Volume Title: The Postwar Residential Mortgage Market

Volume Author/Editor: Saul B. Klaman

Volume Publisher: Princeton University Press

Volume ISBN: 0-870-14106-6

Volume URL: http://www.nber.org/books/klam61-1

Publication Date: 1961

Chapter Title: The Postwar Pattern of Mortgage Interest Rates

Chapter Author: Saul B. Klaman

Chapter URL: http://www.nber.org/chapters/c2341

Chapter pages in book: (p. 74 - 98)

CHAPTER 4

The Postwar Pattern of Mortgage Interest Rates

THE course of mortgage interest rates and its relationship to the flow of mortgage funds are referred to in most chapters of this report. Separate treatment is given here to that subject, so fundamentally important to an understanding of postwar market developments. The influence of shifting market forces on mortgage flows has often been transmitted through changes in mortgage interest rates and yields and in their relationship to yields of other capital market securities.[1] Little current information on these points has been available, and obtaining data is difficult because of the complexities of interrelationships between mortgage interest rates, other mortgage terms, and the demand and supply of mortgage funds. Obviously, such gaps in our knowledge of this important area cannot be filled by what follows. We may hope that a future broad-scaled study of interest rates, as suggested by the National Bureau, will include the mortgage field. Meanwhile, a beginning is made here by presentation of new data on conventional mortgage interest rates, by examination of the effects of discounts on FHA and VA loans, and by analysis of the relationship of changes in mortgage yields to changes in the flow of mortgage funds.

Course of Conventional Mortgage Interest Rates

When this study was undertaken, neither monthly nor quarterly series on conventional residential mortgage interest rates were available on a current basis, and the few regional annual series suffered from many shortcomings.[2] Within the limited resources of the present study, new quarterly data on conventional mortgage interest rates were obtained, covering home and income properties separately. Their important limitations are due primarily to their source—the experience of but a few major

[1] The term interest rate generally refers to the rate specified in the mortgage contract; the term yield refers to the actual return to lenders based on the prices at which mortgages and securities are purchased in the market.

[2] Long-term interest rate series covering all types of real estate in Manhattan, the Bronx, Chicago, and St. Louis were included in the study, *Capital Formation in Residential Real Estate: Trends and Prospects*, by Leo Grebler, David M. Blank, and Louis Winnick, Princeton University Press for National Bureau of Economic Research, 1956. Only the data for Manhattan and St. Louis extended beyond 1940. Because the series are limited in geographic coverage and cover all types of real estate, interpretation becomes difficult. Other limitations of the series are discussed in Chapter 15 and Appendix O of that study, which also includes a general analysis of the long-term relationships between mortgage interest rates, general interest rates, and residential building.

life insurance companies. But, as noted later in the chapter, the series tie in well with broader annual series developed for earlier years by the National Bureau. Moreover, because of significant geographic differentials between mortgage interest rates (see the last section of this chapter), a hypothetical national series is represented better by a few large life insurance companies, which acquire conventional loans throughout the country, than it would be by larger numbers of other types of lenders whose mortgage lending activity is concentrated locally. The series to follow, therefore, notwithstanding significant qualifications, do provide a reasonably accurate measure of the general levels and movements of conventional mortgage interest rates which can be studied in relation to yields on other capital market securities in the postwar decade.

AMPLITUDE OF CONVENTIONAL MORTGAGE INTEREST RATE MOVEMENTS

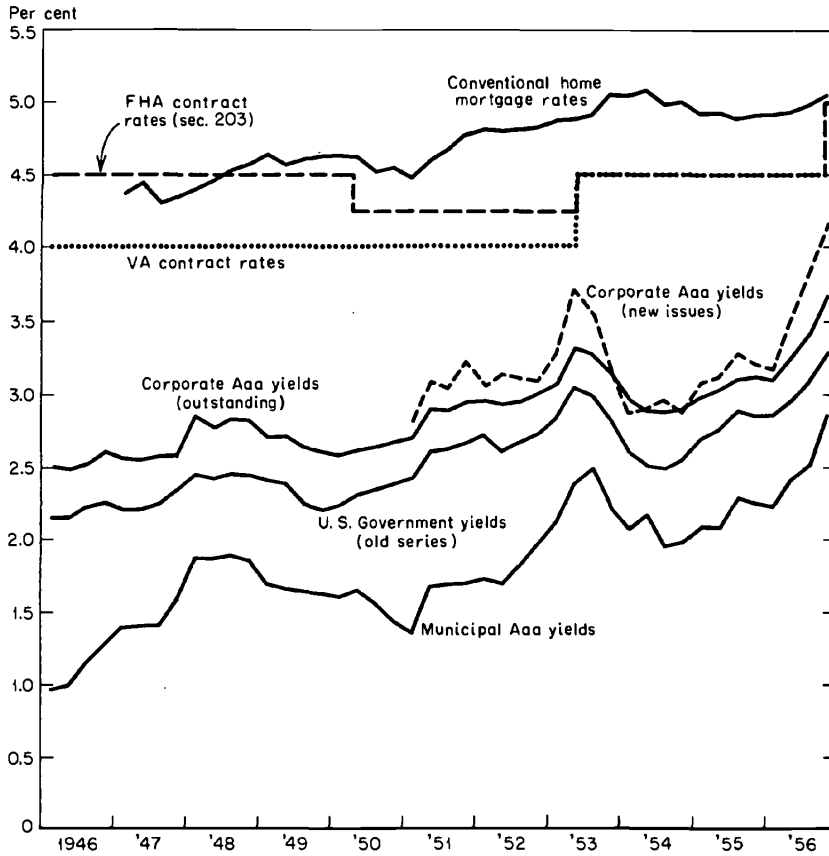
Quarterly conventional mortgage interest rates on one- to four-family houses, as shown in Chart 7, fluctuated within a fairly narrow range of between 4.35 and 5.09 per cent, from 1946 through 1956. For major types of bonds, the amplitude of fluctuation during the period was substantially greater, not only relatively but even absolutely: for outstanding corporate bonds (2.49 to 3.68), U.S. government bonds (2.14 to 3.30), and municipal bonds (0.96 to 2.86). This finding of the relative amplitude of mortgage interest rates and bond yields in the postwar decade agrees generally with those of Grebler, Blank, and Winnick on movements during half a century.[3] The relative difference in the amplitude of fluctuation in the short postwar period was, however, much smaller than in the longer period from the turn of the century. Also in general agreement with findings of that study is the conformity of broad movements in mortgage rates and bond yields in reflecting the pervasive influence of capital market conditions. A significant additional fact revealed by the new quarterly series, however, is the consistent lag in the movements of mortgage interest rate changes behind those of changes in bond yields. Both the narrowness of fluctuations in mortgage interest rates and the lag in reaction to changes in capital market conditions reflect basic differences in mortgage market techniques and characteristics compared with those of other capital markets.

