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CENTER FOR REAL ESTATE AND URBAN ECONOMICS

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WORKING PAPER NO. 95-232

**ECONOMIC CONSEQUENCES OF THE
RODASH DECISION ON THE U.S. ECONOMY:
TESTIMONY BEFORE THE U.S. HOUSE OF
REPRESENTATIVES SUBCOMMITTEE ON
FINANCIAL INSTITUTIONS AND CONSUMER
CREDIT, COMMITTEE ON BANKING AND
FINANCIAL SERVICES**

By

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Robert H. Edelstein
David R. Weinstein

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**"Economic Consequences of the Rodash Decision
on the U.S. Economy"**

**Testimony Before the U.S. House of Representatives
Subcommittee on Financial Institutions
and Consumer Credit**

Committee on Banking and Financial Services

May 24, 1995

WORKING PAPER NO. 95-232

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Testimony of

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University of California at Berkeley

Subcommittee on Financial Institutions and Consumer Credit

House Committee on Banking and Financial Services

May 24, 1995

Madam Chairwoman and Members of the Subcommittee:

Thank you for inviting me to testify today on HR 1362, the "Financial Institutions Regulatory Relief Act of 1995." My testimony will focus upon the economic implications that the 1994 Rodash v. AIB Mortgage decision will have upon residential finance activity, the housing finance system and the U.S. economy.

I have prepared a study which I have submitted for the record. My summary comments will address three significant but perhaps unappreciated potential impacts of the Rodash decision:

- First, interest rates paid by mortgage borrowers can be expected to rise between one-quarter of one percent and one percent (vis a vis other interest rates in the marketplace.) For a typical borrower, this would translate into an increase in the monthly mortgage payment of between \$25 and \$100, or between \$400 and \$1,200 a year.*
- Second, the secondary market will price for the unanticipated risks created by the Rodash decision, thereby increasing the cost of home mortgages and reducing their availability. This would reverse three decades of bipartisan Congressional actions that fostered mortgage securitization in the secondary market and lowered financing costs for American homebuyers.*
- Third, the fifty class actions filed after Rodash could, if the plaintiffs prevail, cause the insolvency of a number of financial institutions backed by the federal government and of government sponsored enterprises. This in turn could generate billions of dollars of liability for the Treasury and a problem similar in magnitude to the S&L debacle of the last decade.*

In essence, the potential economic implications of the Rodash decision are significant, for home borrowers, the home finance sector, and American taxpayers.

Now I will discuss each of these three points in greater detail.

First, how would the Rodash decision lead to rising mortgage interest rates?

Simply put, Rodash rescissions would increase the risks of mortgage lending as well as increase the cost of doing business. Since the mortgage lending business would need to include "Rodash Risk" into the pricing of mortgage products, mortgage interest rates would necessarily increase. As illustrated in my study (chart at page 21), the additional uncertainty would most likely cause home mortgage rates to rise between one quarter of one percent and one percent. This translates into an increase in the typical monthly mortgage payment of between \$25 and \$100, or between \$400 and \$1,200 a year.

Second, how will Rodash impact on the secondary mortgage markets?

The secondary market purchases mortgages from originators, packages them into securities, and sells the securities to institutional investors such as pension funds, insurance companies, thrifts and banks. The growth of the secondary market has become a linchpin of the housing finance system, providing a reliable source of credit to homebuyers even during periods of high interest rates. Rodash calls into question the reliability of the representations and warranties relied upon by the secondary market. This undermines the basic functioning of the secondary mortgage market.

This is why unanticipated Rodash risks could impact the secondary market, increasing the cost and reducing the availability of home mortgages. This would reverse three decades of bipartisan Congressional actions which have fostered the secondary residential mortgage market and lowered home financing costs for American homebuyers.

Third, how costly could Rodash litigation be to the housing finance sector and the Federal government?

During the last three years, more than \$1 trillion dollars worth of residential mortgage loans in the United States have been refinanced. The housing finance system is thinly capitalized, which is appropriate because home loan investments are considered to be very safe investments. If even a small percentage of all refinanced loans become Rodash rescissions, the dollar losses will jolt the balance sheets of institutions in the housing finance sector. And because these institutions are thinly capitalized, a substantial number of Rodash rescissions could force insolvencies at many institutions. The federal government directly or indirectly guarantees the solvency of many of these institutions through the FDIC or the mortgage-backed securities through Ginnie Mae, Fannie Mae, and Freddie Mac.

Hence, the fifty class actions filed after Rodash could, if the plaintiffs prevail, cause more than one hundred billion dollars of liability, and the insolvency of a number of financial institutions and government sponsored enterprises backed by the federal government. This in turn could expose the Treasury to billions of dollars of liability, and a problem similar in magnitude to the S&L debacle of the last decade.

I would be very happy to take any questions you may have.

**ECONOMIC CONSEQUENCES OF
THE RODASH DECISION ON THE US ECONOMY**

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May 22, 1995

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I. INTRODUCTION

The purpose of this paper is to outline the economic implications of the 1994 Rodash v. AIB Mortgage decision upon residential refinance activity, the housing finance system and the U.S. economy. An understanding of how this decision will affect both government and private industry is important to determine whether any legislative action is necessary.

The analysis is divided into three major sections followed by a summary. The first section provides background on the Truth in Lending Act (TILA), Regulation Z, the right of loan rescission for refinanced residential loans and the mechanics of rescission. The paper reviews the Rodash decision and estimates the principal value of loans it may affect.

The second section examines the direct and indirect economic impacts that a large scale rescission of existing loans with Rodash related TILA violations would have upon the economy in general and the banking sector in particular. The effects of Rodash upon mortgage interest rates and market efficiency are discussed. The potential fiscal responsibility of the U.S. Treasury in responding to these impacts is also considered.

The third section investigates how the Rodash decision and TILA, if not amended, will impact future lending practices. The analysis pays particular attention to the new costs associated with mortgage lending and how these costs will affect the consumer.

The major conclusions of our analysis are as follows:

1. The decision in the Rodash case would permit a consumer protection provision in TILA to be used to generate unexpected windfalls for mortgage refinance borrowers. Lender liabilities that may arise from this decision are estimated to be in excess of \$100 billion to satisfy Rodash related claims.

2. The potential impact of pending or threatened Rodash litigation on firms engaged in home finance could have ramifications for our economy as significant as those stemming from the savings and loan debacle of the 1980s. Left unaddressed, claims already filed in class action suits following Rodash, if successful, could lead to the failure of many banks, mortgage banks and savings and loans and weaken many Wall Street firms.

3. If private sector financial institutions fail, several government or government related agencies can be expected to incur significant costs to cover these failures. Should no regulatory relief be enacted, it may be prudent for Congress in its seven year budget projection to allocate significant reserves to cover losses to the Treasury associated with Rodash related litigation. These reserves would cover the both Treasury's direct obligation to fund losses incurred by GNMA and its implied obligation to cover losses incurred by FNMA, FHLMC, and the FDIC insurance funds BIF and SAIF.

4. The Rodash decision is at odds with the intent of TILA to protect the consumer. The potential failure of many financial institutions will reduce competition in mortgage lending, leading to a likely increase in mortgage rates for consumers and a corresponding increase in monthly mortgage payments.

There are many potential dislocations in housing finance and the general economy. Some of these dislocations include:

- A. *Reduction in capital availability for refinance mortgage loans*
- B. *Decline in home values*
- C. Decline in housing construction

5. While there may be debate regarding some of the regulatory reform issues before Congress, there is some particular urgency in responding to this issue. Given the disruption in the home finance and home building industries, if mortgage rates do, indeed, rise, one cannot ignore the possibility that, unemployment is likely to rise and state and federal tax revenues likely to fall. These events will occur because higher mortgage rates lead to lower housing values. Homeowners that now feel poorer will reduce their discretionary spending leading to a general economic slowdown.

II. BACKGROUND ON TILA, THE RIGHT OF RESCISSION, THE RODASH DECISION AND THE CURRENT MAGNITUDE OF RODASH LIABILITY

The Truth in Lending Act and the Right of Rescission

In order to protect consumers and provide a standard for mortgage comparisons, Congress passed the TILA in 1968 and subsequently added a set of revisions. To implement TILA, the Federal Reserve Board adopted Regulation Z which dictates that lenders provide borrowers with the cost of financing which takes into account mortgage interest as well as many of the non-recurring closing costs incurred by the borrower at closing. This cost of financing must be summarized in two forms. First, an "Annual Percentage Rate" (APR) reflects an annualized cost of capital for the borrower assuming the loan is held until maturity. The APR is an internal rate of return calculation that incorporates certain closing costs and interest charges. Second, the "Finance Charge" (FC) is the non-discounted total dollar value of interest and fees assuming the loan is held until maturity. The Federal Reserve was given the authority by Congress to set the tolerance for FC. Under Regulation Z, the Fed set the tolerance at \$10.

The purpose and intent of TILA is straightforward. Since placing a lien on one's home is a very serious undertaking, Congress did not want consumers to do so without the benefit of an easy method to comparison shop. TILA assumes mortgage lenders are better informed than

consumers regarding the cost of credit. Therefore, TILA requires that the lender disclose the cost of credit in two easily understandable measures, the APR and FC.

How might a consumer use these TILA disclosures, the FC and the APR, to choose the "best deal"? A borrower might simply choose the loan with the lowest APR or lowest FC. However, this strategy may or may not lead to the best economic decision. The quality of lender service, controls for variation among lenders regarding which items are included in the FC and the borrower's time horizon and the possibility of refinance are not incorporated in the APR or FC. A detailed analysis of the pitfalls borrower choice using APR and FC is presented in the appendix.

The right of rescission (ROR) embedded in TILA gives borrowers the right to rescind certain refinance loans and other liens upon their homes until midnight of the third business day following the later of (1) the consummation of the transaction, (2) the delivery of accurate, required disclosures and (3) the delivery of the notice of the rescission right to the consumer. Congress created ROR to protect consumers from, among other things, the fraudulent practices of door-to-door home improvement contractors (e.g., aluminum siding salespeople), whose scams in the Washington D.C. area had been well publicized at the time TILA was passed. TILA states that failure of lenders to comply with (2) and (3) may not extend the borrower's right to rescind beyond three years. However, state courts in Colorado, New York, Illinois and a bankruptcy court in New Jersey have re-interpreted this time limit and allowed rescissions as long as 8 years from origination.

While (3) may occur from time to time, the focus of this paper is on condition (2), the requirement that lenders provide borrowers the delivery of accurate, required notices of APR and FC. What is meant by "accurate"? In 1980, Congress set the tolerance for accuracy at 1/8 of 1% of the true APR. However, Congress also authorized the Federal Reserve Board to establish tolerances for the other numerical disclosure, the FC. Under Regulation Z, the Fed set the tolerance at \$10, well below the corresponding 1/8th of 1% APR tolerance of even the smallest mortgage loans. The following table illustrates the dollar value of the TILA tolerance based upon an error of 1/8 of 1% in computing APR for 30 year fixed rate mortgages carrying an 8% coupon and priced at par with no closing costs.

Principal Amount of Loan	TILA Finance Charge Tolerance Based Upon 1/8 of 1% APR
\$40,000	\$470
\$80,000	\$940
\$150,000	\$1,762
\$200,000	\$2,350

\$300,000

\$3,525

Using the \$80,000 loan as an example, these tolerances are computed as follows:

1. Compute the monthly mortgage payment on the loan. In this case, the \$80,000 loan carries a monthly payment of \$587.01. The present value of these payments at 8% is \$80,000 calculated as

$$\$80,000.00 = \text{sum from } \{t=1\} \text{ to } 360 \{ \$587.01 \} \text{ over } \{ 1 + (.08000 \text{ over } 12) \}^{-t} \quad (1)$$

2. Now, discount the loan payments at a rate of 8 1/8%. This discount rate reflects the original yield of the loan plus the APR tolerance as outlined in TILA.

$$\$79,059.11 = \text{sum from } \{t=1\} \text{ to } 360 \{ \$587.01 \} \text{ over } \{ 1 + (.08125 \text{ over } 12) \}^{-t} \quad (2)$$

3. Subtract the present value (2) from the present value in (1). The result is the dollar value of the APR tolerance as set forth in TILA.

$$\$80,000 - \$79,059.11 = \$940.89$$

An error in the APR or FC may be made by the lender in one of two general ways either by design or by error.

Case 1: Items which are categorized as FC, whether or not they are present on the settlement statement, are not used in calculating the APR or FC.

Case 2: Items which are not categorized as FC, whether or not they are present on the settlement statement, are used in calculating the APR or FC.

Mechanics of Rescission

In order to better understand how rescission affects mortgage market entities, the events that occur when a loan is rescinded are illustrated under the following three scenarios:

1. The loan is held in portfolio by the lender.
2. The loan is sold to the secondary market and is within the conforming limit set by FNMA or FHLMC or the loan is FHA-insured or VA-guaranteed and thus eligible for GNMA-guaranteed securities.
3. The loan is sold to the secondary market and exceeds the conforming limit set by FNMA and FHLMC.

To rescind a loan, the borrower informs the entity servicing the loan of its decision. The servicer, on behalf of the creditor, has 20 days to return to the borrower all interest and closing costs including third party charges. Once such interest and charges are returned to the borrower, the borrower must return the unpaid principal balance. It should be noted that it is common for courts to use their equitable powers to modify the rescission mechanism to ensure the borrower's timely repayment of the principal. Otherwise, creditors run the risk of having an outstanding loan which, given the termination of the security interest in the mortgage, is now unsecured.

Once the rescission request is made, the chain of events varies somewhat among the three scenarios. For the purposes of discussion in this section, it is necessary to define some of the players involved. The originator prepares the original loan documents and funds the loan. The servicer receives and records the monthly mortgage payments and passes through the appropriate funds to the owner of the rights to the mortgage cash flows less a fee for servicing each loan. The originator and the servicer may be the same entity.

When the loans are sold by the originator, it makes a series of "Representations and Warranties" (RW) to the assignee. One of the RW made is that the loans conform with TILA. The assignee also assumes responsibility for dealing with loan rescission, should it occur.

Loans destined for the secondary market are often sold by the originator to a conduit which accumulates loan production until there is a sufficient mass to form a pool. If the loans are FHA/VA, the conduit will typically issue a security backed by a GNMA guarantee of the payment of principal and interest to the investors. If the loans are conventional and conforming, then one of the two government sponsored enterprises (GSEs), FNMA or FHLMC, will provide similar guarantees to investors. These GSEs also function as the issuer of the related MBS. If the loans exceed the conforming limit, the conduit may issue a security which provides for any default loss protection through a third party guarantee or insurance coverage or through the structure of the security (e.g. senior/subordinated structure). In exchange for the relatively higher yields of MBSs than comparable U.S. Treasury obligations, MBS investors have knowingly assumed

prepayment risks attributable to changes in market interest rates but have not knowingly assumed a risk of prepayments resulting from Rodash rescissions.

