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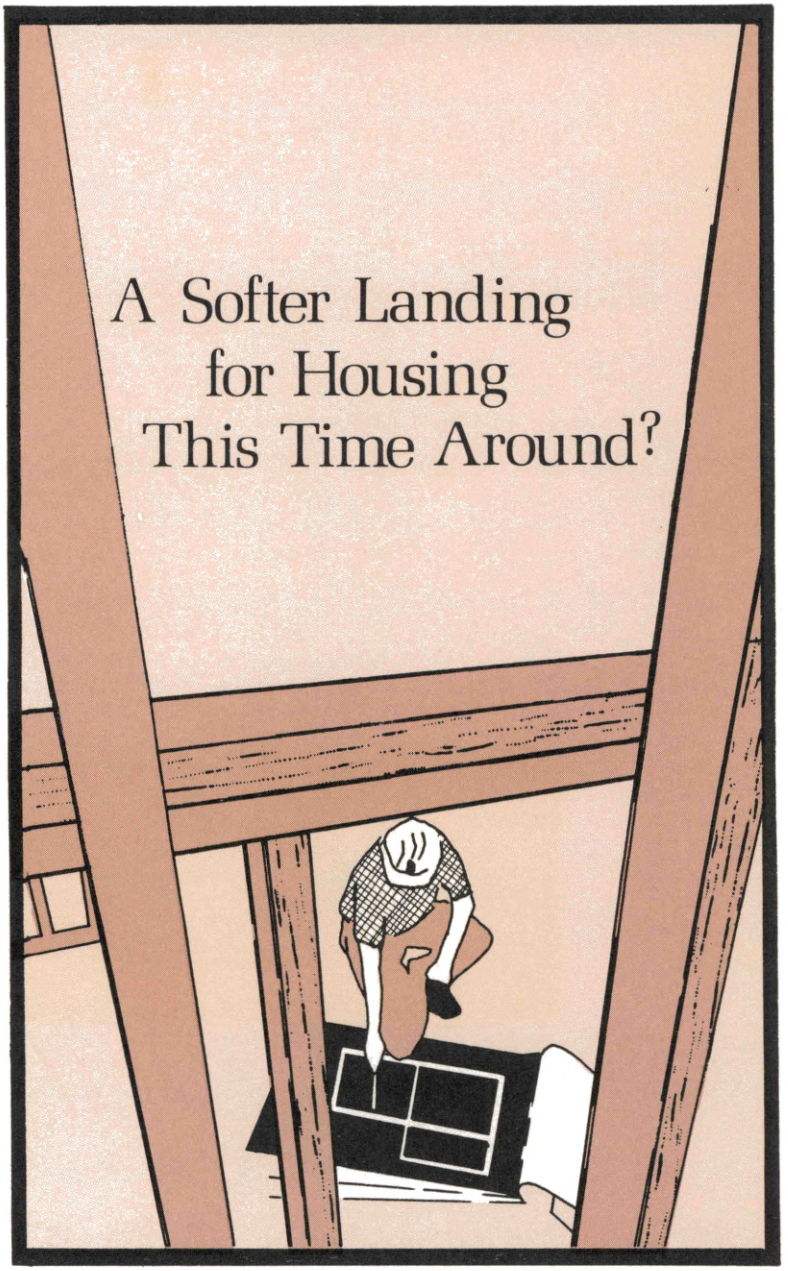

AND

Thrifts Compete with Banks

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Federal Reserve Bank of Philadelphia
100 North Sixth Street
(on Independence Mall)
Philadelphia, Pennsylvania 19106

A SOFTER LANDING FOR HOUSING THIS TIME AROUND?
John Bell

. . . Recent changes in the home mortgage market may soften the effects of recession on the housing industry.

THRIFTS COMPETE WITH BANKS: GETTING A CLEARER VIEW OF A CHANGING PICTURE
Howard Keen, Jr.

. . . Figures for the Third District as a whole show commercial banks with a slight edge over thrifts in competition for savings deposits, but figures on local markets tell a different story.