Other explanations of differences in amplitude of fluctuation have been advanced. The explanation given by Grebler, Blank, and Winnick relies in large part on the fact that the mortgage interest rate series refers to loans *made*, while the bond yield series they used refers to *outstandings*.

[3] *Ibid.*, p. 223.

CHART 7

Interest Rates and Yields on Mortgage Loans and Other Capital Market Securities, Quarterly, 1946–1956



SOURCE: Data on corporate Aaa, municipal Aaa, and U.S. government securities are quarterly averages of monthly yield figures. The U.S. government bond series consists of fully taxable, marketable 2½ per cent bonds due or first callable after twelve years, through Sept. 30, 1955, and those due or callable in ten to twenty years, beginning Oct. 1, 1955. The series on outstanding corporate and municipal yields are from Moody's Investor Service; and on U.S. Governments is from the *Federal Reserve Bulletin.*

The new corporate issues series begins in 1951, from the First National City Bank of New York, and represents high grade corporate bonds adjusted to Aaa basis. Data on FHA and VA mortgage interests rates are the maximum legal rates established by statute or administrative decision. Data on conventional home mortgage interest rates are a weighted average of contract rates on loans closed by two life insurance companies from 1947 to 1951 and by two additional companies from 1951 to 1956. The series is affected little whether it is based on data from two or four companies because of close agreement in interest rate data among the reporting companies. See also Table A–4 below.

Changing market conditions can effect outstanding bonds, they conclude, only through price or yield. On new mortgage loans the effect can take the form of changes in other related factors including "loan-to-value ratios, appraisals, contract terms, noninterest costs, and the ratio of loan rejections, as well as contract interest rates. Also, since the data show contract interest rates rather than yields on mortgages, they fail to reflect changes in premiums and discounts on mortgage loans, at times important in the mortgage market."[4]

One implication of their explanation—that a yield series on new bond issues would move more narrowly than one on outstandings—is not borne out by yield data on new corporate bond offerings. The new corporate issues series shown in Chart 7, for example, fluctuated more widely during 1951–1956 than the series on outstanding corporate issues did. This observation conforms to the generally accepted view that, for most capital market securities, yields on new issues are more sensitive to market developments than are outstandings. The explanation of the narrower amplitude of mortgage interest rates compared to bond yields must lie, therefore, in the basic differences between the two types of debt instruments and between the markets in which they are negotiated and traded.

Markets characterized generally by close pricing are those in which highly standardized commodities are traded. Price is the main point of negotiation. The market for Aaa corporate issues is a good example. Most of the terms associated with public offerings—provisions for callability, sinking funds, and refundability—follow a fairly standardized pattern. In long-term bond issues, furthermore, the question of specific maturity, that is, whether repayment is to be in twenty or thirty years is of little consequence. Moreover, by definition, the credit of the borrower offering an Aaa series and usually the size of loan are not in question.

As we move away from standardized to more differentiated markets and commodities the number of variables, in addition to price, to be negotiated multiplies. In the market for direct placement of corporate securities, for example, there are more terms to negotiate than in the market for public offerings. The market for residential mortgages is an example of the most differentiated, because few markets are characterized by more one-of-a-kind deals. The credit of each borrower must be established, and "credit worthiness" becomes a function of the relative tightness of capital markets. Numerous contract terms other than price are subject to individual negotiation—downpayment requirements, amortization provisions, contract maturities, prepayment penalties, and noninterest costs. The nature

[4] *Ibid.*, p. 223.

and location of the particular residential unit securing the mortgage, moreover, are important factors in a mortgage transaction.

All these elements are more sensitive than the mortgage interest rate is to changes in financial market conditions. Downpayment and maturity provisions are particularly responsive, as reflected, for example, in the wide swings in the availability of no-downpayment thirty-year VA loans between periods of market ease and tightness. The greater responsiveness of such contract terms compared with that of interest rates stems from institutional factors also. The "stickiness" of conventional mortgage rates manifests one institutional factor, the local orientation of mortgage markets, in which a "going rate" of exactly 5 or 6 per cent, for instance, becomes accepted and changes only slowly. In mortgage markets, furthermore, there is no counterpart of the investment banker who works closely with the borrower on narrow underwriting margins, and achieves fine-drawn pricing through discounts and premiums. The mortgage lender dealing directly with borrowers rarely resorts to discounts and premiums, and seldom changes contract interest rates by less than one-fourth of a percentage point and often by not less than one-half. Moreover, the fee or premium, often paid by a lender to a mortgage broker or originator for "finding" loans, does not show up in a contract interest rate series, but is included as one of the administrative costs. For reasons growing out of market and technical peculiarities, therefore, fairly substantial and more prolonged changes in financial conditions are required to bring about changes in conventional mortgage interest rates.

The element of administrative costs, noted above, has its own place in the relative stickiness of mortgage rates. In general, the larger such costs are relative to the interest rate the more stable the interest rate is likely to be. The reason is simple: a minimum margin must be maintained between the interest rate and a lender's fixed administrative costs to assure him a reasonable return. The same reason accounts for the high and unvarying rates on consumer credit—high costs of administering a portfolio of consumer loans. Similarly on residential loans, administrative costs of acquisition, servicing, and record keeping, perhaps 75 basis points compared to 10 on corporate securities, create a relatively stable state in residential mortgage interest rates.[5]

LAG IN MORTGAGE INTEREST CHANGES

Changes in mortgage interest rates lagged consistently behind changes in bond yields throughout the postwar decade. Moreover, in each cycle

[5] I am indebted to Roger F. Murray for helpful discussion of the basic reasons for differences in behavior between mortgage and other long-term yields.

the timing of the lag has been generally the same—about four quarters. This timing pattern differs little whether the comparison is between mortgage interest rates and yields on outstanding or on new bond issues. Considering the imperfections in the data, the consistency of pattern is remarkable, even though some of the cyclical differences may be obscured by quarterly averages.