To make the concept of rescission concrete, consider a \$100,000 30 year fixed rate loan with an 8% interest rate. After 3 years the borrower has paid \$23,695 in interest and the loan balance is \$97,280. Assume the borrower paid \$2,000 in closing costs. Therefore, the sum of money due the borrower upon rescission would be \$25,695.

Loans Held in Portfolio

Lenders who hold a loan in portfolio may or may not sell the servicing rights to a third party. To consider the case of "widest involvement," assume that the originator has sold the servicing rights. For the loan rescission example above, the borrower would issue the rescission notice to the servicer thus creating the obligation of the holder to pay the borrower the sum of \$25,695 within 20 days of receipt of the rescission request.

While the rescission requests are generally administered by the servicer (as the entity with which the borrower has regular contact), the portfolio lender will bear the ultimate loss upon such rescission. In addition, the servicer might also have recourse against the originator for the loss it incurred in servicing income. This recourse would be available if the originator has made RW to the servicer (which would entitle the servicer to be reimbursed for any amounts paid out to a rescinding borrower as well as to recover its own losses) that the loan behind the servicing rights being purchased conformed to TILA when in fact it did not.³

If the originator does not have the capital to pay the borrower, it may not be able to absorb the losses and liabilities associated with rescission and decide to declare bankruptcy. If the originator is a bank or savings and loan association, the FDIC must then step in to cover all insured deposits. In this case, the loan likely will be held in suspense as a nonperforming, unsecured loan, the mortgage having been terminated. Except for the highly unusual circumstance where a court would order forfeiture of the entire loan for the creditor's failure to return the interest and charges owed the borrower, the borrower will ultimately have to return the principal at par. In the example, the outstanding principal is \$97,200 and the amount to be returned to the borrower is \$25,695. Some courts have permitted an offset where the borrower could return the principal net of the money owed by the originator. That sum would be $\$97,200 - \$25,695 = \$71,505$.

³ If the servicer has resold the servicing rights to another servicer, the second servicer will also have a claim against the original servicer for breach of RW by the original servicer.

Loans Sold to the Secondary Market With U.S. or U.S. Agency Guarantees

In order to fully appreciate the impact of Rodash on the economy, it is important to review the basic mechanics of the secondary market in MBS guaranteed by FNMA, FHLMC or GNMA. An example using a commercial bank is typical of the process.

FLOW OF FUNDS SECONDARY MORTGAGE MARKET

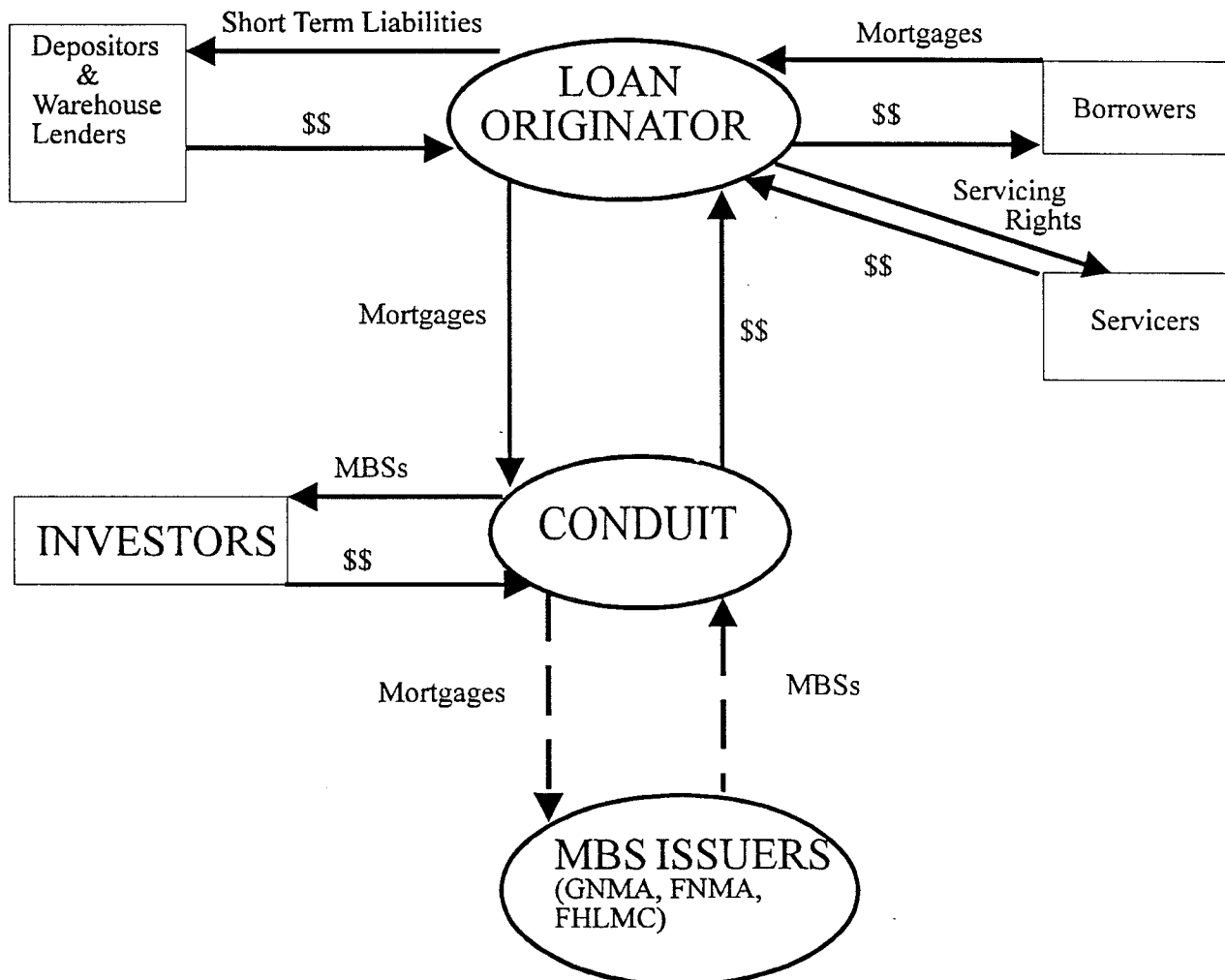


Figure 1

- 1. Raise Capital.** The lender raises the capital needed for a \$100k loan by taking deposits.
- 2. Make Mortgage.** The lender makes a \$100k mortgage loan to a home buyer.

3. Sale of Mortgage. The lender may sell the mortgage to a conduit or GSE or package the loan itself into a pool (or collection) of mortgages to be securitized by the GSE (or guaranteed by GNMA). Upon sale, the lender has the \$100k to lend to another home buyer.

4. Loans are swapped for MBSs. The lender or conduit swaps a pool of mortgages for an MBS certificate backed by this pool of mortgages. The certificate may be issued by one of the Agencies (i.e., FNMA or FHLMC) or a private issuer (in the case of MBSs guaranteed by GNMA).

5. MBSs are Sold to the Public. Interests in the MBSs are sold to investors: individuals, mutual funds, pension funds, and so forth. Through this process, capital loaned from originator to borrower "flows back" from investors to the originator where it may be used for new loans.

This whole securitization process can take as little as 30 days. An example of how capital might flow from investors to borrowers is illustrated in Figure 1. Depositors or warehouse lenders provide the initial capital to mortgage originators through very short term loans. The originators then sell their loans to conduits. A conduit accumulates mortgage loans for pooling into mortgage securities. (Most lenders cannot produce loans at a fast enough rate to pool their own loans without taking on significant interest rate risk; they use conduits as a means to sell small numbers of loans.) Many of these lenders also sell the servicing rights to servicers (which may be a conduit). Servicers collect monthly mortgage payments and pass through the proceeds to the beneficial owners of the loans. The conduit swaps out its mortgage pool for a mortgage backed security which may protect investors against certain defaults through a GNMA or GSE guarantee. The MBSs are then sold to investors on Wall Street. Perhaps the most significant aspect of the secondary market is that capital which might have been tied up for years in a lender's portfolio is recycled in a month's time.

Returning to the \$100,000 loan example, the borrower would give notice to the servicer as in case (1). FNMA, FHLMC or GNMA (collectively referred to as the "Agencies") will inevitably conclude that the loan breached RW and would require repurchase of the defective loan at its unpaid principal balance plus accrued interest by the servicer⁴. (The Agency in question would most likely also have contractual recourse against the entity that sold the loan to the Agency if different from the servicer). If the servicer and other contractually obligated parties are unable to purchase the loans, the Agencies would nevertheless remain obligated be responsible, under their guarantees, to make investors whole. If the rescissions occur on a sufficient scale that the sellers and servicers cannot satisfy their obligations to the Agencies, the Agencies may require the assistance of the US Treasury to meet their obligations.

Loans Sold to the Secondary Market Through Private Label Issues

⁴ Under Agency procedures, purchasers of servicing rights associated with existing Agency MBSs are required to make the same RW as were made by the initial seller of the underlying loans.

Loans that exceed the GSE conforming limit (currently \$203,150) are not accepted by these agencies into their pools. Typically a conduit or investment bank will issue its own private label security when loans are non-conforming. Investor protection against default (typically anticipated to be borrower nonpayments) may be provided by some form of guarantee, third party insurance coverage or by the security structure itself (e.g., senior/subordinated structure).

However, regardless of the credit enhancement used in a private label pool, the same TILA RW are made to the investors that were made in the previous example. **Therefore, if losses are sustained because of RW that were not valid, all investors have recourse against the issuer that made those RW.**

The chain of events is identical to the one that occurs with Agency enhanced pools except that if the servicer, originator and conduit all choose to file bankruptcy instead of honoring the borrower's rescission request, the MBS investors do not have an Agency guarantee, and thus do not have the backing of the U.S. Treasury. **Thus, in this case it is significantly more likely that the MBS investors could sustain losses attributable to rescinded loans.**

Given the mechanics of rescission, the Rodash v. AIB Mortgage decision and its potential fiscal liability will be examined.

Rodash V. AIB Mortgage

In 1994, a Florida home mortgage borrower, Martha Rodash, went to court in order to rescind a refinance loan because two borrower cost items in the settlement statement were listed incorrectly. The lender, AIB Mortgage, listed a \$22 courier fee and a Florida intangible tax of \$204 as "amount financed" rather than "finance charge." The 11th Circuit Court in Florida agreed with Ms. Rodash that, since the lender had violated the literal instructions in TILA, she was entitled to rescind her loan. **This rescission entitled her to \$47,000 in interest and fees that she had paid to the lender over a three year period.**

Through March 1995, approximately 50 class action suits based upon Rodash have been filed in several states, including Florida, Illinois, Massachusetts and Pennsylvania. Each of these suits has the potential to rescind the vast majority of refinance loans less than three years old in each defendant's portfolio. A ruling in favor of rescission may require that a lender notify all its qualifying mortgagors that they too may rescind their loans.

The following is a list of fee categories which are part of one or more of these class action suits:

1. Courier
2. Florida intangible taxes
3. Wire transfer
4. Survey processing
5. Assignment (assignment of loan to secondary mortgage market purchaser)
6. Processing
7. Underwriting
8. Document preparation
9. Tax service
10. Flood certification
11. Excess recording
12. Title rundown
13. Settlement
14. Amortization schedule
15. Photo
16. Certified copy
17. Fax

Ironically, the law as now written provides for a rescission even if a \$10 error overstated the finance charge. In such instances, the borrower has not been "injured," yet still may have the right to redeem tens of thousands of dollars in interest from the lender. To the extent that borrowers may recover up to three years' interest payments for a mistake of as small as \$10, the Rodash ruling contradicts one of the Fed's five principles regarding the content of Regulation Z: "...burdens (to creditors) not justified by substantial consumer benefits should be eliminated from the regulation." While Ms. Rodash may have reaped "substantial consumer benefits," if TILA is not amended, consumers are likely to be worse off in the long run as a result of Rodash. The effects of Rodash upon consumers is explored later in the paper.

Magnitude of Rodash Liability

How widespread is the Rodash type liability for the banking system in the United States? First, one must be familiar with the size of the U.S. mortgage market and its relative size of the entire non financial debt market. Figures B-1 and B-2 illustrate the size of the U.S. mortgage market and level of U.S. single family mortgage debt, respectively. Total single family mortgage debt is currently in excess of \$3.3 trillion. The dollar values of these mortgages that have been securitized through the Agencies or private labels are illustrated in figures B-3, B-4 and B-5. One can see that Agency insured mortgage debt is approximately \$1.1 trillion as of the 1st quarter of 1995.

The Rodash liability may be present in the vast majority of refinance loans originated in the last three years for several reasons. First, the 11 pages of Federal Reserve regulations defining what is and what is not a finance charge is vague. Different locales have different traditions regarding costs that are incurred and the subset of these costs that are passed onto the borrower. In many cases mortgage lenders do not know if an item should or should not be included in the finance charge. For example, an origination fee paid by a borrower directly to a lender is considered part of the FC whereas a similar origination fee paid to a third party loan broker is often not included in the FC even though the fees may be identical and the borrower pays them in both cases. With the myriad of line item charges a borrower may incur, the chances of a \$10 mistake are quite high. Furthermore, new charges (e.g. Federal Express) emerge over time and are not explicitly addressed in a statute written several years ago.

Second, even if finance charge items were much more clearly defined, the nature of the mortgage business leaves it open to many honest errors. Variation in refinance mortgage origination volume is due primarily to variations in interest rates. Specifically, the larger the spread between the coupon on a refinance mortgage and a borrower's current mortgage, the more likely the loan is to be refinanced.⁵ In turn, interest rates are quite cyclical. Many academics model interest rates as following a mean reverting path with random disturbances.⁶ Because of the cyclical nature of the refinance mortgage origination business, lenders typically supplement their full time staffs with temporary employees during times of heavy refinance activity. This approach tends to maintain low costs per origination over the cycle and benefits the consumer. Figure B-6 shows how much of the variation in mortgage originations is a function of the volume of refinance originations.

Unfortunately, the pressure on an origination staff associated with high levels of refinance activity leads to errors. Borrowers typically lock in an interest rate/discount point combination well before the closing date. This "lock" is tied closely with the lenders agreement to sell the loan to the secondary market. If the lock period expires without the loan closing, the borrower may take the business elsewhere. Thus, "saving the lock" becomes a race against time for a staff swamped with loan applications and supplemented by large numbers of temporary employees who are not experienced in completing loan documents. The bottom line is that because of the nature of the mortgage business, loans made during the high activity period of a refinance cycle are more likely to have honest mistakes in the finance charge than loans made during the low activity period of a refinance cycle.

Third, even without the pressures of "ramping up" for the high volume period of a

⁵ Schwartz, E. S., and Torous, W. N., "Prepayment and the Valuation of Mortgage Backed Securities", Journal of Finance, 44: 375-392, June 1989.

⁶ Cox, J.C., Ingersoll, J.E., and Ross, S.A., "A Theory of the Term Structure of Interest Rates", Econometrica, 53:385-467.

of 1994. Hence, the Rodash ruling led to an exposure for lenders that was much higher than it refinance cycle, lenders must work within a \$10 two-sided tolerance. In other words, they do not have the luxury of using a strategy of "when in doubt, include the charge in FC." This \$10 tolerance can be violated by a simple courier fee that is incurred hours before closing or an additional notary fee incurred at closing. Often, third party escrow companies handle the closing process and have the ability to add or subtract certain charges. It is rare that these groups will review the TILA portion of the closing documents to see if they, too, need to be modified.