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The Federal Reserve Bank of Philadelphia is part of the Federal Reserve System—a System which includes twelve regional banks located around the nation as well as the Board of Governors in Washington. The Federal Reserve System was established by Congress in 1913 primarily to manage the nation's monetary affairs. Supporting functions include clearing checks, providing coin and currency to the banking system, acting as banker for the Federal government, supervising commercial banks, and enforcing consumer credit protection laws. In keeping with the Federal Reserve Act, the System is an agency of the Congress, independent administratively of the Executive Branch, and insulated from partisan political pressures. The Federal Reserve is self supporting and regularly makes payments to the United States Treasury from its operating surpluses.

A Softer Landing for Housing This Time Around?

*By John Bell**

With many economists claiming that a recession has arrived or is waiting just around the corner, the fate of the housing industry has become a subject of growing concern to American policymakers and the public. Why does housing receive such special attention? The surface answer is simple: decent housing is considered a basic requirement by most individuals, and many people believe that housing is among the most important industries to the welfare of the economy at large.

People are interested in housing for several reasons. Besides providing for one of the basic human needs—shelter, owning a house is a sign of achievement in our society. Moreover, in inflationary times, many people find that buying property is one way to preserve the purchasing power of their dollars.

So far as impact on the economy is concerned, housing is right up there along with a few other industries such as autos and consumer durables. When a house is bought, a wide range of goods and services will be required to complete the transaction and to maintain and run the household thereafter. The demand for these goods and services translates into jobs and incomes, and it helps to keep the economy chugging along.

When the nation's economy has gone into a downturn in the past, housing usually has been hit quite hard. Whether it will be hit as hard again, though, is open to question. Developments in the housing and mortgage markets in recent years may make things easier for housing this time around.

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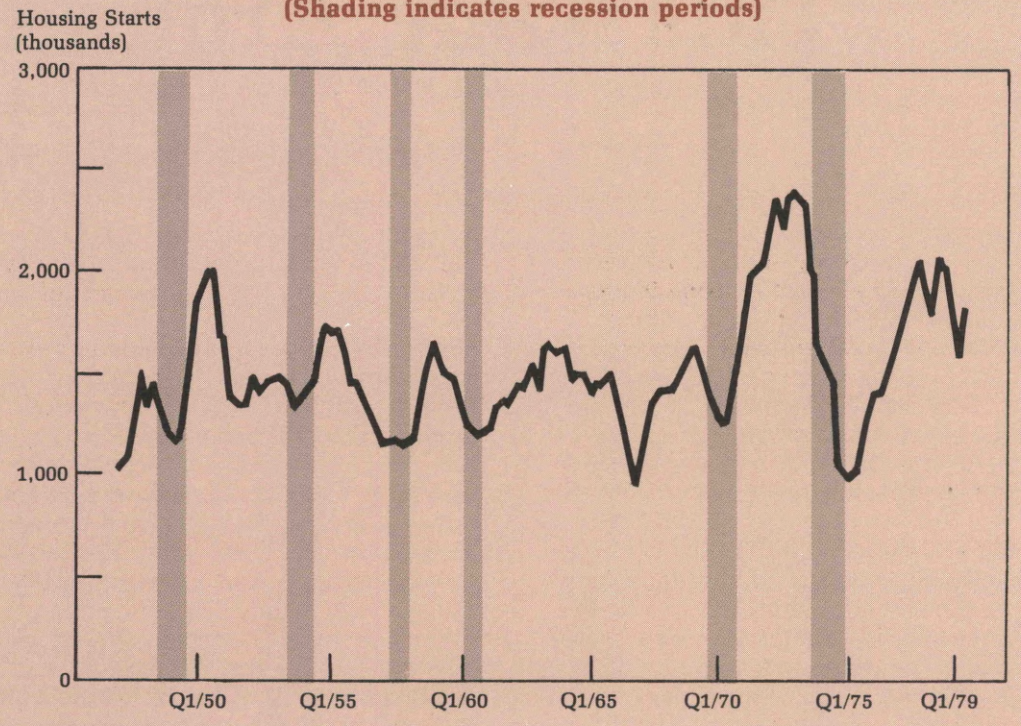
AS THE RECOVERY SLOWS, HOUSING SINKS

Since the end of World War II, the U.S. economy has undergone six major recessions. Over this time, a clear pattern has developed which links the pace of overall business activity to the housing industry: as each economic expansion has matured and the U.S. has approached another recession, the number of housing starts has dropped off dramatically (Figure 1). The economic forces underlying this behavior are well known to economists. There are three of them. The first is that very few people in our society have enough cash to buy a home outright, and thus they rely on mortgage financing. The second is that the level of interest rates rises during an economic expansion. The third is that governments often put a legal cap on interest rates to keep them from going too high.