The timing of peaks and troughs for the various types of capital market securities, evident from Chart 7, is pinpointed in Table 12. Except for

TABLE 12

Turning Points in Interest Rates and Yields on Capital Market Securities
(quarterly averages of monthly data)

Cycle	Mortgages	Corporate Bonds		U.S. Government Bonds	Municipal Bonds
		Outstandings	New Issues		
PEAKS (quarters)					
First	1949-I	1948-I	—	1948-I	1948-III
Second	1954-II	1953-II	1953-II	1953-II	1953-III
LAG IN MORTGAGE RATES BEHIND BOND YIELDS (number of quarters)					
First	—	4	—	4	2
Second	—	4	4	4	3
TROUGHS (quarters)					
First	1951-I	1950-I	—	1949-IV	1950-I
Second	1955-III	1954-III	1954-I	1954-III	1954-III
LAG IN MORTGAGE RATES BEHIND BOND YIELDS (number of quarters)					
First	—	4	—	5	4
Second	—	4	6	4	4

SOURCE: Figures are based on data shown in Chart 7.

municipals, outstanding bond yields reached their first postwar peak in the first quarter of 1948 compared with the first quarter of 1949 for mortgage interest rates. The subsequent decline in bond yields continued to a low around the first quarter of 1950 and was accompanied by little

change in mortgage rates. Later the rates declined to a low in the first quarter of 1951. A new marked rise in bond yields, following the "accord" (see Chapter 3, section on monetary and debt management policies and liquidity of financial institutions), culminated in a mid-1953 peak for both new and outstanding issues (except municipals), while the advance in mortgage interest rates did not come to an end until mid-1954. The downward phase of the second cycle, for all but the new corporate issue series, ended in a third quarter 1954 trough, again four quarters before the trough in mortgage interest rates was reached.[6]

In the changed money market environment after late 1954, bond yields—on both new and outstanding issues—rose sharply through 1956 and apparently continued to rise through the third quarter of 1957. Mortgage interest rates rose much less sharply through 1956. Evidence from lenders (although actual data for 1957 are not at hand) suggests that the advance in rates gained momentum in 1957 and was still in progress as the year ended. The pattern of the first postwar decade suggests that the rise probably continued through the third quarter of 1958.

The lag of about four quarters in mortgage interest rate changes behind bond yield changes reflects the institutional structure of mortgage interest rates and the greater responsiveness to market conditions of changes in other mortgage terms, discussed earlier. Important also is the influence of the commitment technique, fundamental to the mortgage lending process. The technique, described and appraised in Chapter 7, generally involves arrangements to provide mortgage credit in the future under terms and conditions prevailing at the time the commitment is made. Interest rates on mortgage loans closed, therefore, are those in effect several months before disbursement of funds. Because life insurance companies use the commitment method more extensively than other types of lenders do in disbursing their funds, the lag of interest rate series behind bond yields, shown in Chart 7, is probably greater than that of a series based on loans closed by banks or savings and loan associations. Alternatively, an interest rate series based on current mortgage loan commitments would show a considerably shorter time lag.

COMPARISON OF INTEREST RATES ON HOME AND INCOME PROPERTY LOANS

The data obtained in this study on conventional mortgage interest rates for income properties—somewhat thinner than those for homes—may be

[6] The trough for new corporate issues is not quite clear with both the first and fourth quarters of 1954 at about the same low level, separated by a small rise in the interim quarters. In part, the movement reflects technical problems in the series.

used only as a broad guide to level and movements. The series shown in Chart 8 includes chiefly loans on large-scale apartment buildings and high-quality commercial properties (office buildings, shopping centers).

CHART 8

Conventional Mortgage Interest Rates on Home and Income Property Loans Closed, Quarterly, 1951–1956

SOURCE: Data on home mortgage loans are a weighted average of contract interest rates reported by four life insurance companies. In income property loans data are a weighted average of contract interest rates from two companies, one of which reported on residential loans also. See Table A-5 below.

In accord with earlier data compiled by the National Bureau,[7] findings for the postwar decade show that interest rates on mortgage loans closed on income properties were lower than on homes. The spread has varied somewhat from a high between 50 and 60 basis points in 1951 to a low between 20 and 30 basis points through most of 1955 and 1956. The generally lower level of rates on business type property loans is due to two obvious advantages of such loans: large individual loans involve relatively low servicing costs per dollar of loan; such loans are secured by

[7] For a summary of data on conventional mortgage interest rates see R. J. Saulnier, Harold G. Halcrow, and Neil H. Jacoby, *Federal Lending and Loan Insurance*, Princeton University Press for NBER, 1958, Table 69.

properties having assured income from high-grade tenants renting space under firm long-term leases.

Evidence obtained in interviews, however, suggests that the pattern is subject to significant variations. Relatively high interest rates can often be commanded by the comparatively few mortgage lenders able and willing to make large individual loans of several million dollars. This is so particularly during periods of capital market stringency when alternative investment opportunities are plentiful. In periods such as 1953 and 1956, the spread between mortgage interest rates on home and business property loans narrows. Several life insurance companies reported informally that during 1956 and early 1957 their rates on income property loans were as high or even higher than on home loans.

The greater volatility of average interest rates on business than on home property loans is also clear from Chart 8. It is due chiefly to the greater influence of each individual loan on the business loan series than on the home loan series because the number of business-property loans is much smaller than that of home loans.

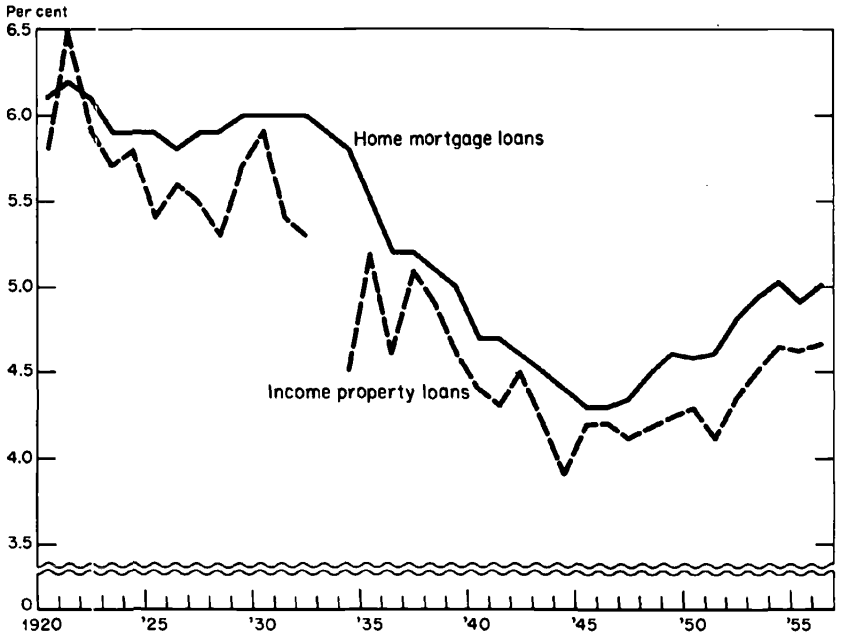
LONGER-TERM MOVEMENTS IN CONVENTIONAL MORTGAGE INTEREST RATES

Annual data on conventional mortgage interest rates for earlier years from National Bureau studies with more recent data developed in this study permit the construction of the annual series from 1920 through 1956, shown in Chart 9. Comparability of the present series (1947–1956) with the National Bureau series (1920–1947) is made more direct by use of earlier data for life insurance companies only. The National Bureau's interest rate data for commercial banks and savings and loan associations closely parallel the life insurance company data at a somewhat higher level. The level of rates in 1947—4.2 per cent for the last year of the National Bureau series and 4.3 per cent for the first of the present series—speaks for the comparability of the series and strengthens the credibility of each.