Fourth, the remedy for a violation of a tolerance as low as \$10 is extraordinary. Consider the Rodash case itself, where the plaintiff was awarded in excess of 207 times the dollar value of the TILA error. One must also not forget that these TILA errors are not items which are left off the closing statement. The borrower is fully aware of these charges. The charges were simply left out of the calculations used to compute the FC or the APR.

Finally, during the unprecedented refinance boom of 1992-94, the total dollar volume of refinance loans was \$2.2 trillion, approximately 2/3 of all mortgage debt outstanding at the end
7 8
would have been at another period in time.

How many loans are at risk? Pinpointing an exact number is difficult because of the ambiguity surrounding certain charges and their categorization as finance charges as well as the exact distribution of the coupons on the loans in question and the dates of origination. However, based upon data received from the Mortgage Bankers Association and HUD, it is likely that one may conservatively estimate that \$1.17 trillion of refinance loans are exposed to Rodash.⁹ Based upon this estimate, we can do sensitivity analyses on the value of a rescission of a percentage of these loans.

The average rate of loan origination in the time period 1992-1994 may be conservatively estimated at 6%. This would include adjustable rate mortgages (ARMS) with perhaps lower coupons and fixed rate mortgages (FRMs) with higher coupons. **Excluding the costs of**

⁷ By raising the affordability of homes, the historically low interest rates during the period caused many renters to become homeowners. Thus, some of the activity during the period was in the form of purchase loans.

⁸ Refinance loans made with the same lender (except to the extent they are "cash out") are exempt from Rodash claims as are home purchase loans. However, we believe the percentage of same lender refinances is small. Lenders may be reluctant to "cannibalize" their own portfolios; furthermore, secondary market guidelines often prohibit a lender from soliciting borrowers whose loans it has sold.

⁹ Data supplied by HUD and the Mortgage Bankers Association. It is also difficult to ascertain how much of the refinance volume during the 1992-94 period was comprised of multiple refinances. However, a conservative estimate would be that all the loans in 1992 were refinanced again in 1993 or 1994 of the backing up of interest rates in 1994, all refinances in that year are unlikely to have come from loans originated in 1993. 1993 and 1994 originations total \$1.4 trillion. We have discounted that number to \$1.17 trillion as an extra measure of conservatism. The MBA estimates that the Rodash liability covers loans totaling \$1.3 trillion.

attorneys and closing costs, this could yield a payout to borrowers of at least \$105 billion.¹⁰

¹¹ ¹²

¹⁰ The "average loan" was originated in the Fall of 1993. Thus, this figure is arrived at by assuming that the average age of a rescinded loan is 18 months and the average interest rate is 6%. These assumptions are conservative and ignore the non-interest related liabilities.

¹¹ However, based upon the strict \$10 tolerance of Regulation Z, and the types of charges at issue in the Rodash cases, it can be assumed that an exposure up to 90% of these refinance loans is likely.

¹² It is unclear at this time whether loans that have been paid off are subject to rescission. This paper has assumed that they are not; however, if paid off loans are eligible for rescission, the potential interest liability would double to \$210 billion because it would be calculated using an entire 36 month period.

III. ECONOMIC IMPACT OF EXISTING RODASH LOANS UPON THE U.S. ECONOMY.

The implications of widespread rescissions are the main focus of this paper. The next section examines the effect that the Rodash decision could have on (1) housing finance, (2) home prices, (3) the secondary mortgage market and (4) market efficiency in the general economy.

Economic Efficiency: A Benchmark for Evaluating Public Policy

It is necessary to describe a measure by which the impacts of the Rodash decision and potential remedies may be measured. For this purpose, the notion of efficiency relates public policy issues to the housing finance system. The measurement of efficiency of the housing finance system depends upon the perceived function it is intended to serve. While many specific functional performance goals for the housing finance system have been suggested by economists, there are three global interrelated objectives for the housing finance system that span these specific suggestions. These relate to operational efficiency, allocational efficiency, and equity or distributional considerations. Operational efficiency signifies that the housing finance system should be organized in order to minimize the use of resources (i.e., social costs) for each level of housing finance and distribution of social risk. Allocational efficiency of the housing finance system means that, for a given level of resources, the social returns are maximized for each risk distribution. Finally, equity or distributional considerations require that the housing finance system be organized such that costs, risks, and resource utilizations are equitably spread across society. The degree to which these objectives are met through private financing institutions measures the efficiency of the private housing finance system.

Housing, Public Policy and The Overall Societal Well Being

In principle, the objective in this analysis is the evaluation of the social desirability of alternative methods and mechanisms through which the private sector provides residential financing. Each set of alternative housing finance arrangements has implications for the allocational efficiency of resources and the distribution of rewards throughout the economy. Although economists may not be able to prescribe a method by which one state of the economy can be made optimal, policy actions are generally available for changing an existing situation. It is important to know in such cases whether a contemplated change is desirable.

The implied problem of choice among different policy alternatives is one of welfare or normative economics, and, in the broader sense, depends upon the satisfaction levels of all consumers. But almost every alternative to be considered will have favorable effects on some groups and unfavorable effects on others. In principle, an economist can determine whether a particular state of the economy involves an efficient allocation of resources and can analyze the consequences in moving from one state of circumstances to another. However, he has no special competence to conclude that particular sets of institutional arrangements, if they imply unfavorable effects upon some groups, are truly preferable for society.

As a starting point, an economist typically considers the notion of pareto optimality as a basis for evaluating societal well-being. A state of the world is considered pareto optimal if the current use of resources cannot be reorganized to increase the well-being of one or more individuals without decreasing the well-being of others. Conversely, a state of the world is pareto non-optimal if at least one person's well-being can be improved without harming anyone else. Put differently, a positive "social dividend" can be achieved by a move from a non-pareto allocation to a pareto optimal position. For the latter reason, pareto conditions are frequently considered a plausible welfare target toward which society should move.

Perfect competition is often considered to be a socially desirable market form because it normally results in the fulfillment of necessary (first order) conditions for pareto optimality. It is in this sense that the perfect competition represents a welfare optimum. On the other hand, imperfect competition usually engenders violations in the conditions necessary for pareto optimality. The situation is further complicated by the existence of external effects in consumption and production. In general, perfectly competitive markets will not lead to pareto optimality if external effects such as public goods exist.

In the case of TILA, for reasons discussed below, the strict interpretation of rescission based upon the Rodash ruling will ultimately produce a significantly less efficient market for residential financing. Therefore, in the long run, consumers will necessarily be worse off. In such circumstances, public policy will need to take a proactive step in order to restore a competitive environment for residential finance, thereby augmenting consumer well-being. The analysis will now focus what the direct and indirect impacts of Rodash will be, and how they will affect social economic efficiency.

Direct Impacts of Rodash When Loans Are Held in Portfolio

The analysis of the direct impacts is subdivided into the effects upon portfolio lenders and lenders who sell their loans to the secondary market.¹³ Portfolio lenders, most commonly savings and loans and to a lesser extent commercial banks, generally have capitalization levels of about 4% of assets. Since servicers have much lower levels of capitalization, it is likely that Rodash liabilities in the end will fall squarely on these entities and the originators from which they acquire servicing. If Rodash suits are defended successfully (or at least well enough to avoid the failure of the financial institutions), the legal fees the banks are incurring will have (and are having) a significant and negative impact upon their balance sheets.

¹³ Note that because of FIRREA, many portfolio lenders will swap their loans for Agency backed certificates and keep the certificates in their portfolios.

Impact of Rodash Decision on Portfolio Lenders

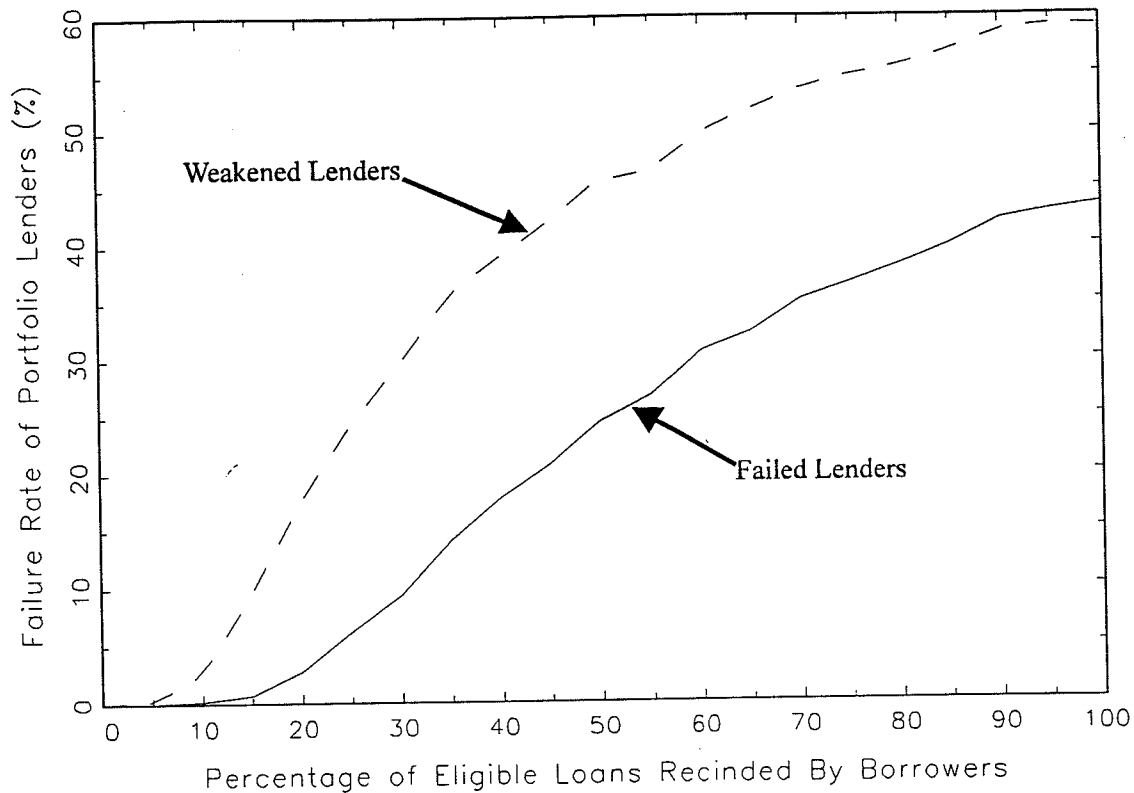


Figure 2

If the litigation defenses are not successful, the effects upon housing finance could be devastating, assuming a significant number of borrowers opt to rescind. Using distributions of capitalization levels, portfolio mix, and Rodash exposure, the rates of failure and weakening for portfolio lenders may be modeled. These rates are illustrated in the above graph as a function of how many Rodash loans are actually rescinded. A lender is considered weakened when 50% of its capital must be paid out in rescission claims. Failure is assumed to occur when 100% of the bank's assets must be paid out in rescission claims. As one can see, a small percentage of Rodash rescissions can adversely affect a significant percentage of banks because of the highly levered nature of the industry.^{14 15}

¹⁴ The underlying assumptions of the model are (1) lenders have a ratio of capital to assets normally distributed with a mean of 4% (2) the percentage of Rodash loans in a bank's portfolio is normally distributed with a mean of 35% and (3) the percentage of Rodash loans actually rescinded is normally distributed with a mean equal to the x axis value and a variance that is a function of the mean.

¹⁵ Since they have much lower capital reserves than portfolio lenders, mortgage banks would have higher failure rates. Conversely, because of their diversification of liabilities into non-residential loans, commercial banks would have lower failure rates than portfolio lenders (e.g. savings and loans).

Even if a particular bank has minimal Rodash exposure, its balance sheet may still be decimated by the effect Rodash will have upon the secondary mortgage market (which discussed in detail later in this section). This event may occur because many portfolio lenders purchase interest only strips (IOs) and servicing rights as a hedge against rising interest rates. Much of the savings and loan debacle was caused by poor duration matching; banks would lend long via 30 year fixed rate mortgages and borrow short through day to day deposits or short term CDS. When interest rates rose, the cash flow from the bank assets did not change, but the outflow on the liabilities (which adjusted quickly to changing rates) went up. Soon, these banks had negative cash flows and failed.

A bank's loan servicing portfolio is another type of interest only (IO) asset; servicing rights represent a slice of the interest payments from a mortgage loan. Interest only strips are mortgage derivatives which have the odd characteristic that they rise in value as interest rates rise.¹⁶ The nature of the rise in servicing or IO values is directly tied to the implication that as interest rates rise, prepayment rates fall. When prepayment rates fall, the stream of interest payments for a particular pool of loans grows in size and duration. If rates fall and IO or servicing values decline, the loss is offset to some extent by the rise in value of the lenders long term assets. **However, if an event were to occur that raised prepayment rates that was independent of changes in interest rates, it could undermine the hedge value of the bank's servicing or IO portfolios and cause the same type duration mismatch losses we saw in the S&L crisis.** A Rodash rescission has the same effect on an IO holder as does a prepayment. Thus, widespread Rodash decisions could greatly reduce or wipe out the value of a bank's IO and servicing portfolios. In addition to explicit losses on the IO or servicing assets, the banks would be left with an portfolio unprotected against rises in interest rates. If more rates rise (as they are likely to do), the banks would suffer heavy losses in the values of their long term assets and may incur negative cash flows.

When a bank fails, it can no longer meet its liabilities to its depositors. Depending on the nature of the institution, the bank's depositors may be insured by BIF or SAIF. These insurance funds have the implied backing of the U.S. Government.¹⁷ Thus, if no relief from Rodash is enacted, Congress may want to consider allocating reserves to protect and maintain FDIC's ability to absorb losses caused by mass rescissions of loans originated or held by banks and thrifts that are subject to Rodash-type claims.

¹⁶ This occurs over a specified range of interest rates. If rates rise enough, the value of the IO will eventually decline.

¹⁷ The federal government bail out the depositors in the Savings and Loan Debacle cost taxpayers \$500 billion.

Direct Impacts of Rodash When Loans Are Sold to the Secondary Market

The effects of the Rodash ruling would be more widespread when loans are sold to the secondary market for the simple reason that there are more parties involved. Mortgage bankers, who do not issue savings deposits, but originate mortgages for sale to the secondary market, have seen their market share for originations rise to over 45% in recent years.¹⁸ Figures B-7 and B-8 illustrate the recent growth of thinly capitalized mortgage banks in the housing finance system. While traditional financial institutions certainly originate residential mortgage loans for the secondary market, the example uses a mortgage bank as the originator.