When the Cost Goes Up, Buying Goes Down. When a home purchase is to be financed with a mortgage loan, the borrower must consider the interest he will pay on the loan when he figures out what monthly payment he can afford. For a mortgage of a given size, a higher interest rate means a higher monthly payment. At an interest rate of 10 percent, for example, the monthly payments on a $50-thousand mortgage that matures in 25 years are $454.36. But at a rate of 10 1/2 percent, payments are $472.10 per month for that same $50-thousand, 25-year

FIGURE 1
HOUSING STARTS DIP PRIOR TO RECESSIONS
(Shading indicates recession periods)



SOURCES: National Bureau of Economic Research and U.S. Department of Commerce, Bureau of the Census.

mortgage.

As an economic expansion wears on, growing business activity and credit demand drive up all interest rates, including the mortgage rate. With each jump in the mortgage rate, some people who could have afforded a mortgage at the old rate no longer can do so, and so they may stay at the old address, find a preferable rental unit, or, possibly, buy a less expensive home. In response to this diminished demand, the number of housing units on which construction is started tapers off.

So it seems as though reduced demand should cause a dropoff in housing starts as the recovery matures. But this is not the only reason we see a slowdown in housing prior to U.S. recessions. There are two others, both connected with the supply of funds, which have to be coupled with decreasing demand to account for the dramatic housing dropoffs.

Mortgage Rate Ceilings: The Second Cause. Because housing is so important to so many people, there are always cries of unfairness when rising interest rates keep people from buying the units they want. In many cases, state governments have responded to these cries by setting a legal maximum on mortgage rates. They have attempted to keep the mortgage rate low despite rising rates in other markets so that people would not be kept from buying houses. Ironically, this interest-rate capping probably has hurt those it was intended to help.[1]

Like any other market, the mortgage market is governed by supply and demand considerations. Suppose that the current mortgage rate is 10 1/2 percent and that, at this rate, demand equals supply; every qualified borrower who wants a mortgage at 10 1/2 percent can get one. Now assume that interest rates in other markets rise. The natural response of mortgage lenders in this situation is to cut back on the amount of funds they supply to mortgage borrowers in order to buy more profitable assets, which causes the supply of funds available for mortgages to shrink. Where lenders used to offer, say, a million dollars per day at the rate of 10 1/2 percent, now they perhaps offer only 80 percent of that amount. The market is out of balance not because demand has risen but because supply has shrunk. With demand exceeding supply, the interest rate will be bid up to the point where some borrowers drop out of the market. At this higher rate, lenders will offer more funds, but borrowers will demand less. The final result is a higher mortgage rate but a market where demand and supply are balanced.

But what would happen if the mortgage rate were restricted by law to 10 1/2 percent and could not be bid higher regardless of demand? In that case, the supply deficiency would persist. No matter how much money people wanted to borrow, mortgage lenders would offer only 80 percent of the former volume. In fact, if market rates continued to rise and the supply of home loan funds dwindled further, the discrepancy between supply and demand would become even larger.

Clamping a legal lid on mortgage interest rates is a quick-fix way to keep those rates low. But it provides a Pyrrhic victory at best. When there is a shortage of mortgage money and rates cannot be raised, lenders may ration what is available to creditworthy customers by means other than price, such as requiring larger down payments. To the would-be homeowner who can't afford a larger down payment, an artificially low mortgage rate provides little consolation.