While from 1920 to 1932 the level of mortgage interest rates remained relatively stable, around 6 per cent, the postwar rise started from a much lower level after a steep and steady drop of nearly fifteen years' duration. Thus, notwithstanding the significant increase in interest rates on both home and income property loans after World War II, levels at the end of 1956 were still well below those of the 1920's and early 1930's. It is likely, however, that further rises during 1957 carried the average level considerably closer to that of thirty years earlier.

CHART 9

Conventional Mortgage Interest Rates on Home and Income Property Loans, 1920–1956



SOURCE: For 1920–1933 data are from J. E. Morton, *Urban Mortgage Lending: Comparative Markets and Experience*, Princeton for NBER, 1956, Tables C-5 and C-8. For 1934–1946 data are from unpublished tables of the National Bureau, and for 1947–1956 are from the present study. While Morton's monograph also reproduces National Bureau data for 1934–1946, these include interest rates on federally underwritten loans as well as on conventional loans, and are not completely comparable with earlier or later figures on conventional mortgage interest rates. Data for 1933 on income property loans are not available. See also Table A–6 below.

FHA and VA Mortgage Interest Rates and Prices

The overriding fact about interest rates on FHA and VA mortgage loans is their relative inflexibility. The maximum rates are established by law and regulation and tend to become going market rates. The arbitrary setting of rates outside the "free" market has been a major element influencing the allocation of funds in the capital market, tending to attract funds into mortgages and away from other types of investments during periods of market ease and to restrict the flow of mortgage funds during periods of stringency. Adjustments in FHA and VA mortgage yields made through discounts and premiums have not been wholly effective in

solving the basic problems inherent in a market situation characterized by the existence of ceiling prices for one product and free prices for competitive products (see following section on discounts and premiums for discussion of reasons).

When World War II ended, the federal government was underwriting mortgages made by private lenders at fixed maximum interest rates of 4 per cent for VA loans and 4½ per cent for FHA loans. Subsequent changes in those rates, discussed in Chapter 3, are visible in Chart 7. The early postwar rates on such government underwritten loans were markedly higher than yields on long-term government securities, while risks were little greater. The rates were also significantly higher than yields on business securities. The differential more than compensated for the higher administrative and servicing costs on FHA and VA loans compared to those on other capital market securities. Moreover, the established maximum interest rate for FHA mortgages was apparently at a higher level than conventional mortgage interest rates through mid-1948, and the rate for VA mortgages was only slightly less than conventional rates. Under these circumstances, federally underwritten mortgages were quite attractive to investors.

Except for a time during 1948 when bond yields were rising, the appeal to investors of FHA and VA loans continued strong until the Federal Reserve-Treasury "accord" of early 1951. Thereafter, while other important elements described in Chapter 3 were at work, the ebb and flow of federally underwritten mortgage funds reflected in large part the narrowing and widening differentials between fixed interest rates on FHA and VA loans and changing yields on other capital market securities. During periods of credit stringency, when yields on competitive capital market securities rose, investment in federally underwritten mortgages declined, but rose again when competitive yields fell during periods of credit ease. The relationship is shown in Chart 1 and discussed in more detail in the accompanying text. To recapitulate, inflexible interest rates on FHA and VA loans have made an important contribution to wide fluctuations in the flow of mortgage funds during alternating periods of credit ease and restraint. Moreover, existence of two types of government securities—direct obligations and loans with federal guarantees—at yield differentials determined arbitrarily outside the "free" market but obviously at variance with the market's evaluation of the differential has been an important factor in capital market instability.

DISCOUNTS AND PREMIUMS

The question to be considered here is why discounts or premiums on loans with fixed maximum interest rates have not been effective in adjusting yields to actual market conditions. Other capital market securities are traded at prices above or below par in response to changing conditions, with a resulting differential between effective yields and coupon rates. Why is such complete market flexibility not possible for federally underwritten mortgages? The answer lies in a myriad of factors—legal, moral, and psychological, as well as economic—and is associated with a background of federal statutory and administrative changes. Some knowledge of the background, briefly sketched below, is necessary to an understanding of this basic problem.[8]

Regulations limiting fees and charges made by lenders and builders against borrowers of FHA and VA loans have been in effect since the beginning of the federal mortgage underwriting programs. Until 1950, however, there were no regulations governing fees, charges, or discounts that could be imposed by lenders upon builders or sellers of houses under these programs. By legislation (Housing Act of 1950, Section 504), the Veterans Administration and Federal Housing Administration were required to limit the charges which could be made by lenders against builders. Later (September 1951) charges against a seller of existing properties were limited as well.

These Congressional actions stemmed largely from developments in preceding months during which FNMA was actively supporting the market for VA loans through the issuance of advance commitments to purchase such mortgages at par. With the private market price of VA loans at less than par, lenders were able to exact discounts from builders and turn a profit in selling mortgages at par to FNMA. "Thus, in practical effect, the lender was exacting a fee from the builder or sponsor for obtaining financing

[8] The discussion following to the end of this section is based largely on information included in the congressional reports and hearings given below.

81st Congress, 2nd session, Report No. 1286, Senate Committee on Banking and Currency, to accompany S. 2246, February 24, 1950. 81st Congress, 2nd session, Conference Report No. 1893 to accompany S. 2246, April 5, 1950. 83rd Congress, 1st session, Senate Banking and Currency Committee, Hearings on "Mortgage Interest Rate Problem," January 28, 1953. 83rd Congress, 1st session, House Veteran's Affairs Committee Hearings on "Proposed Sale of Guaranteed Loans at a Discount," April 29, 1953. 83rd Congress, 1st session, Conference Report No. 692 to accompany S. 2103, "Housing Amendments of 1953," June 30, 1953. 83rd Congress, 1st session, House Veterans Affairs Committee, Hearings on "Proposed Sale of Guaranteed Loans at a Discount," May 12, 1953. 83rd Congress, 1st session, House Subcommittee on Housing of Committee on Veterans Affairs, Hearings on "Fees and Charges Schedule Governing Guaranteed Housing Loans," June 18, 1953.

that actually represented the use of government funds. It is believed that this was the practice which the Congress was in the main concerned about and was desirous of curbing, although there was, in addition, concern that the cost to the purchaser would be increased."[9] The legislation enacted was considerably broader and applied to all FHA and VA loans whether or not sold to FNMA.

The 1950 legislation did not end the practice of mortgage discounting, however. Lenders and builders devised numerous practices, not covered by the law, through which discounts were considered legal or at least not patently illegal.[10] With yields on corporate and government securities rising through most of the period to mid-1953 (Chart 7), discounts were widespread, especially on VA loans. The VA interest rate (4 per cent), fixed at a lower maximum than the FHA rate ($4\frac{1}{4}$ per cent), led lenders to seek to increase the effective rate by discounts and builders to obtain liberal financing on houses to be sold.