Before outlining the impacts Rodash might have upon the secondary market, one needs to appreciate the benefits the secondary market has brought to the consumer. Some of these benefits include:

- 1. Higher Liquidity of Mortgages.** By transforming heterogenous mortgages into securities similar to fixed income products already traded on the market, the secondary market has increased the liquidity of mortgages. Higher liquidity implies a lower asking price which implies a lower required yield.
- 2. Lower Mortgage Rates.** By increasing liquidity, the bid/ask spread on mortgages has narrowed considerably. As bid/ask spreads narrow, mortgage rates fall, *ceteris paribus*.
- 3. Elimination of Adverse Selection.** By guaranteeing the payment of principal and interest to investors, there is a concern that asymmetric information regarding the integrity of individual loans might facilitate the sale of the less desirable loans to investors and retention of the more desirable loans by the lender. The threat of losing access to the secondary market deters lenders from this practice.
- 4. Lower Origination Costs.** By standardizing underwriting requirements and loan documentation, the secondary market has reduced the cost to borrowers of originating or refinancing a loan.
- 5. Call Protection.** Although some simple rational mortgage models predict that all mortgage borrowers controlling loans in a security prepay their loans at the same time, the fact is that each mortgage loan in a security has a unique sensitivity to the factors surrounding prepayment. Thus an investor in a mortgage security will not experience the "all or nothing" scenario posed by investment in a single mortgage. While one could certainly diversify on an individual level, most individual investors do not have the capital to purchase several individual mortgages.

¹⁸ Market share information provided by HUD and MBA.

6. Less Credit Rationing. Since capital may be turned over in as little as 30 days, bank deposits can be "re-lent" several times during the period the "original loan" is outstanding.

7. More Competition at the Origination Level. The ability to recycle capital has led to a proliferation of mortgage bankers, lenders who generally do not issue deposits. They establish a line of credit with commercial banks, often referred to as warehouse lenders, to borrow money on a short term basis to make mortgages. Upon sale of the mortgages to the secondary market, the warehouse loan is repaid. Thus, a commercial bank's deposits may be used to make mortgages by originators other than the bank itself. In part, because mortgage banks do not have to incur costs associated with raising deposits, they are able to originate loans quite inexpensively. This competition has the ironic effect of squeezing margins on the commercial banks' mortgage loans, the very lenders who sometimes act as warehouse lenders for the mortgage banks.

If there is one word that embodies the transformation that the secondary market has had on the home mortgage market, it is efficiency. By creating a centralized market for the trading of mortgages, standardized requirements and insurance against default, the secondary market offers a higher level of operational efficiency than existed prior to its development. By reducing adverse selection issues and the information costs surrounding a whole loan purchase and by allowing capital to flow across vast geographical distances, the secondary market has increased the level of allocational efficiency by producing lower retail mortgage rates for the same level of risk. Finally, by putting all loans into "one rating pool", the secondary market required yields spread the risk of default across all of society. By fostering access to global capital, insuring investors against default and standardizing the process, the secondary market has minimized the deadweight costs associated with mortgage lending. Thus, increased market efficiency of the secondary market causes society to be better off.

As outlined in Section II, the borrower notifies the servicer when loan rescission is desired. A chain of events then occurs by which the servicer, conduit and originator (to the extent they have made RW) are all asked to pay off the borrower (or to reimburse these payments to the issuer or guarantor of MBS). If none of these groups is willing or able to pay the borrower and the loan is an Agency backed loan, then ultimately FNMA, FHLMC and the U.S. Treasury must fund the shortfall (or risk causing a panic in the financial markets). In this case, the loan in question will be purchased from the pool at par. If the loan is trading at a discount just before repurchase, then the MBS investor has a windfall profit. If the loan is trading at a premium just before the purchase, then the MBS investor suffers a loss. In both these cases the gain or loss derived from the difference between the loan value and par is offset by a gain or loss by the borrower.

If the loan in question is in a private label pool, then neither the Agencies nor the U.S. Treasury are directly involved. Thus, the losses of investors in the financial markets could be quite severe.¹⁹

In this event, since a new risk surrounding MBS investing will have been identified, there will be a short term impact of rising mortgage rates as the market raises the required yield on mortgage securities. This will have an effect on all mortgage lenders because the secondary market currently sets an array of competitive prices that lenders must consider in pricing their loans.

Direct Impact Upon the U.S. Treasury of Rodash

The funding of FNMA and FHLMC obligations as well as direct U.S. Treasury obligations through GNMA and the bailout of BIF and SAIF could conservatively reach \$100 billion based upon the volume of prospective Rodash loans based upon existing loans in the marketplace. The failure of banks due to servicing and IO losses could easily double that number. Thus, prudence would suggest that the Treasury set aside appropriate reserves to meet its potential obligations.²⁰

Indirect Impacts of Rodash Upon the Economy

Unfortunately, the direct impacts of Rodash may be overshadowed by the indirect impacts upon the general economy. As with any major shock to the economy, there is an initial period of disequilibrium in which the roles of suppliers and consumers of goods and services are dislocated and unstable. One could expect the following short term consequences of widespread Rodash decisions: (1) Collapse of the Mortgage Securitization Infrastructure, (2) Shortage of Mortgage Related Capital, (3) Reduction in Home Values, (4) Reduced General Economic Activity, (5) Diminution of the Borrower's Ability to Refinance Residential Loans, (6) Pressure on the GSEs, (7) Potential Shock to the Value of MBS Securities, (8) Increased Litigation, (9) Diminished Federal and State Tax Revenues, (10) Increased Unemployment and (11) Increased Federal Budget Deficit.

1. Collapse of the Mortgage Securitization Infrastructure. If the class litigation is successful and leads to significant rescissions, Rodash will likely cause the collapse of the mortgage banking system as we have come to know it. As described earlier, servicers, conduits and originators will either be crippled by huge payouts of capital or will cease to exist. The links

¹⁹ As of the 1st quarter of 1995, there were approximately \$200 billion in outstanding private label mortgage backed securities. Source: Inside Mortgage Securities.

²⁰ As of the 1st quarter of 1995, the GSEs had approximately \$950 billion in outstanding mortgage securities and GNMA had approximately \$450 billion in outstanding mortgage securities. Source: Inside Mortgage Securities

described in Figure 1 will be severed. Without a mortgage securitization infrastructure in place, access to capital for mortgage loans will be greatly restricted. **Fears fueled by media coverage may cause a run on the banks by depositors.**

This may have implications for other sectors of the capital market. To the extent that lenders are no longer viable, access to commercial and personal loans may be curtailed. It is likely that corporate bonds will remain attractive to investors; those firms with the ability to issue debt will be able to continue to leverage their assets appropriately. **However, many small businesses could fail or forego expansion because of their inability to borrow funds.**

2. Shortage of Mortgage Related Capital. With a banking infrastructure that is cut off from capital access through securitization, affordable capital available for lending will be greatly curtailed. Recall that under the current system, mortgage capital is "recycled" every 30 days. If lenders are forced to hold all their loans in portfolio because secondary market access was closed, then capital used in mortgage origination will be unavailable for new lending until the loan is paid off. The average 30 year fixed rate mortgage is held approximately 70-120 months.²¹ **Thus, a shutdown of the secondary market could reduce available capital by a factor of 70-120.**

3. Reduction in Home Values. The path to this consequence is simple. If there is a shortage of capital, then the price of mortgage money will rise. If there is a new risk associated only with mortgage loans, then the price of mortgage money will rise relative to the price of other debt. Potential home buyers will be priced out of the market. Home prices would fall as a result of falling demand.

²¹ See Harding, J.P., Ph.D. Thesis, University of California, Berkeley.

RODASH TAX ANALYSIS

EFFECT ON MORTGAGE RATES

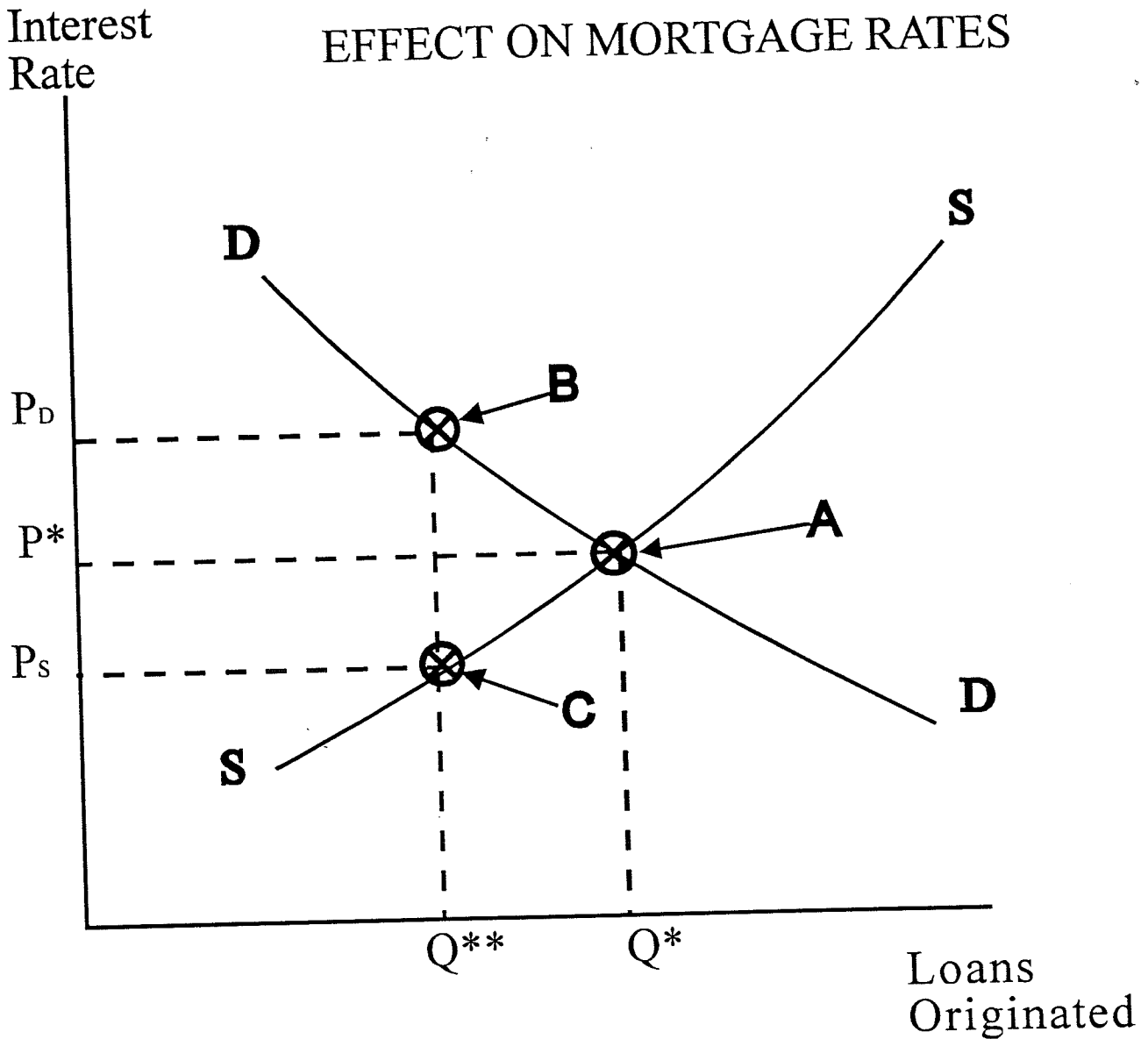


Figure 3

To illustrate this point consider Figures 3 and 4. Figure 3 illustrates the effect that a Rodash based premium in interest rates would have on loan demand. Because the premium paid to compensate for Rodash risk does not represent a return to the lenders, it creates a wedge between what the effective interest rate a lender receives as his return and the interest rate a borrower pays.

In Figure 3, the equilibrium interest rate without Rodash is P^* . At this price, Q^* loans are originated. However, with the Rodash premium, the borrower must now pay an interest rate of P^D on her loan while the lender receives a net interest rate of P^S . The result of these changes is that the quantity of loans originated falls from Q^* to Q^{**} .

RODASH TAX ANALYSIS EFFECT ON HOUSE PRICES

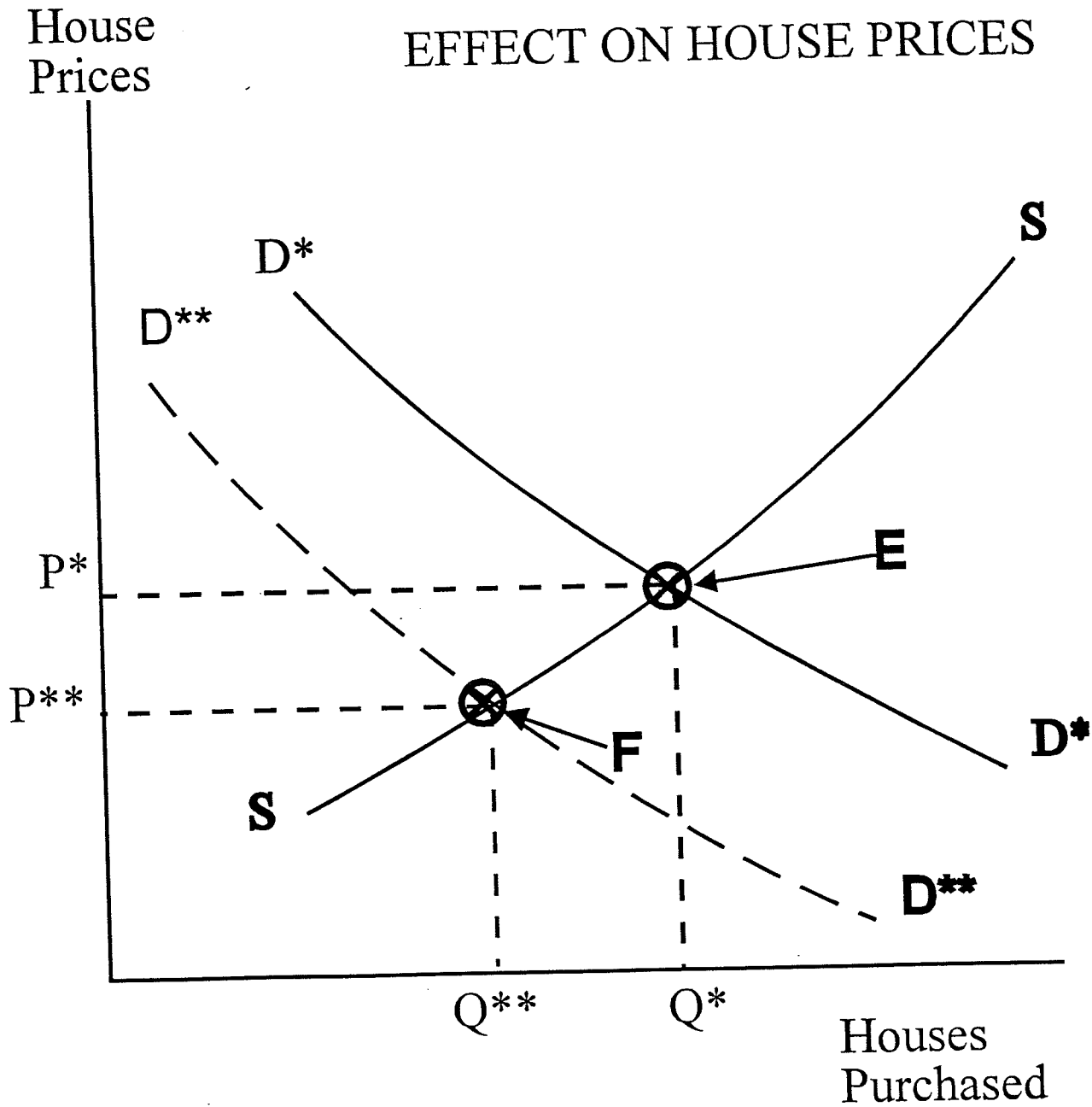


Figure 4

Since most home purchases are dependent upon highly leveraged financing, the reduction in loans supplied has a direct effect upon the demand for houses. As illustrated in Figure 4, the demand for houses shifts down in response to the inability of some borrowers to obtain financing and the need for others to reduce their housing consumption to maintain payments that are affordable. Home sales (per period) fall from Q^* to Q^{**} . **This drop in demand will cause home prices to fall from P^* to P^{**}** . The exact magnitude of the drop is hard to quantify because it depends on several factors relating to (1) the magnitude of the Rodash premium, (2) the elasticity of demand and (3) the elasticity of supply.