Deposit Rate Ceilings: The Final Nail. Ceilings on interest rates that banks and thrifts can pay to depositors have much the same effect on the market for deposits as mortgage ceilings have on the mortgage

[1]For a more complete discussion of how usury ceilings affect mortgage market activity, see Helen Frame Peters, "The Mortgage Market: A Place for Ceilings?" *Business Review*, Federal Reserve Bank of Philadelphia, July/August 1977.

market: they create artificial shortages of funds.

When market interest rates rise, people with large savings accounts at banks or savings and loan associations typically make withdrawals in order to buy government bonds or other financial instruments that pay higher interest rates. This process of disintermediation—going around the financial intermediaries to invest directly in higher yield bonds, for example—slows the supply of funds to banks and other mortgage lenders. In the absence of deposit rate ceilings, the normal result would be a higher interest rate on bank deposits. But that rate is limited by Federal regulatory authorities—the Federal Reserve for banks and the FDIC and Federal Home Loan Bank Board (in cooperation with the Federal Reserve) for thrifts. If market pressures otherwise would push the rate beyond the ceiling, a shortfall of funds develops exactly as one did in the mortgage market.

The impact of a shortage of deposits on the mortgage market is fairly clear. Lenders can make available only the funds they have. So if deposits are limited, mortgage funds will become scarce and rates will be pushed up. But in many states the mortgage rate cannot be raised beyond a certain level, and the result is a shortfall of mortgage money.

Thus deposit ceilings tend to reduce the amount of funds available to mortgage lenders in periods of high interest rates, and financial institutions will reduce the amount of mortgages they originate as they reduce their acquisition of all assets.

So there are several explanations for the slowdown in housing prior to each recession. But while there is widespread feeling now that we are heading into a recession that will last into 1980, we haven't seen as dramatic a dropoff in the housing industry as those to which we've become accustomed. If the forecasters are right about the recession, what is different about housing this time around?

CHANGES IN HOUSING: A CUSHION FOR A SOFTER LANDING?

Many changes have been instituted in the housing industry since the last recession, and they affect both demand and supply sides of the market.

Buying Continues Despite High Interest Rates. One thing that appears to be different about the later stages of the current business cycle is the continued relative strength in the demand for housing, despite record mortgage rates.

Some observers trace this strength in demand to demographic causes. They note that many of the children born in the postwar baby boom now are entering the household formation years when they will either marry and start a family or set up housekeeping on their own. These baby-boom children could be bolstering the demand for housing. Although statistics and projections by the Bureau of the Census indicate that the real surge in household formations as a result of the baby boom came in the early 1970s, formation rates still are expected to stay above the average rate of the 1960s for the next five years or so.

Others find the key to strong housing demand is a new innovation by mortgage lenders—the graduated payment mortgage (GPM). With a GPM, the borrower pays lower than usual payments at the beginning of the mortgage term instead of paying a fixed monthly payment for the life of the loan. These payments increase by a certain percentage each year through the first five to seven years of the loan. (Payments at the beginning of the term may be so low as not even to cover interest expense at that time. Thus the loan balance actually may increase for the first several years.) Because payments in the early years of the mortgage are so low, buyers who would have been shut out of the home market by high mortgage rates can go ahead and buy anyway if they can get a GPM. Some have done so.

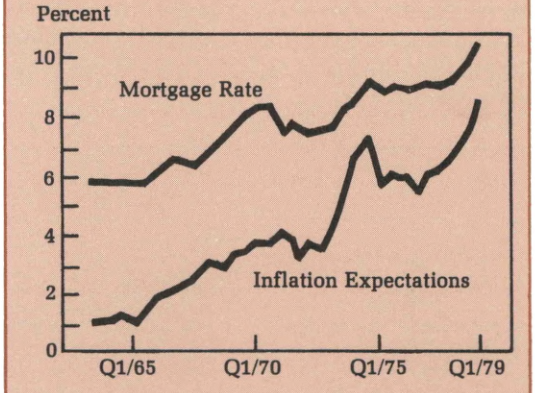
A third explanation of continued demand, and possibly the most important, has to do

with inflation. Recent trends in inflation rates provide a double incentive for prospective home buyers. One incentive can be traced to the fact that housing price boosts have far outstripped increases in the overall price level. Since 1963, the average price of a new house has risen 244 percent, according to the U.S. Department of Commerce. Over that same period, the overall consumer price index has gone up by only 121 percent. Hence buying a house appears to offer a good way to protect an otherwise shrinking dollar.