Even so, in view of the established maximum interest rate on FHA and VA loans, and the obvious legislative intent to limit discounts, many large investors—particularly life insurance companies—reduced their purchases of federally underwritten mortgages rather than resort to discounts. The Veterans Administration, in the hearings cited, expressed the view that the reluctance could not "be explained solely on economic grounds. For example, a 20-year GI 4 per cent loan purchased at a 5 per cent discount offers a yield to the investor of 4.64 per cent if . . . held to maturity and a somewhat higher yield [if] prepaid prior to maturity." Rather, the Administration believed that the reluctance stemmed "from their apprehension that the purchase of loans at very sizable discounts may subject them some day in the future to public censure, or perhaps even to criminal prosecution, although the VA solicitor has ruled that discount arrangements are legal under the act and regulations, provided they meet certain tests and conditions."[11] Such apprehension was reported more directly in later congressional testimony. "Many

[9] Hearings on "Mortgage Interest Rate Problem," reply of Veterans Administration to questions of Senate Banking and Currency Committee, p. 43.

[10] In particular, three practices known to be in wide general use were outlined in Hearings on "Mortgage Interest Rate Problem," p. 40: (1) Since the statute prohibited excessive charges against builders, sellers, and borrowers only, without mention of other parties to a transaction, lenders collected fees from real estate brokers or acted directly as sales brokers. (2) An agreement would be made by a lender with a builder or seller under which a purchase of loans at par and accrued interest was agreed upon if the lender was unable to sell such loans at par within a specified period. To guarantee such a purchase, a deposit subject to forfeit was posted by the builder or seller. (3) A builder would close VA loans in his own name, as a nonsupervised lender, and later sell them at a discount.

[11] *Ibid.*, p. 42.

lenders solicitous of their own good repute balk or shy away from going into the program under arrangements of that kind [see footnote 9], and they are the people that tell us, 'If you will legalize this discount so our lawyers will not tell us to be leery of whether it is or is not proper under the law, we will go into your program'.[12]"

Soon after maximum interest rates on VA and FHA loans were increased restriction of the described discount practices was undertaken by Veterans Administration directive (May 1953). Builders were required to certify that they had neither directly nor indirectly paid discounts or fees other than those explicitly allowable by statute or regulation. Strong protests by builders and lenders led to legislation (June 1953) authorizing builders and sellers to pay discounts incurred by lenders on federally underwritten loans. Such discounts, however, could not be passed on to purchasers.[13] The limitation on covering discounts in sales transactions was one important deterrent to their effective use in bringing yields on VA and FHA loans into competitive range with other capital market investments. Whereas small discounts could be covered by builders in selling price or absorbed in profit, the larger discounts required by lenders in late 1955 and 1956 made builders and sellers increasingly reluctant to reduce, by absorption of discounts, effective sales return on houses. Consequently both new house builders and sellers of existing houses turned to conventional mortgages with flexible interest rates and no need for discounts to increase effective yields.

The question whether mortgage discounts were actually being absorbed by builders or were passed on to veteran buyers has long been debated, but conclusive evidence is lacking to support either contention. Because the methods of real estate value appraisal are so inexact, one view, as expressed by a Congressman, is that the cost of discounts could readily be covered in the sale price of a house. A VA representative testified that "it was impossible to appraise houses within a 5 per cent figure. How can you come before this committee and tell us that you think the veteran will not have to absorb this [discount], when your people admit that you cannot get closer than 5 per cent to the amount of money?" The same man said that "he had checked it over and over, and said that always in some way they passed it on down to the house and to the veteran buying

[12] Testimony of T. B. King, Assistant Deputy Director of Loan Guaranty Service, Veterans Administration, in hearings on "Proposed Sale of Guaranteed Loans at a Discount," p. 1035.

[13] The legislation, included in the Housing Amendments Act of 1953 took the form of an amendment to section 504 of the Housing Act of 1950. This section was finally repealed altogether on November 1, 1954.

the house."[14] Echoing this claim, a high federal housing official stated that, however careful a valuation system may be, "I do not think anybody in the business will contend that it can be so careful that it will prevent" passing back the discount to the borrower in the price of the house.[15] In answering these contentions, the Veterans Administration claimed that the criticism was not generally valid because the VA exercised appraisal controls through refusing to recognize increases in reasonable value. "On a number of occasions VA field offices have been exhorted to exercise extreme care to avoid yielding to any upward pressure from builders to permit the reflection of the discounts through higher reasonable values. Thus . . . it is unlikely that the builder is able to recoup his discount costs through higher valuations." The VA representative pointed out the offsetting value of the "availability of GI loan credit with its very low cost and liberal terms." Giving some ground, he continued: "But we cannot deny the possibility or even the probability that in a minority of cases the builder is able to obtain higher valuations sufficient to recompense him for all—or at least part—of whatever discount he may be required to pay for his financing."[16]

The general question of the incidence of discounts need not be resolved to reach agreement that the existence of regulations prohibiting the payment of discounts by borrowers is a deterrent to the use of FHA and VA loans. This is so particularly for existing house sales with value appraisals not based on costs, of which the seller's discounts might be one. In periods of credit tightness, moreover, not only increase of discounts required by lenders, but also other factors reduced the possibility of covering them in higher selling prices and thus passing them on to borrowers. With profit margins narrowed by increased cost of building and of land acquisition and development, builders found it difficult to absorb the costs of discounts as well. Thus, they temporarily reduced or discontinued operations under federal guaranteed financing.

Most lenders, also, were reluctant to place funds in federally underwritten mortgages when yields on other capital market instruments were rising. Notwithstanding the availability of discounts on a clearly legal basis after 1953, public censure was still likely, so long as discount charges were considered at least unethical. Congressional reaction to the existence

[14] Statement by Representative Olin E. Teague, in questioning Mr. T. B. King, in "Proposed Sale of Guaranteed Loans at a Discount," p. 1032.

[15] Statement by Raymond Foley, then Administrator of the Housing and Home Finance Agency, in "Mortgage Interest Rate Problem," p. 12.

[16] "Mortgage Interest Rate Problem," p. 44.

of large discounts in tight capital markets contributed importantly to the shaping of public opinion on this question. A subcommittee on housing expressed stern disapproval:

"In parts of the South and West the typical price for VA-guaranteed loans seems to fall in the 95 to 97 range. Even more disturbing are the very frequent accounts of even larger discounts of from 7 to as much as 10 points . . . . The persistence of these 'horror' cases and the generally agreed upon fact of discounts as heavy as 5 to 6 per cent in some areas, even for loans to excellent credit risks in desirable projects, has caused the subcommittee grave concern.