This relative rise in home mortgage rates will cause some homeowners to be "locked in" to their homes. Moving to another residence would require borrowing at the post-Rodash higher rates. Restrictions on mobility are detrimental to society because they impede those able to do particular jobs most effectively from taking those jobs.

One may argue that since Rodash only affects refinance loans, there should be no effect upon capital for purchase loans. However, by removing the most efficient (to date) mechanism for moving capital from investors to borrowers, Rodash will necessarily lead to a less efficient system whereby borrowing rates are higher to reflect these inefficiencies. Some of the effects include (1) higher due diligence costs, (2) higher adverse selection costs, (3) higher information costs, (4) higher sales costs and (5) higher lender mark ups due to the reduction of competition.

4. Decline in General Economic Activity. A systematic decline in home values would cause a corresponding decline drop in the wealth of many consumers which in turn would cause them to reduce their discretionary spending. The reduction in discretionary spending will cause a general economic slow down, including accompanying unemployment.

5. Diminution of the Borrower's Ability to Refinance. Because of Rodash liability, lenders will be less willing to refinance loans under the current fee structure, except for a borrower's original lender (who is generally unaffected by Rodash).

6. Pressure on the GSEs. FNMA and FHLMC, as guarantors of last resort, will be forced to payout huge sums to Rodash borrowers. Whether a Congressional bailout is required or not will depend on how much of a potential \$105 billion liability falls upon them. Regardless of the need for a bailout, the crippling of the GSEs will reverberate for many years to come if the mortgage banking system is to rise from the ashes.

GNMA MBS, of course, are guaranteed by the full faith and credit of the US government. Funds to pay off many of the judgements on these loans will come directly out of the US Treasury.

7. MBS Investors: Winners and Losers. Since most of these refinance loans are now trading at a discount, investors who receive their principal back due to rescission will realize a windfall. These investors are likely to be those holding MBSs backed by GNMA, FNMA or

FHLMC. This windfall is a transfer of wealth from Rodash borrowers to the MBS investors since these borrowers are paying par to buy back discount loans.

Conversely, those investors holding MBSs enhanced by private label backing or senior/subordinated structures may be at risk to lose the rescinded interest and fees. If the servicers, conduits or lenders associated with an MBS decide not to meet their obligation, a private label issuer may decide to fold rather than pay out huge sums of money. Some MBSs may not even have a credit enhancement provision from the issuer at all.

Such potential losses to the market could cause a widespread discounting of MBS prices and panic in the bond market. Although some of the collateral backing MBSs is exempt from Rodash (e.g. purchase money mortgages), this information is generally lost at the pool level. This could destroy the integrity of the secondary market for non-conforming loans.²²

8. Increase in Litigation Activity. As is often the case in litigation, the Rodash type law suits will have the potential to produce windfall fees to the attorneys involved on both sides. In particular, the firms representing the plaintiffs may earn an award from the defendant(s). Second, service groups (possibly formed by the same attorneys representing the classes) will be created in order to encourage borrowers in a class to file for rescission. Assuming these groups work on a percentage basis of the value of the payout, their fees could reach levels of billions of dollars.

9. Governmental Income Tax Revenues Fall. The windfall to the borrowers and their attorneys who successfully win judgements to rescind their loans as well as some of the MBS investors will increase their tax liabilities. However, their increased liability will be offset by the losses incurred by some MBS investors and various lending institutions who pay for the rescissions. **If a government bailout is required because of the insolvency of the banking system, the direct cost for the Treasury will not match the increased tax liability of those who win judgements.**

Furthermore, there will be tremendous strains upon the BIF and SAIF to meet their obligations to depositors from failed institutions. These institutions will need cash infusions from Congress to make depositors whole.

Beyond these direct costs to the Treasury, the recession caused by a Rodash induced collapse of a portion of the banking system will put tremendous downward pressure on employment and spending which will translate into smaller personal and corporate income taxes, respectively. **Increased unemployment, lower corporate earnings and huge federal bailout obligations could increase the deficit by several hundred billion dollars. Increased deficits can lead to inflation and higher interest rates.**

²² A non conforming loan is one whose size exceeds the ceiling imposed by FNMA and FHLMC. They are common in regions where home prices are high. The current conforming limit is \$203,150.

10. Increased Unemployment. The types of jobs that would suffer as a result of widespread bank failures and the collapse of the secondary market cover the entire spectrum in the housing and banking sectors. Unemployment would rise as the result of a direct loss in jobs in the following sectors: banking, mortgage banking, title and escrow, credit rating agencies, loan servicing, real estate brokerage, construction, home inspection. The indirect effects from the reduction in consumption by unemployed individuals would ripple throughout the entire economy.

11. Increased Federal Budget Deficit. The unemployment caused by widespread Rodash rescissions combined with the possible bailout responsibilities of Congress and reduced income tax revenues will tend to widen the federal deficit, adding to the debt and making current efforts to balance the budget difficult.

IV. ECONOMIC IMPACT OF FUTURE RODASH LOANS UPON THE U.S. ECONOMY

The previous section dealt with issues and consequences of existing Rodash liability. In other words, the issues in the previous section are relevant if no retroactive regulatory relief is enacted and lenders begin to lose (or settle on unfavorable terms) the class action lawsuits. This section describes the likely implications that Rodash will have on the economy in the future if no forward looking regulatory relief is enacted. We believe this will amount to a full scale restructuring of the U.S. housing finance system. This restructuring will affect the way consumers get mortgage financing, how the deals are structured and how the secondary market receives these assets.

After a period of time has elapsed from the initial shock, the economy will settle into a new equilibrium. This new equilibrium represents structural changes from the old order that may be very difficult to dislodge. For example, the huge cutback in defense spending in recent years has resulted in massive layoffs in both the private sector (e.g. Lockheed) and the public sector (base closures). Thus, the short term consequence was unemployment. Eventually, these unemployed workers will learn new skills and re-enter the economy in different roles, perhaps developing high technology products for civilian use. The shift in the roles of these workers is a long term consequence of defense cutbacks. The changes outlined in this section are derived as long term responses to the continuing presence of likely Rodash liability in TILA. While many of the short term consequences (e.g. high unemployment) may subside, these long term consequences are likely to remain indefinitely until another shock to the system occurs.

We believe the impacts of Rodash on future mortgage lending will fall into seven areas, (1) Reduced Competition in Mortgage Lending, (2) Changes at the Origination Level and (3) Changes in the Secondary Market, (4) Return of Higher Inflation, (5) Emergence of the "Rodash Flipper", (6) Emergence of Rescission as an Alternative to Default and (7) Development of a Rodash Insurance Industry. The net result for the consumer will be higher mortgage rates, ceteris paribus.

1. Reduced Competition in Mortgage Lending

Tough capital requirements would prevent many of the thinly capitalized mortgage bankers we observe today from existing. These mortgage bankers are a low overhead and efficient producer of loans. Recall figures B-7 and B-8 which show a marked increase in the market share of mortgage bankers over time. Without their presence, loan origination market share would accrue in favor of savings and loans and commercial banks and loan fees would rise. This reduced competition hurts the very consumer TILA was supposed to protect.

Thus, the fallout from Rodash will result in the failure and mergers of many originators, specifically the thinly capitalized mortgage banks. A reduction in competition leads to higher search costs for the consumer; these higher search costs enable the lender to charge a higher interest rate. In the short term, lenders will be reluctant to make refinance loans that are subject to rescission since the secondary market will not accept (or will require a steep discount for) a refinance loan that has not been seasoned sufficiently to excise its Rodash liability. Since refinance loans account for 10-60% of a lender's originations in a given year, this loss in loan fees may also cause many originators to fail or merge.

2. Changes at the Origination Level

Until originators can contain their Rodash risk, they will be unwilling to make refinance loans using the current fee structure. We believe one long term change that may evolve from Rodash is a restructuring of loan fees. Lenders will no longer explicitly charge the borrower for a series of fees (e.g. courier) whose status with respect to FC is questionable. Instead they will charge borrowers a flat fee based upon their past experience. All debits and credits for the underlying closing costs will be handled by the lender's internal accounting staff. Of course, the fact that the bank paid for these fees will be disclosed as required by law. This approach would seem to mitigate most of the issues concerning Rodash and TILA.

One concern that would still remain under a flat fee arrangement would involve mistakes committed by the escrow companies. The escrow companies that close the deal are traditionally third party entities, independent from the lender. They may request a courier service a day before closing or be faced with new recording fees the day of closing. If they add those fees to the borrower's costs, TILA could be violated. If they do not add the fees, they have less incentive to incur these costs. In any event, the escrow company's adherence to these instructions adds a new dimension of risk to the lender's portfolio.

3. Changes in the Secondary Market

In a new equilibrium, the secondary market would pay a premium for pools backed by purchase loans. Purchase and refinance loans would be pooled separately so that Rodash risk-free pools could be formed. Currently they are pooled together at random. **This bifurcation will**

have the effect of slowing pool production and raising pipeline risk, another cost which will be passed on to the consumer in the form of higher rates and fees. Ceteris paribus, refinance pools would trade at a discount to purchase pools to reflect this risk. It is possible that Rodash risk could raise the cost of refinancing significantly; thus, mortgage rates on purchase loans could fall since the value of the borrower's prepayment option would be reduced. However, other forces such as increased pipeline risk could offset any potential fall in purchase mortgage rates. Agencies might specifically exclude Rodash risk from their guarantees in the future, allowing the market to price this risk in the value of the security.

Alternatively, the agencies could require originators to set aside capital against possible Rodash losses. Such set asides would create a permanent reduction in capital availability for the economy.

Existing pools containing Rodash loans could drop from AAA to junk bond status because of the tremendous uncertainty regarding their cash flows. New pools of refinance loans would trade at lower prices than purchase pools reflecting the Rodash risks. The actual level of their pricing would be a function of how the primary market was able to deal with Rodash. We would also see a seasoning effect; when the statutory three year period expired, the pools would rise in value since the remaining loans would no longer have the degree of Rodash risk they had at origination.

4. Emergence of Rodash Insurance Companies

To remove Rodash risk, lenders will demand Rodash insurance. Since the escrow officer makes the "final inspection" of documents before closing, the only player that could offer Rodash Insurance without creating a moral hazard would be the escrow companies. By offering such insurance, the Rodash risk could be effectively priced. Since such insurance requires large reserves, we would expect to see a huge consolidation in the escrow industry. States which do not use escrow companies would see an immigration of these firms in short time.

In order to keep their premiums to a minimum (or perhaps just to qualify for insurance), lenders would have an incentive to improve the quality control of their document preparation process. Some of the steps they would likely take toward this end would be higher levels of staffing and training, more due diligence on loan sales and expansion of in house legal departments. These steps will result in higher lender costs (along with the Rodash insurance premium) which will be passed along to the consumer. These are essentially deadweight costs to society because the benefits derived are quite small.

5. Return of Higher Inflation

We believe that the uncertainty over future Rodash liability (in addition to the liability incurred from existing Rodash loans) will put upward pressure on U.S. Treasury rates. The potential need for the Treasury to borrow funds to cover these liabilities would cause an increase

in uncertainty about the future supply of debt and thus drive the price of the debt down. Lower Treasury bond prices translate into higher yields. Thus, the pressure on the Federal deficit caused by Rodash will make it more likely that Congress will have to "print" its way out of debt through increased money supplies instead of growing the economy to reduce the debt. Whenever central banks print more currency, the value of the currency falls and inflation rises, ceteris paribus.

6. Emergence of "Rodash Roulette"

The continuation of TILA in its current form would create a new hobby for many borrowers: Rodash Roulette. Recall that in the original Rodash decision, the borrower received an award worth \$47,000. Consider that one can close a loan for \$1,000-\$2,000 and sometimes for no out of pocket expense at all. Using \$1,000 as a closing cost figure and the Rodash award as a benchmark, a borrower can turn \$1,000 into \$47,000 just by refinancing and having the lender make a Rodash error. If the chances of such an error are 50%, the borrower has an expected payoff of \$23,500 on a \$1,000 bet. Those are odds which will seem attractive to even the most risk averse borrowers. If the loan is not in violation of TILA, the borrower just refinances again! Eventually, the laws of probability will cause the borrower to have a Rodash mortgage. She can then sit back, relax, and rescind in 36 months!

7. Emergence of Rescission as an Alternative to Default

Borrowers who have experienced a decline in home equity or a loss of income may decide that rescission is an attractive alternative to default.

V. SUMMARY

In summary, we make the following findings and conclusions:

1. The decision in the Rodash case would permit a consumer protection provision in TILA to be used to generate unexpected windfalls for mortgage refinance borrowers. Lender liabilities arising from this decision are estimated to be in excess of \$100 billion to satisfy Rodash related claims. The remedy for a TILA violation may be one in which the borrower may be awarded a sum of money which is hundreds or thousands of times larger than the mistake made by the lender.

2. The potential impact of pending or threatened Rodash litigation on firms engaged in home finance could have ramifications for our economy as significant as those stemming from the savings and loan debacle of the 1980s. Left unaddressed, claims already filed in class action suits following Rodash, if successful, could lead to the failure of many banks, mortgage banks and savings and loans and weaken many Wall Street firms. Although the direct cost of Rodash is approximately \$105 billion, the total cost of Rodash could be considerably higher because of its ripple effect on the economy.

3. If private sector financial institutions fail, several government or government related agencies can be expected to incur significant costs to cover these failures. Should no regulatory relief be enacted, it may be prudent for Congress in its seven year budget projection to allocate multi-billion dollar reserves to cover losses to the Treasury associated with Rodash related litigation. The Rodash decision may require huge payouts by GNMA, FNMA, FHLMC, and the FDIC insurance funds BIF and SAIF. These agencies all have the direct or implied backing of the U.S. Treasury.

