	63
1920	168
1921	505
1922	367
1923	646
1924	775
1925	618
1926	976
1927	669
1928	499
1929	659
1930	1,352
1931	2,294
1932	1,456
1933	4,004
Total	15,502

Source: US Census Bureau, *Historical Statistics of the United States: Colonial Times to* 1970, Part 2, page 1038, available at:
http://www2.census.gov/prod2/statcomp/documents/CT1970p2-11.pdf.

TABLE 3
Number of Banks Closed Because of Financial Difficulties
1934-1970

Year	Number of Closings
1934	61
1935	32
1936	72
1937	83
1938	80
1939	72
1940	48
1941	16
1942	23
1943	5
1944	2
1945	1
1946	2
1947	6
1948	3
1949	9
1950	5
1951	5
1952	4
1953	5
1954	4
1955	5
1956	3
1957	3
1958	9
1959	3
1960	2
1961	9
1962	3
1963	2
1964	8
1965	9
1966	8
1967	4
1968	3
1969	9
1970	7
Total	625

Source: US Census Bureau, *Historical Statistics of the United States: Colonial Times to* 1970, Part 2, page 1039, available at:
http://www2.census.gov/prod2/statcomp/documents/CT1970p2-11.pdf.

TABLE 4
Margin Requirements for Credit Extended Under Regulations T, U, and X

Minimum Percent of Market Value Required				
Effective Date		**Type of Security**		
Year	**Date**	**Common Stocks**	**Convertible Bonds**	**Short Sales**
1934	October 1	25-45%	-	-
1936	February 1	55	-	-
1936	April 1	55	-	-
1937	November 1	40	-	50%
1945	February 5	50	-	50
1945	July 5	75	-	75
1946	January 21	100	-	100
1947	February 1	75	-	75
1949	March 3	50	-	50
1951	January 17	75	-	75
1953	February 20	50	-	50
1955	January 4	60	-	60
1955	April 23	70	-	70
1958	January 16	50	-	50
1958	August 5	70	-	70
1958	October 16	90	-	90
1960	July 28	70	-	70
1962	July 10	50	-	50
1963	November 6	70	-	70
1968	March 11	70	50%	70
1968	June 8	80	60	80
1970	May 6	65	50	65
1971	December 6	55	50	55
1972	November 24	65	50	65
1974	January 2	50	50	50

Source: Private e-mail received on March 21, 2008 – 23 changes in all.

TABLE 6
Operations of Private Mortgage Insurance Companies in New York State

Year	Number of Companies	Combined Capital and Surplus (in Millions)	Total Guarantees Outstanding (in Millions)
1921	12	64	548
1922	14	71	652
1923	15	55	781
1924	20	64	981
1925	26	93	1,214
1926	28	121	1,522
1927	37	141	1,837
1928	45	183	2,169
1929	37	200	2.407
1930	50	204	2,867
1931	50	200	2,851
1932	47	184	2,823

Source: Alger [1934].

TABLE 7
Number of Section 221(d)(2) Mortgage Originations
1964-1980

Year	Number of Mortgage Originations
1964	27,942
1965	55,595
1966	35,962
1967	30,681
1968	41,531
1969	83,050
1970	94,803
1971	115,337
1972	87,585
1973	50,669
1974	33,553
1975	26,799
1976	26,542
1977	33,388
1978	30,945
1979	23.491
1980	12,448

Sources: 1970 and 1978 FHA Annual Reports for 1964-1973 data, and FHA Single-family Data Warehouse as of May 31, 2009 for 1974-1980 data.

TABLE 8
Private Mortgage Insurance Industry
Combined Ratios

Year	Active Companies	Total Industry
1981	89.7%	75.1%
1982	122.7	109.0
1983	118.9	116.4
1984	111.7	109.1
1985	145.2	151.1
1986	123.2	168.7
1987	140.3	220.7
1988	113.2	155.4
1989	88.2	130.5
1990	78.7	95.4
1991	69.3	80.2

TABLE 11
Distribution of Insured Single-Family Mortgage Originations
by Type of Insurance
1982-1993

Year of Origination	FHA		VA		Private		Total
	Number	Percent	Number	Percent	Number	Percent	Number
1982	106,468	18.0	92,957	15.7	391,060	66.2	590,485
1983	395,048	27.9	285,696	20.2	736,777	52.0	1,417,521
1984	213,814	15.2	198,431	14.1	990,529	70.6	1,402,774
1985	380,012	28.9	193,178	14.7	741,208	56.4	1,314,398
1986	855,923	47.2	345,935	19.1	612,434	33.8	1,814,292
1987	1,218,614	55.5	451,125	20.6	524,334	23.9	2,194,073
1988	591,912	47.4	210,999	16.9	445,139	35.7	1,248,050
1989	595,237	51.2	182,559	15.7	385,429	33.1	1,163,225
1990	644,749	52.8	192,601	15.8	383,635	31.4	1,220,985
1991	567,386	44.1	186,205	14.5	532,525	41.4	1,286,116
1992	600,456	33.4	289,901	16.1	907,561	50.5	1,797,918
1993	994,881	37.5	457,693	17.3	1,198,307	45.2	2,650,881

Sources: FHA, VA, Mortgage Insurance Companies of America as reported in Canner and Passmore [1994].