" . . . The subcommittee is convinced that . . . the 4½ per cent interest rate . . . is a fair rate for a virtually riskless investment. At the same time, we recognize . . . that . . . discounts in some degree are unavoidable and indeed are a necessary adjustment to changing supply and demand relationships. Large discounts, however, should not be sanctioned. A 7 per cent discount, for example, will give a gross yield for a twenty five-year loan (assuming a ten-year repayment period) of 5.53 per cent. The subcommittee regards this as an outrageous yield on a government-guaranteed obligation at a time when long-term government loans are yielding less than 3 per cent. Mortgages require a somewhat higher yield than bonds, to be sure, but no one, in our opinion, can defend a spread of such a magnitude."[17]

Such Congressional opinion has had a restraining influence upon acceptance by lenders of large discounts on federally underwritten mortgages. Large financial intermediaries, in their widely acknowledged role as public trustees, have been less willing to risk public censure than to ignore the facts of market forces. Small lenders that originate mortgage loans directly to borrowers have found it difficult to charge discount fees, and many have regarded the practice as something unsavory. These attitudes were borne out in interviews with officers of large and small institutions. Thus, from both the demand and supply side, the discount technique, because of legal requirements and equity pressures, has proved only partially effective in compensating for fixed maximum interest rates in a tightening capital market.

[17] Report No. 2 of the Subcommittee on Housing of the House Committee on Banking and Currency, "Mortgage Credit and FHA Multifamily Housing," January 31, 1956, pp. 4–5.

YIELD DIFFERENTIALS BETWEEN FHA, VA, AND CONVENTIONAL MORTGAGES

Market evaluation of federally underwritten mortgage loans, as reflected in yields to investors, has seldom coincided with that of the federal government, as reflected in maximum statutory or administrative interest rates. During most of the first five years after World War I, FHA and VA loans commanded premiums in the market, while in the next five years they generally carried discounts. Investors' judgment of the value of federal mortgage insurance and guaranty is suggested in part by the yield spread between federally underwritten and conventional home mortgage loans. Precise measurement of that spread and also of the spread between FHA and VA loans is precluded by inadequacies of the data, and interpretation is hampered by lack of knowledge about differences in other terms of mortgage lending. Since early 1953 the Federal Housing Administration has reported average market prices of FHA loans, and similar data have been available from the Federal National Mortgage Association on both FHA and VA loans.[18] These data purportedly represent prices on secondary market transactions in mortgages available for immediate delivery. The fact that price quotations on FHA-insured loans reported independently by FNMA and FHA have been in close agreement from 1953 through 1956 increases confidence in the reliability of the data.

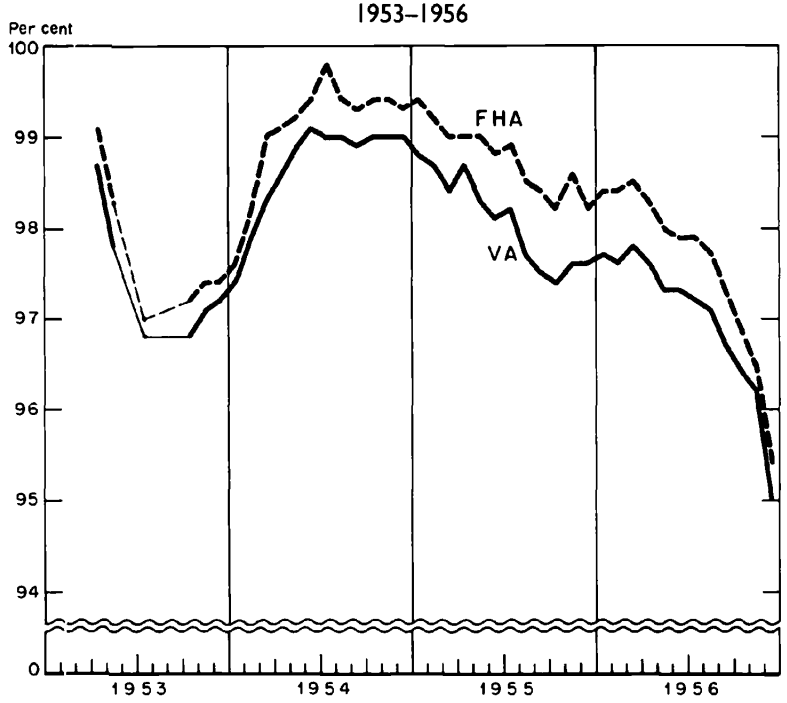
Comparison of FHA and VA loan prices, shown in Chart 10, indicates that both types of mortgages have remained below par since mid-1953 (close to par through most of 1954), and that FHA loan prices have been consistently higher than VA prices. The price spread has varied somewhat over the years, increasing to an average of about 0.7 of a percentage point after early 1955 compared with an average 0.4 of a point in the two preceding years. Maximum administrative interest rates on both mortgages were the same, 4½ per cent, throughout the period shown in the chart. Investors' willingness, therefore, to purchase VA loans only at a lower price (higher yield) than FHA loans must be explained by their evaluation of other factors bearing on loan quality.

In general, contract terms—maturities, downpayments, and loan-to-value ratios—have been more liberal for VA loans than for FHA loans.

[18] Federal Housing Administration, "Average Typical Prices Offered for FHA-insured (Section 203) 4½% Home Mortgage Loans—Immediate Delivery Transactions (In Market Areas of FHA Insuring Office Cities)"; and Federal National Mortgage Association, "Average Prices of Section 203 and 501 Mortgages by Agency Area on Selected Dates."

Lenders generally have regarded VA property appraisals also as tending to be more liberal than those made by FHA. The fact that the VA guaranty is for 60 per cent of a loan (not to exceed $7,500), and FHA

CHART 10
Average Prices of FHA and VA 4.5 Per Cent Mortgages, Monthly, 1953–1956



SOURCE: Federal National Mortgage Association monthly release, "Average Prices of Section 203 and 501 mortgages by Agency Area on Selected Dates."

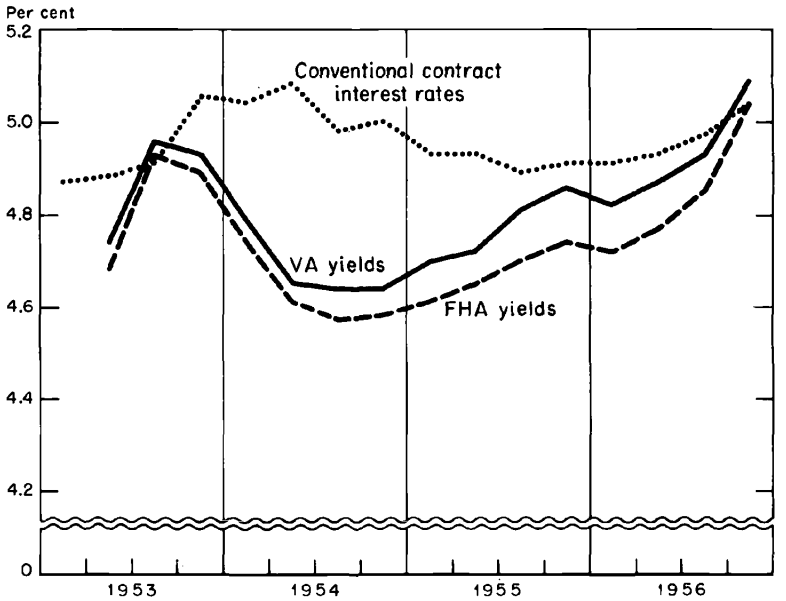
insurance for 100 per cent of a loan, may also have influenced investors' judgment about the quality of these mortgages.