4. The Rodash decision is at odds with the intent of TILA to protect the consumer. The potential failure of many financial institutions will reduce competition in mortgage lending, leading to a likely increase in mortgage rates for consumers. There are many potential dislocations in housing finance and the general economy. Some of these dislocations include:

- A. Decline in housing construction**
- B. Decline in home values**
- C. Reduction in capital availability for refinance mortgage loans**

5. While there may be debate regarding some of the regulatory reform issues before Congress, there is some particular urgency in responding to his issue. Given the disruption in the home finance and home building industries, one cannot ignore the possibility that, as a result of the impacts upon the housing finance system, unemployment is likely to rise and state and federal tax revenues likely to fall.

6. The measures of the cost of credit by which TILA compliance is monitored often lead borrowers to the wrong decision when used properly. We offer a detailed explanation of how APR and FC may lead to the wrong or right consumer choice depending upon (1) variation in maturities of loans being compared, (2) variation in FC classified costs across lenders being considered and (3) variation in borrower time horizon across loans being considered.

7. The current version of TILA is at odds with the public policy goal of Congress to have a fair and efficient housing finance system by making the system less efficient and more costly to consumers. With inherent Rodash liability, the current version of TILA adds huge deadweight costs to the U.S. housing finance system. These are costs that can and will be passed on to the consumer. These costs will reduce capital availability and drive up mortgage interest rates. With very little societal benefit, these costs reduce the efficiency of the U.S. Housing Finance System. Thus, potential home buyers may be priced out of the market or denied credit all together.

8. Rodash violations are unavoidable in TILA's current form. Despite a new awareness of Rodash, lenders may be unable to curtail TILA violations because (1) the \$10 tolerance is too small, (2) the two sided nature of the liability does not allow lenders to err on the side of overstating APR or FC, (3) the cyclical nature of the mortgage business requires it to use less competent staff people on the margin when loan demand is high and (4) new charges emerge over time which are not addressed by the statute.

APPENDIX A: USING FC AND APR IN MAKING CONSUMER CHOICES

APPENDIX A: USING FC AND APR IN MAKING CONSUMER CHOICES

This analysis could not be complete unless we consider how a borrower might use FC or APR in making a mortgage choice. This appendix illustrates three cases in which the best choice for a borrower from an economic standpoint is independent of any decision one might make using FC or APR.

Case 1: Borrowers With Different Time Horizons

Consider two borrowers, S and L, each considering two loans A and B with the following characteristics:

Item	Loan A	Loan B
Loan Amount	\$100,000	\$100,000
Maturity	30 Years	30 Years
Interest Rate	8.00%	6.75%
Discount Points	\$0	\$8,000
Origination Fee	\$2,000	\$2,000
Other Closing Costs	\$0	\$0
APR (per TILA)	8.21%	7.81%
Finance Charge (per TILA)	\$165,024	\$143,495

Based Upon the TILA required disclosure of FC or APR, each borrower would choose loan B. Is loan B best for each borrower? The answer is a definite maybe. In this case it all depends upon the borrower's time horizon.

Let us assume that S has a time horizon of 3 years and L has a time horizon of 15 years. We may then recompute the actual FC and APR based upon this borrower specific information.

Item	Loan A	Loan B
FC Based Upon a 3 Year Time Horizon	\$25,564.23	\$29,924.50
APR Based Upon a 3 Year Time Horizon	8.77%	10.72%
FC Based Upon a 15 Year Time Horizon	\$110,516.99	\$100,043.08
APR Based Upon a 15 Year Time Horizon	8.25%	8.00%

One can see that Loan A was the right choice for Borrower S and Loan B was the right choice for Borrower L based upon the correct FC and APR calculations for their time horizons. Since FC and APR are calculated under the assumption that a borrower holds a loan until maturity, the shorter a borrower's time horizon, the less valuable FC and APR information will be when comparing two loans of the same maturity. When the possibility of refinance is considered, a borrower's time horizon with the loan in question will be less than her time horizon in her home.

Figure A-1 shows the actual FCs of both loans as a function of borrower time horizon. Also shown are the two horizontal lines representing the FC disclosed to the borrower under TILA. In this case the FC line for Loan A crosses the FC line for loan B at a borrower time horizon of approximately 77 months.

Present Value is Ignored By FC

While the APR implicitly accounts for the present (or time) value of money, the FC does not. Using the standard discounting algorithm, we may compute the present value of the FC for each loan.

Item	Loan A	Loan B
Present Value of FC Based Upon a 3 Year Time Horizon	\$22,750.43	\$27,556.99
Present Value of FC Based Upon a 15 Year Time Horizon	\$66,130.24	\$63,460.35

Using present value did not change our results, but it did make the difference in loan values significantly less for the 15 year horizon borrower. **In fact, the present value approach reveals that FC calculations may be even more misleading in helping a borrower make a choice.** This concept is illustrated in Figure A-2 where the lines do not cross until a time horizon of approximately 110 months.

Case 1 Conclusion: FC and APR cannot help a borrower make a proper decision because these statistics do not consider a borrower's time horizon.

Case 2: Variation in Loan Maturities Being Compared

Now we consider two loans, C and D, and one borrower. The borrower has a 5 year time horizon. The characteristics of the two loans are as follows:

Item	Loan C	Loan D
Loan Amount	\$100,000	\$100,000
Maturity	30 Years	5 Years
Interest Rate	8.00%	6.75%
Discount Points	\$0	\$8,000
Origination Fee	\$2,000	\$2,000
Other Closing Costs	\$0	\$0
APR (per TILA)	8.21%	9.33%
Finance Charge (per TILA)	\$165,024	\$42,791.60

Here the borrower is sent mixed signals by TILA disclosures of FC and APR. The FC for loan D is much lower than that of Loan C, yet it has a higher APR. Because FC does not normalize the cost of credit in a "per year" statistic, it is inherently flawed when comparing loans of different maturities.

If we compute the actual FC and APR for the 5 year loan, we can then make better use of these statistics.

Item	Loan C	Loan D
Actual FC Based on a 5 Year Time Horizon	\$40,941.57	\$42,791.60
Actual APR Based on a 5 Year Time Horizon	8.50%	9.33%

We see that loan C seems to be a better deal when a control for loan maturity is used. Had the borrower used FC for her decision, she would have paid out over \$1,800 more in interest over the five year period.

Case 2 Conclusion: FC is an inappropriate measure of the cost of credit when comparing loans of different maturities. FC will usually favor loans with shorter maturities.

Case 3: Variation in Fees Included in FC

Let us now consider two loans, E and F, and one borrower with a 30 year time horizon. The loans have the following characteristics:

Item	Loan E	Loan F
Loan Amount	\$100,000	\$100,000
Maturity	30 Years	30 Years
Interest Rate	8.00%	8.00%
Discount Points	\$0	\$0
Origination Fee	\$0	\$2,000
Third Party Broker Fee (Paid By Borrower)	\$3,000	\$0
APR (per TILA)	8.00%	8.21%
Finance Charge (per TILA)	\$163,024	\$165,024

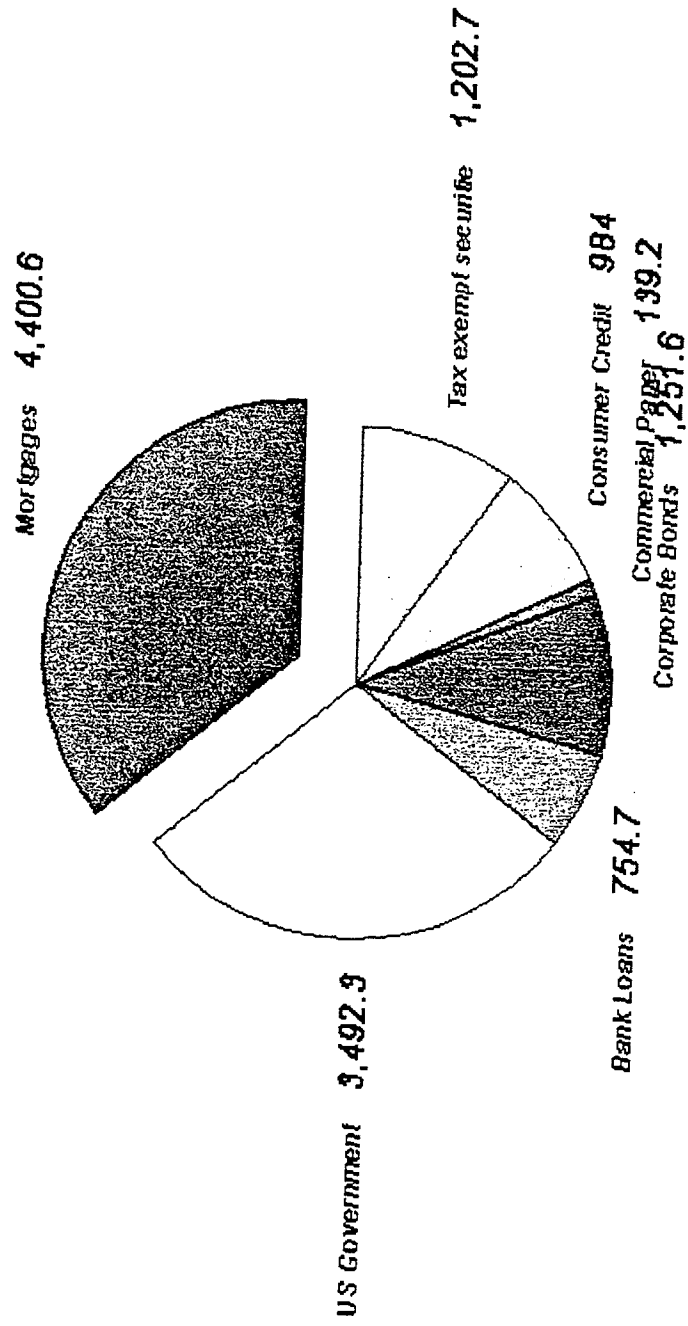
Federal Reserve guidelines require that in house origination fees be counted toward the FC and APR, but that third party brokerage fees often should not be counted, even though they are paid by the borrower. Thus, based upon FC, one would choose loan E, even though it is costing the borrower \$1,000 more than loan F would have cost her.

Case 3 Conclusion: When there are cross sectional variations among lenders regarding the nature of fees and whether those fees are included in FC, borrowers will be unable to depend upon FC for correct guidance regarding loan choice.²³

²³ Had the third party fee been only \$1,500, then the borrower using FC as a measure of the cost of credit would have picked the correct loan.

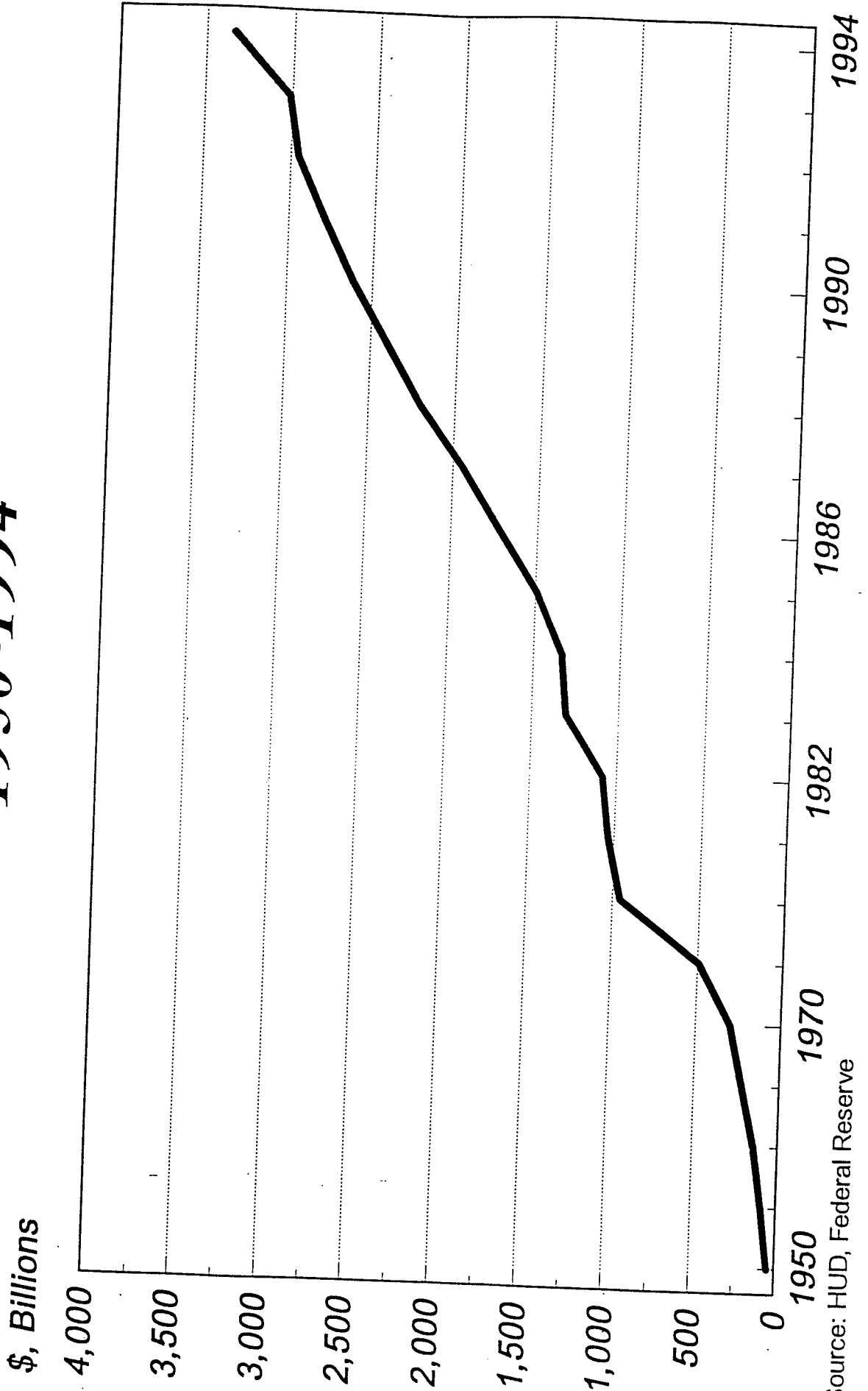
APPENDIX B: FIGURES AND TABLES

Figure B-1
Domestic Non-Financial Capital Market, By
Sector; As of December 31, 1994, \$ Billions