TABLE 12
Non-Agency Residential Mortgage-Backed Securities Originations

Year	Dollar Amount of Single-Family Mortgages Originated (in Billions of Dollars)	Percent of Total Residential Mortgage-Backed Securities Originated
1998	203.2	21.9%
1999	147.9	17.8%
2000	136.0	22.1%
2001	267.3	19.7%
2002	414.0	22.3%
2003	586.2	21.6%
2004	864.2	45.9%
2005	1,191.3	55.3%
2006	1,142.4	55.7%
2007	707.0	37.9%
2008	51.8	4.2%

Source: *Inside MBS and ABS.*

TABLE 13
Total Private Mortgage Insurance Industry
Net Premiums Written

Calendar Year	Net Premiums Written (Billions of Dollars)
1996	2.3
1997	2.7
1998	2.8
1999	3.0
2000	3.3
2001	3.7
2002	3.8
2003	3.5
2004	3.4
2005	3.5
2006	3.5
2007	4.2
2008	N/A

TABLE 14
Private Mortgage Insurance Industry
Combined Ratio

Calendar Year	Combined Ratio
1996	70.77%
1997	63.42%
1998	58.03%
1999	45.37%
2000	35.73%
2001	40.74%
2002	45.43%
2003	48.34%
2004	62.50%
2005	60.44%
2006	65.01%
2007	153.97%

Source: MICA.

TABLE 15
FHA Single-Family Activity in the Home Purchase Market
Through February 28, 2009

Fiscal Year	FHA Share of Home Purchase Activity
1993	7.91%
1994	7.42
1995	6.46
1996	7.43
1997	7.73
1998	7.12
1999	7.96
2000	7.71
2001	7.87
2002	6.93
2003	5.09
2004	3.28
2005	1.89
2006	1.75
2007	2.04
2008	8.14
2009[71]	13.18

Source: FHA/HUD available at:
http://www.hud.gov/offices/hsg/comp/rpts/fhamktsh/fhamkt.cfm.

[71] First five months of FY 2009 – i.e., through February 28, 2009.

TABLE 16
Distribution of Single-Family Mortgage Originations by Type of Insurance
Based on Dollar Amount of Originations
1992-2008

Year	Type of Insurance			
	FHA	VA	Private Mortgage Insurance	No Insurance
1992	5.4%	2.9%	11.3%	80.4%
1993	7.8	4.1	13.4	74.8
1994	11.9	6.4	17.0	64.8
1995	7.1	3.7	17.1	72.0
1996	9.1	4.0	16.2	70.7
1997	8.6	3.1	14.1	74.2
1998	7.1	2.9	12.9	77.0
1999	9.3	3.8	14.4	72.5
2000	8.9	2.1	15.6	73.4
2001	5.9	1.6	12.8	79.7
2002	5.0	1.5	11.7	81.8
2003	4.2	1.7	10.2	83.9
2004	3.2	1.2	9.1	86.5
2005	1.8	.8	8.6	88.8
2006	1.8	.8	8.9	88.4
2007	3.3	1.0	14.7	81.0
2008	16.9	2.7	12.9	67.5

Source: Inside Mortgage Finance.

We have excluded loans insured by the Farmers Home Administration as these are usually negligible.

TABLE 17
Outstanding Household Home Mortgage Debt

End of Year	Amount of Home Mortgage Debt	Gross Domestic Product	Ratio of Debt to GDP
1985	$1.450 trillion	$4.220 trillion	34.4%
1990	$2.506 trillion	$5.803 trillion	43.2
1995	$3.334 trillion	$7.398 trillion	45.1
2000	$4.821 trillion	$9.817 trillion	49.1
2005	$8.873 trillion	$12.422 trillion	71.4
2006	$9.866 trillion	$13.178 trillion	74.9
2007	$10.540 trillion	$13.808 trillion	76.3
2008 (Q3)	$10.542 trillion	$14.265 trillion	73.9

Sources: Federal Reserve Board of Governors and Bureau of Economic Analysis.

TABLE 18
Homeownership Rate in United States

End of Year	Rate in Percent
1976	64.8%
1980	65.5%
1988	63.8%
1992	64.4%
2000	67.5%
2001	68.0%
2002	68.3%
2003	68.6%
2004	69.2%
2005	69.0%
2006	68.9%
2007	67.8%

Source: U.S. Bureau of the Census.

TABLE 19
Homeownership Rate in United States
(in Percent)

End of Year	U.S. Totals (1)	Midwest Region (2)	Differential (3) = (2) - (1)
1976	64.8%	69.2%	4.4%
1980	65.5%	70.1%	4.6%
1988	63.8%	67.6%	3.8%
1992	64.4%	67.8%	3.4%
2000	67.5%	73.1%	5.6%
2001	68.0%	73.5%	5.5%
2002	68.3%	73.3%	5.0%
2003	68.6%	73.5%	4.9%
2004	69.2%	73.7%	4.5%
2005	69.0%	72.8%	3.8%
2006	68.9%	73.0%	4.1%
2007	67.8%	71.7%	3.9%
2008	67.5%	71.4%	3.9%