The relative influence of each of these factors on mortgage loan prices cannot be determined. It is clear, however, that the market tends to judge the quality of FHA and VA loans to a large extent on their own merits notwithstanding the contingent liability assumed by the federal government. The criterion of quality influences not only differences between prices quoted for FHA and VA mortgages, but also differences within one type of mortgage with varying terms. For example, FNMA's purchase price schedule under its secondary market operations in late 1956

varied as much as $2\frac{1}{2}$ points for both FHA and VA mortgages in the same area, depending upon loan-to-value ratios and length of maturities. Price variations by geographic area are also important, as indicated in the last section of this chapter.

CHART 11

Comparison of Average Yields on VA-Guaranteed Mortgages, FHA-Insured Home Mortgages, and Average Contract Interest Rates on Conventional Home Mortgages, Quarterly, 1953–1956



NOTE: Data on contract interest rates on conventional home mortgage loans are from the same source indicated in Chart 7. Data on FHA and VA mortgage yields are calculated from average prices shown in Chart 10 and are based on an assumed 10-year prepayment period and a 25-year average contract maturity. The difference in yields, assuming a different repayment period, would have been small. See also Table A–7.

On the basis of their market prices, average FHA and VA yields ranged between 4.6 per cent and 5.1 per cent from mid-1953 through 1956, as shown in Chart 11. Conventional mortgage interest rates during the same period ranged from around 4.9 to 5.1 per cent. Before 1953, no regularly published data on FHA and VA mortgage prices or yields are available. Scattered information suggests that, during most of the 1946–1950 period, FHA loans, carrying interest rates higher than on VA loans and for a time even higher than on conventional loans (Chart 7),

commanded premium prices in the market.[19] Unpublished data on FHA mortgage prices and yields reveals that, during the period from 1948 to early 1953, their movements paralleled those of conventional mortgage interest rates very closely. With minor exceptions, quarterly conventional mortgage interest rates were consistently between 30 and 40 basis points above the market yields on FHA mortgages. Data on VA mortgage yields after mid-1953, described above, suggest a somewhat smaller spread between them and conventional rates in earlier years than that between FHA and conventional mortgage rates.

The spread between yields on mortgages underwritten by the federal government and those not so protected reflects not only the existence of the government guaranty but differences in lending terms. Federally underwritten mortgages usually bear terms more favorable to the borrower with respect to maturities, downpayments, and monthly payments. If those terms were more nearly the same, it is likely that market yields on federally underwritten mortgages would be lower and the spread between them and conventional rates greater. Such liberal terms, however, would hardly have been acceptable to lenders without the federal guaranty.

All of this implies that, even with the contingent liability of the federal government, the market does not regard FHA and VA loans as riskless assets. In judging them as investments it applies traditional standards of quality, just as in judging conventional mortgages. Thus, from the point of view of the lender, government underwritten loans with all the advantages noted, if secured by poorly located or otherwise less desirable properties, will command lower prices or higher yields than loans on more favorable or less risky properties. Most lenders interviewed in the course of this study agreed with the implications just pointed out. Among the most frequently mentioned reasons for judging government underwritten loans on their own merits were: (1) the social obligation of large financial intermediaries to screen and select mortgages carefully; (2) the cost of dealing with delinquencies and defaults, which several large institutions had found to vary directly with the liberality of loan terms; (3) the unwillingness of lenders to be associated with foreclosures and bad loans; (4) the disadvantages of reinvesting foreclosed mortgage funds at unfavorable times; (5) the lack of full coverage by the Federal

[19] For example, in congressional hearings on the "Mortgage Interest Rate Problem," Raymond Foley, then Housing Administrator, said: ". . . some years ago when we were on a 4½ per cent rate in the section 203 operation, the detached one- to four-family house operation in some areas of the country, the insured mortgage was commanding high premiums 103, sometimes 104."

Housing Administration of foreclosure and associated costs; (6) the greater risk exposure of VA loans, having a maximum $7,500 guarantee, in the face of the increasing size of loans. To fortify itself against that risk exposure, one large financial institution adopted a policy against accepting VA loans if the unguaranteed portion exceeded 50 per cent of the appraised value of the property.

The views just set forth about risk, yield, and terms on federally underwritten loans are, however, opposed by a minority view held by some large institutional lenders. They hold that such loans are essentially riskless and should be acquired strictly on the basis of yield comparison with direct Treasury obligations and Aaa corporate bonds without considering other characteristics. They regard most of the factors noted above as more than offset by other aspects of the government guaranty. Loans acquired at discounts and later foreclosed are repaid by the government at par. This practice often results in a profit or premium to the lender despite the costs incurred in administering the loan, attempting to forestall default, and reinvesting recaptured funds. The ultimate conclusions suggested are that the sooner a discounted mortgage goes to foreclosure the better for the investor and that the poorer the quality of a federally underwritten mortgage the higher its prices should be. The market place, however, has not yet accepted this extreme view, and prices are still directly related to quality, as they are in the conventional mortgage market.

The differential between average contract interest rates on conventional loans and yields on federally underwritten loans was considerably wider during the 1954–1955 period of capital market ease than in periods of market stringency before and after that (Chart 11). These changes in yield differentials have resulted chiefly from swings in FHA and VA yields; conventional interest rates have moved within a fairly narrow range. The pattern reflects, in part, technical inadequacies in the two series and differences between them; in part it depicts actual market influence.

Technically, the yield data are based on price quotations reported by FHA and FNMA field offices for typical transactions on immediate deliveries (Chart 10). They are simple averages not weighted by transactions and hence subject to greater fluctuation as quoted "spot" prices change. Also, the inclusion of transactions not based on prior commitments results in a series more sensitive to market changes. The conventional interest rate series, as noted previously, is a weighted average of loans closed by life insurance companies based mainly on prior commitments. It is therefore likely to be generally sluggish and less sensitive to immediate market changes than FHA and VA yields.

Among market influences bearing upon yield changes in the various series are not only changes in market conditions, but also changes in loan composition, including the quality of loans, geographic representation, loan acquisition and servicing costs, and other related factors. The influence of these factors on the various series is not measurable. Yield differentials should be considered, therefore, as only approximations of the true situation. The slight rise, shown in Chart 11, of FHA and VA yields over conventional interest rates for a time in 1953 and 1956 can be interpreted realistically to mean only that differentials narrowed markedly at those times compared with other periods of market ease. If the technical comparability of the series were better, it is likely, given the basic differences between conventional and federally underwritten loans, that a truer picture of slightly higher conventional rates would have been shown.