Source: Federal Reserve Flow of Funds Account

Figure B-2 US Single Family Mortgage Debt 1950-1994



Source: HUD, Federal Reserve

Figure B-2

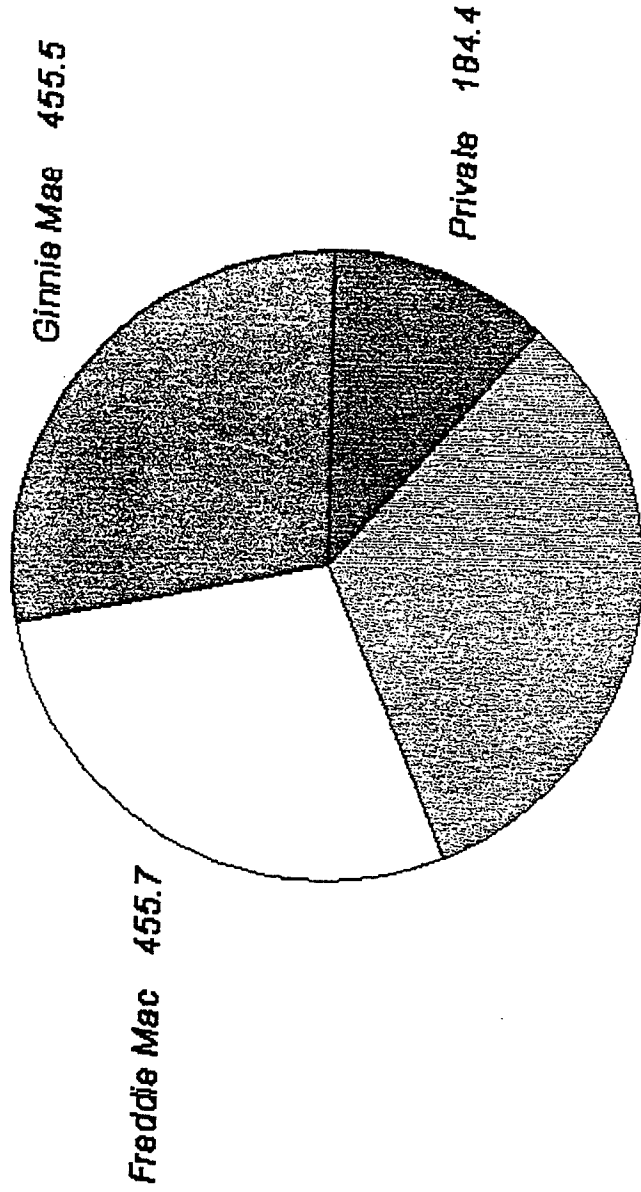
US Single Family Mortgage Debt

1950-1994

	\$, Billions
1950	
1955	45.2
1960	88.2
1965	141.9
1970	220.5
1975	297.7
1980	489.5
1981	956.3
1982	1,033.4
1983	1,079.8
1984	1,300.2
1985	1,336.2
1986	1,490.2
1987	1,720.8
1988	1,943.1
1989	2,201.2
1990	2,408.3
1991	2,615.3
1992	2,788.7
1993	2,953.5
1994	3,014.4
	3,339.2

Source: HUD, Federal Reserve

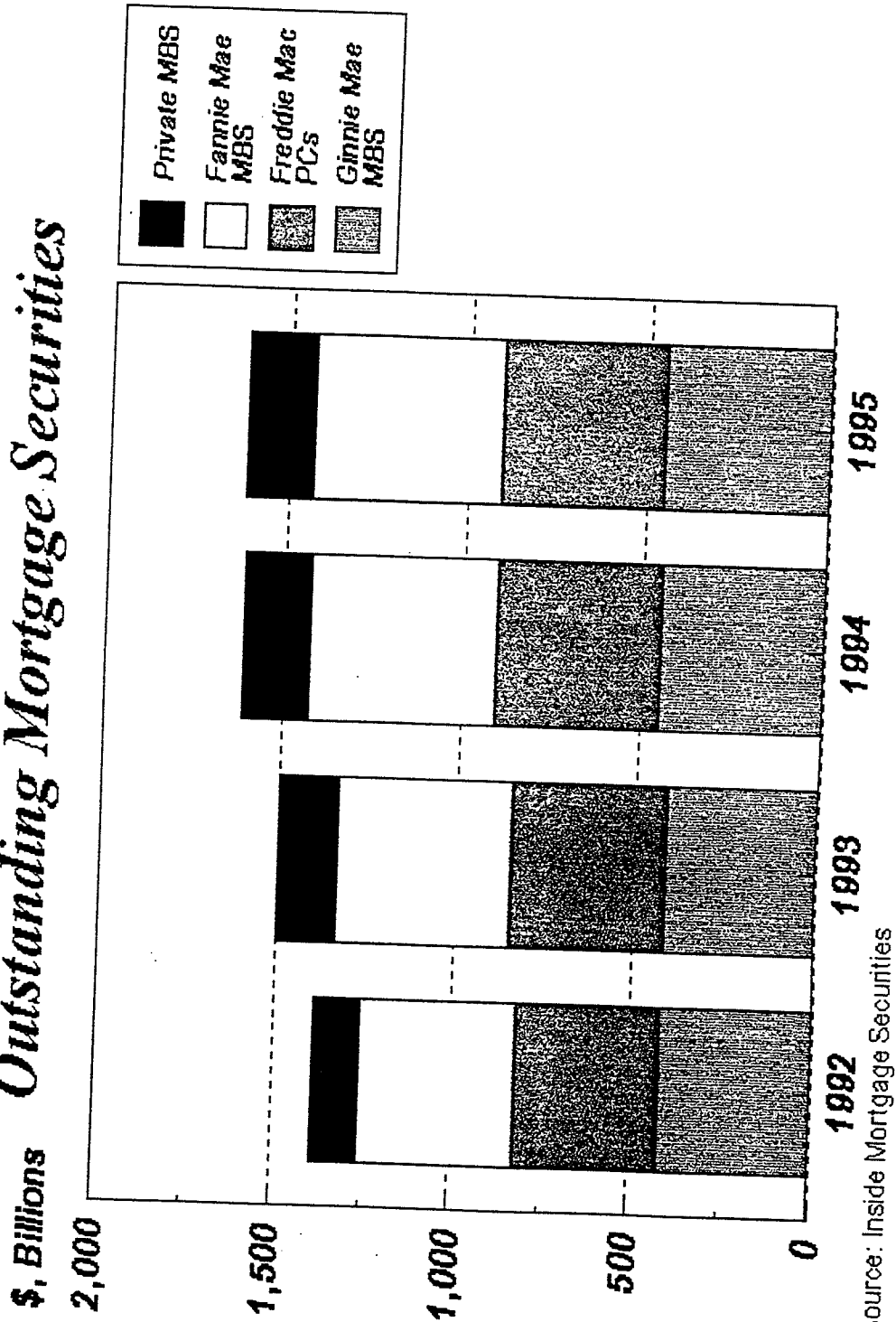
Figure B-3
Outstanding Mortgage Securities, By Type
First Quarter 1995; \$, Billions



Fannie Mae 529.9

Source: Inside Mortgage Securities

Figure B-4
Outstanding Mortgage Securities



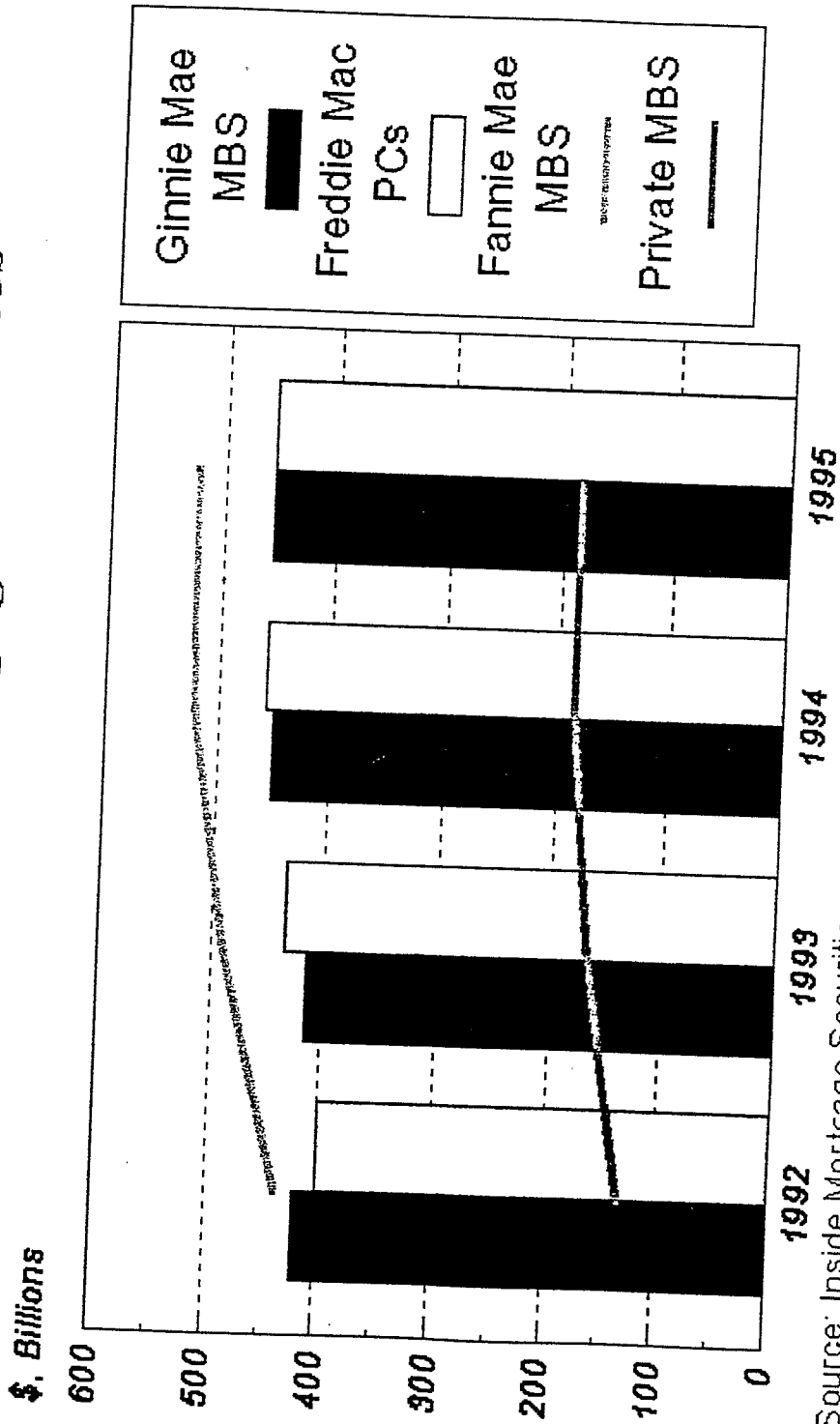
Source: Inside Mortgage Securities

Figure B-4
Outstanding Mortgage Securities

	Ginnie Mae MBS	Freddie Mac PCs	Fannie Mae MBS	Private MBS
1992	419.5	401.5	435.9	132.0
1993	414.1	434.5	486.8	164.0
1994	450.9	457.3	520.8	183.6
1995	455.5	455.7	523.9	184.4