Additional basic reasons may be suggested for the changing yield spread between conventional and federally underwritten mortgages during periods of capital market tightness and ease. In tight markets institutional lenders generally have a choice of investment outlets and are able to place funds in high-yield conventional mortgages on conservative terms for downpayments and maturities. Furthermore, they can be more stringent in selecting borrowers and properties and hence reduce their risk exposure. In this setting, lenders are reluctant to place funds in federally underwritten mortgages unless yields are close to those on conventional mortgages. When markets ease and lenders find it more difficult to invest all their capital funds profitably, they are more willing to acquire federally underwritten mortgages at wider yield differentials. Demands by borrowers for such liberal-term mortgages increase faster than demands for conventional mortgages, which lenders cannot acquire in the desired quantities. Rates on conventional mortgage loans therefore decline, but only slowly because of institutional and traditional factors previously discussed. The decline in yields is probably greater than in contract interest rates because lenders are willing to pay a premium for high quality conventional loans at good rates. This is particularly characteristic of such lenders as life insurance companies, which acquire loans frequently through mortgage companies.

Geographic Variation in Mortgage Yields

Unlike corporate or government securities, which are issued and traded in national markets at nationally quoted yields, mortgages are originated and traded in numerous local markets at varying yields. Both the course of

real estate values and the fortunes of mortgage borrowers are closely linked with local area developments. State laws with differing treatment of rights of mortgagors and mortgagees and the general complexity of legal arrangements tie transactions to the local rather than national level. While the interregional flow of mortgage funds has accelerated since the advent of federal mortgage insurance and guaranty, prudent lenders carefully appraise the economic, legal, and social climate of areas under consideration for lending.

The local character of mortgage markets is responsible for the geographic variation in mortgage interest rates and yields. There is no national mortgage rate; series discussed in preceding sections are only broad averages of varying geographic rates and yields. Within regional and national averages, prices and yields will, of course, vary between individual mortgages, based on the previously discussed factors of security, borrower, and terms. On mortgages of comparable quality secured by properties in different regions, however, yields vary because of a host of factors associated with local areas and because of the institutional arrangements for mortgage financing, although these differentials have declined substantially over the years.[20]

Limited current data on regional mortgage yields clearly indicate that differentials—though narrower than in earlier years—persist. Price quotations on VA 4½ per cent mortgages, reported to FNMA by field agencies in late 1956, for example, varied from a low of 93.6 in the Los Angeles area to a high of 96.4 in the Philadelphia area (Table 13).[21] These prices represent yields of about 5.60 and 5.10, respectively, if a prepayment period of eight years is assumed on a twenty-five year mortgage. The differential of about 0.50 basis points is not much smaller than that in 1940 (footnote 20). On FHA 5 per cent mortgages, the 1956 differential between the Los Angeles and Philadelphia areas was somewhat smaller. Despite the increased interregional flow of mortgage funds and use of the process of arbitrage, regional yield variations have apparently narrowed little throughout the postwar period. Several reasons may be suggested for the persistence of variations in regional mortgage yields.

[20] "In 1890 the spread between the regions with the highest and lowest effective (residential mortgage) interest rates was 3.8 percentage points. In 1920 the spread in terms of contract rates was 2.2 points; in 1934, 1.4 points; in 1940, 0.6 point. In 1950 the median first mortgage interest rate . . . in each of the four major census regions was 5.0 per cent . . . . The tendency towards smaller regional differences . . . has resulted both from the improvement of lending facilities and the decrease in risks of mortgage lending in what were young regions in 1890 and from greater mobility of mortgage funds, through which local markets became less isolated." (Grebler, Blank, and Winnick, *op. cit.*, p. 229.)

[21] From the Federal National Mortgage Association, "Average Prices of Section 203 and 501 Mortgages by Agency Area on Selected Dates."

TABLE 13

Regional Prices for VA-Guaranteed Mortgages, by FNMA Agency Area, January and June, 1953-1956

Region	*1953*		*1954*		*1955*		*1956*	
	Jan.	June	Jan.	June	Jan.	June	Jan.	June
Atlanta	98.5	96.5	96.9	98.2	98.0	97.6	97.2	97.2
Chicago	99.4	98.2	97.4	99.0	98.6	98.4	97.9	97.1
Dallas	98.8	98.2	97.4	99.0	98.7	97.7	97.4	97.2
Los Angeles	97.5	96.5	97.2	99.0	98.5	97.5	96.9	95.9
Philadelphia	99.4	97.7	98.0	99.4	99.8	98.9	98.3	99.2
Seattle	—	99.5	97.5	99.8	99.0	97.7	98.4	97.0

SOURCE: Federal National Mortgage Association, "Average Prices of Section 203 and 501 Mortgages by Agency Area on Selected Dates."

1. The geographic concentration of capital and the predominance of local lenders in some areas of the country have tended to make for rate differentials. Mortgage rates in eastern financial centers—Boston, New York, and Philadelphia, for example—are generally lower than in the Southwest and Far West where there is a scarcity of capital relative to demands for it.

2. Though fluidity of mortgage funds between areas has been considerably increased by the introduction of federal mortgage insurance and guaranty, it is by no means complete.

3. Costs of acquiring and servicing mortgages away from a lender's home base make for higher gross yields in capital-scarce areas.

4. Variations among state laws governing foreclosure and borrower redemption rights make recovery of funds in case of default more or less costly and difficult for lenders. Prospective difficulties naturally call for higher yield requirements by the lender. In Michigan, for example, the extended period of redemption has resulted in increased preference by lenders for the land contract over the mortgage loan.

5. Mortgage yield differentials result from variations in economic factors tending to influence area real estate and construction markets, such as industrial stability and growth, expansion in population, diversification of industry, and zoning ordinances, as well as lenders' appraisals of the long- and short-term economic potential.

6. A common desire among national lenders for geographically diversified mortgage portfolios tends to keep regional rates apart. For example, some large eastern financial institutions, in order to maintain what they consider appropriate diversification, will place funds in Pennsylvania mortgages at par, for example, even though California mortgages are available to them at 96.

Other broad reasons for continued geographic variation in mortgage yields lie in the imperfections still remaining in mortgage markets. Neither lenders nor borrowers have complete knowledge of transactions. Institutional arrangements for acquisition of mortgages tend to perpetuate yield differentials between areas and within the same market area. Yields in an area on mortgages of comparable quality, for example, may vary because one large financial institution intent upon increasing its mortgage investments there is willing to acquire them through its correspondent at prices above those generally prevailing. Prices of other mortgage originators in the area, however, are not affected because funds from that institution are not available to them.