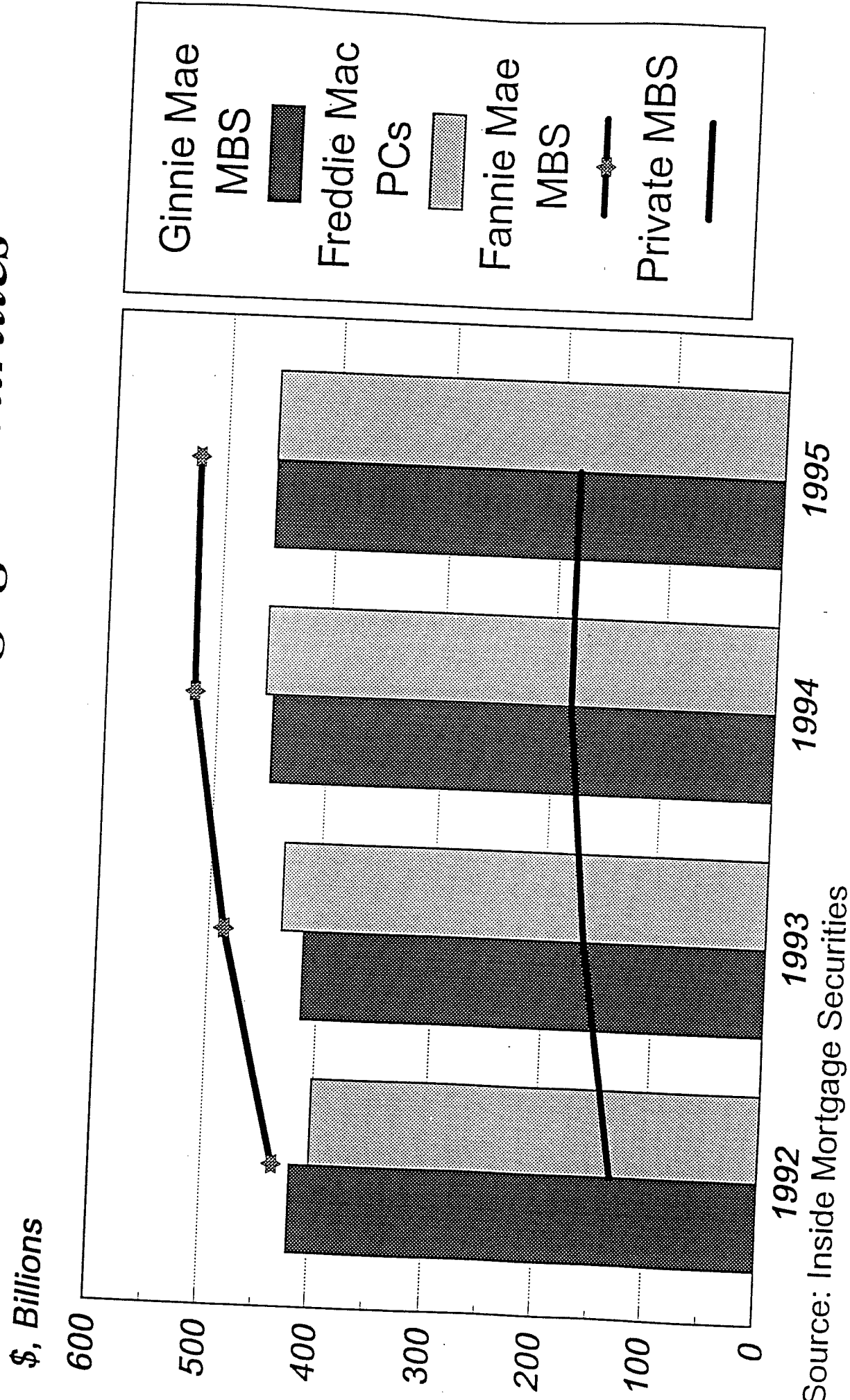
Source: Inside Mortgage Securities

Figure B-5
Outstanding Mortgage Securities



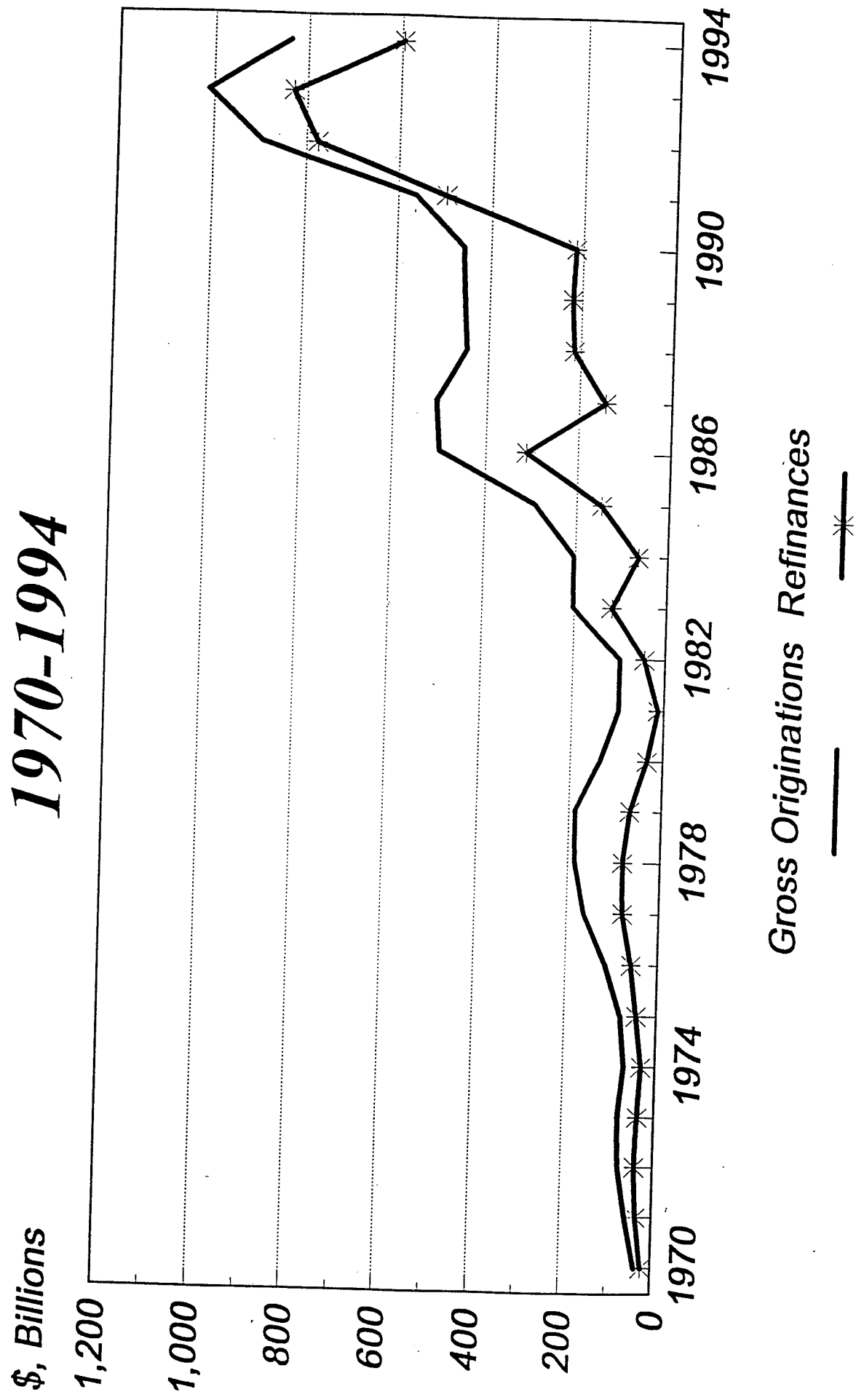
Source: Inside Mortgage Securities

Figure B-5 Outstanding Mortgage Securities



Source: Inside Mortgage Securities

Figure B-6
Refinance and Gross Originations
1970-1994



Source: HUD, MBA

Figure B-6

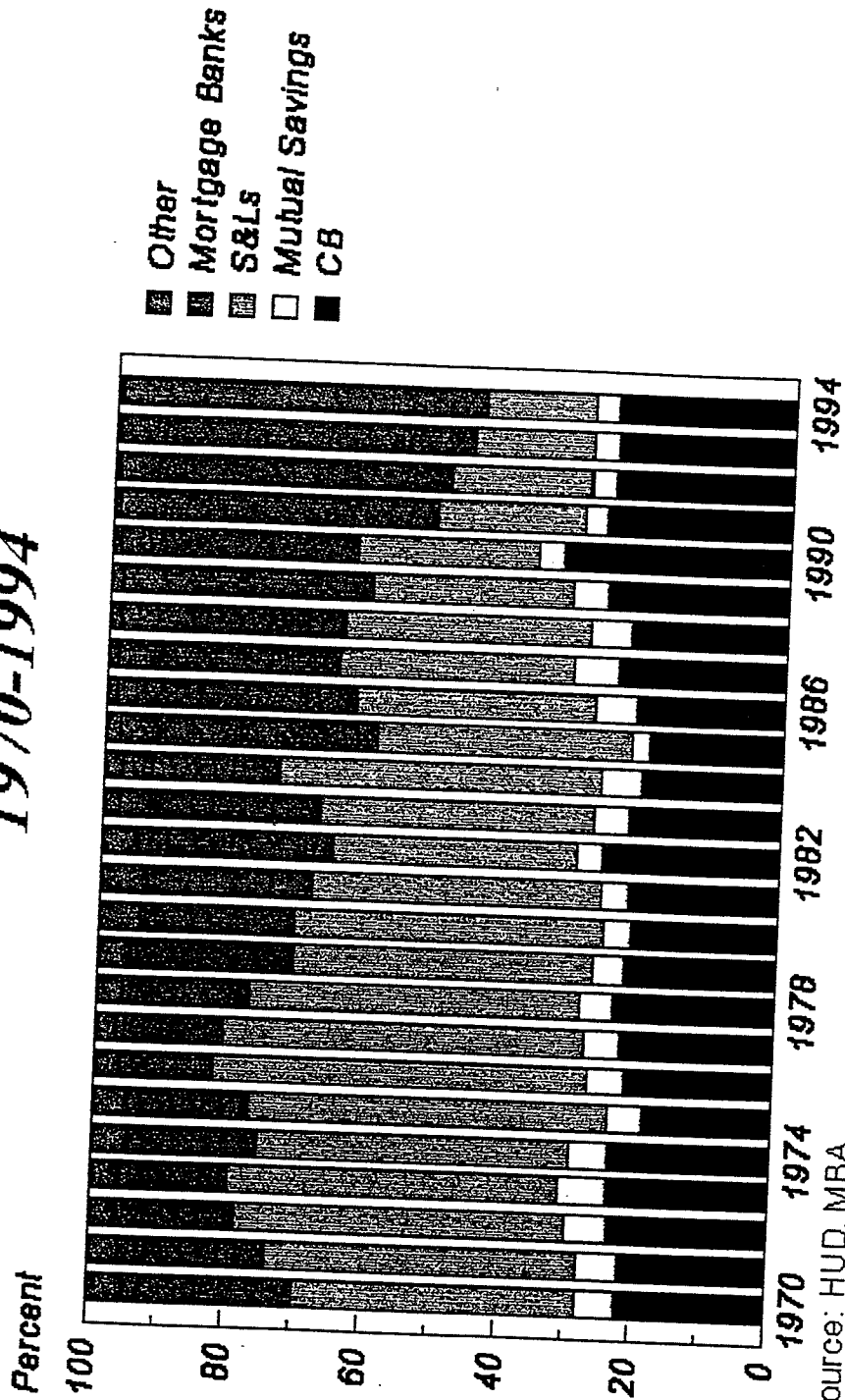
Refinance and Gross Originations

1970-1994, \$ Billions

	Gross Originations	Refinances
1970		
1971	36	21
1972	58	35
1973	76	40
1974	79	36
1975	68	30
1976	78	43
1977	113	57
1978	162	79
1979	185	81
1980	187	68
1981	134	34
1982	98	12
1983	97	44
1984	202	118
1985	204	63
1986	290	145
1987	499	312
1988	507	142
1989	446	214
1990	453	220
1991	458	215
1992	562	498
1993	894	776
1994	1,010	829
	838	596

Source: HUD, MBA

Figure B-7
Market Share of Originators
1970-1994



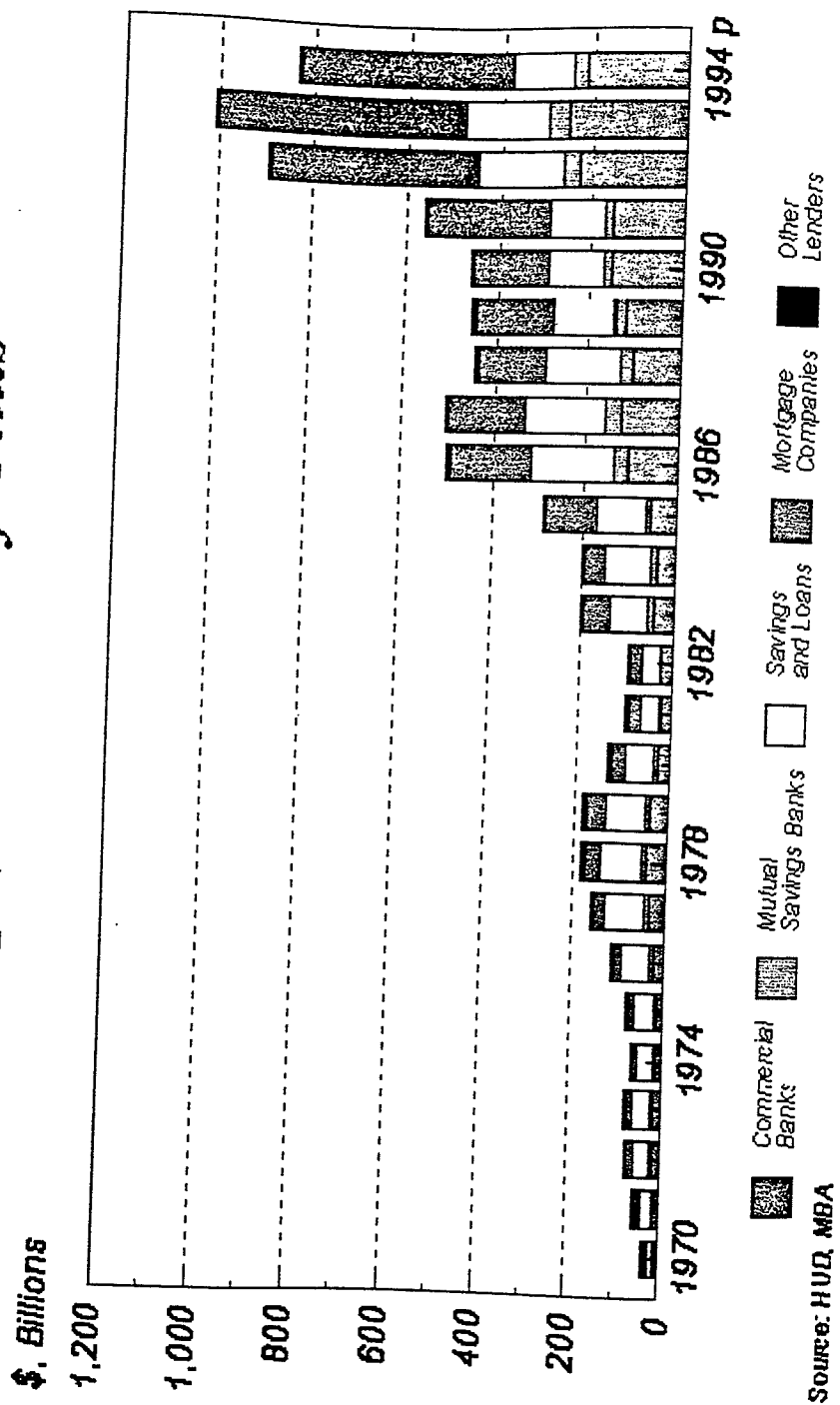
Source: HUD, MBA

Figure B-7
Market Share of Originators
1970-1994; In Percent

	CB	Mutual Savings	S&Ls	Mortgage Banks	Other
1970	21.97	5.92	41.69	25.07	5.35
1971	21.80	6.06	46.02	21.63	4.50
1972	23.35	6.73	48.42	17.55	3.96
1973	23.77	7.46	48.55	16.06	4.17
1974	23.89	5.79	45.85	19.29	5.19
1975	18.61	5.52	52.89	17.97	5.01
1976	21.74	5.68	54.92	13.93	3.73
1977	22.64	5.37	53.24	15.85	2.90
1978	23.73	5.08	48.65	18.59	3.95
1979	22.13	4.81	44.25	24.21	4.60
1980	21.54	4.04	45.70	21.99	6.73
1981	22.10	4.07	42.77	24.44	6.62
1982	25.98	4.12	35.88	28.87	5.15
1983	22.19	5.35	40.37	29.62	2.48
1984	20.57	6.23	47.23	23.37	2.60
1985	19.67	2.59	37.72	37.96	2.07
1986	21.75	6.23	35.26	35.24	1.52
1987	24.57	6.74	34.40	32.95	1.34
1988	22.84	6.36	35.95	33.17	1.68
1989	26.76	5.12	29.70	36.76	1.66
1990	33.44	3.93	26.39	35.16	1.09
1991	27.28	3.29	21.69	46.96	0.78
1992	25.97	3.83	20.65	48.97	0.58
1993	25.69	3.90	17.75	52.11	0.55
1994	26.13	3.60	16.16	53.58	0.54

Source: HUD, MBA

Figure B-8
Mortgage Originations, 1970-1994: By Lender
Type, 1-4 Family Units



Source: HUD, MBA

Figure B-8
Mortgage Originations, 1970-1994
By Lender Type; 1-4 Family Units, \$ Billions

	Commercial Banks	Mutual Savings Banks	Savings and Loans	Mortgage Companies	Other Lenders
1970	7.8	2.1	14.8	8.9	1.9
1971	12.6	3.5	26.6	12.5	2.6
1972	17.7	5.1	36.7	13.3	3.0
1973	18.8	5.9	38.4	12.7	3.3
1974	16.1	3.9	30.9	13.0	3.5
1975	14.5	4.3	41.2	14.0	3.9
1976	24.5	6.4	61.9	15.7	4.2
1977	36.7	8.7	86.3	25.7	4.7
1978	43.9	9.4	90.0	34.4	7.3
1979	41.4	9.0	82.8	45.3	8.6
1980	28.8	5.4	61.1	29.4	9.0
1981	21.7	4.0	42.0	24.0	6.5
1982	25.2	4.0	34.8	28.0	5.0
1983	44.8	10.8	81.5	59.8	5.0
1984	41.9	12.7	96.2	47.6	5.3
1985	57.0	7.5	109.3	110.0	6.0
1986	108.6	31.1	176.1	176.0	7.6
1987	124.6	34.2	174.5	167.1	6.8
1988	101.9	28.4	160.4	148.0	7.5
1989	121.2	23.2	134.5	166.5	7.5
1990	153.3	18.0	121.0	161.2	5.0
1991	153.3	18.5	121.9	263.9	4.4
1992	232.1	34.2	184.5	437.6	5.2
1993	259.5	39.4	179.3	526.5	5.6
1994 P	218.0	30.0	134.8	447.0	4.5

Source: HUD, MBA