The other inflation-based incentive for homebuyers has to do with expected future inflation and the current mortgage rate. Economic theory suggests that homebuyers are less concerned with the nominal rate quoted by a lending institution than with the real rate of interest. This real mortgage rate is defined as the difference between the quoted mortgage interest rate and the expected annual rate of inflation over the life of the loan. Of course, inflation expectations, which are difficult to measure in any case, are virtually unknown for periods as long as the 25 to 30 years for which a typical mortgage contract is written.[2] But some information on shorter term inflation expectations is available. And it indicates that, over the past 15 years or so, anticipated inflation has been rising more quickly than the conventional mortgage rate (Figure 2). This suggests that the real mortgage rate may not be moving up as rapidly as the quoted rate and makes it easier to understand why the demand for housing has not fallen off so far: a ten-percent mortgage rate appears much less forbidding when expected inflation falls in the range of eight percent to nine percent than when prices are expected to be fairly stable.

[2]For an in-depth look at how inflation expectations are formulated, see Donald J. Mullineaux, "Inflation Expectations in the U.S.: A Brief Anatomy," *Business Review*, Federal Reserve Bank of Philadelphia, July/August 1977.

FIGURE 2
INFLATION EXPECTATIONS HAVE MOVED UP MORE QUICKLY THAN THE MORTGAGE RATE



SOURCES: Board of Governors of the Federal Reserve System and Joseph A. Livingston's semi-annual survey of leading economists.

So this is one change on the demand side of the housing scene that makes things different this time around—buyers are not being driven from the market by high real mortgage costs. But what about the supply side of the story?

Governments Relax Constraints on Interest Rates . . . Most of the supply constraints that have helped push housing over the brink in the past have not been in the housing market per se but in the mortgage market. In many cases, these constraints can be attributed to government regulation of interest rates.

Since the last recession, however, many regulations have been relaxed, allowing the mortgage market to operate more freely and to allocate available funds more efficiently. One example of such regulatory reform is the raising or abolition of mortgage rate ceilings in many states. The turmoil that can be induced by rigid ceilings was demonstrated vividly in Tennessee in 1978 when

many credit agencies closed their doors because they couldn't lend money profitably at the maximum legal interest rate. Figure 3 shows that some states have reformed their mortgage rate ceiling laws since 1974. By allowing the mortgage market to operate more freely, they have removed or reduced artificial shortages of money and made it less likely that the housing industry will be pushed over the cliff.

FIGURE 3

SINCE 1974, MANY STATES HAVE MOVED AWAY FROM FIXED MORTGAGE CEILING RATES

Number of States with	1974	1979
Fixed Ceiling	39	19
Floating Ceiling	0	15
Selective Ceiling	4	7
No Ceiling	7	9

SOURCE: Office of the State Legislative Council, American Bankers Association. This is a summary table prepared by researchers at the Federal Reserve Bank of Philadelphia. It applies only to conventional first mortgages and does not reflect all the exceptions and special provisions associated with state ceilings.

Recent changes in deposit ceilings have helped out somewhat, too. This past June, the interest rates payable on passbook and other savings-type accounts were raised by one-quarter percentage point. This increase may help banks and thrift institutions somewhat in their fight to retain funds being lost through disintermediation. But a far more significant change was made on June 1, 1978. A major channel of disintermediation prior to that date was the U.S. Treasury bill market. When the market-determined rate on Treasury bills would rise high enough, people would start to draw money out of banks and thrift institutions to buy the bills. Thus the amount of funds available for mortgage lending was reduced. On June 1, 1978, banks and thrifts were authorized to issue certificates of deposit with a $10-thousand minimum denomination (the same as for a Treasury bill) that carried the current six-month T-bill rate. This change was met by a sigh of relief from the housing industry. Response to the new CDs was strong, and it appears to have helped housing as intended. The new money market certificates may have made as many as half a million additional housing starts possible in their first six months.[3]

Finally, a January 1979 rule change by the Federal Home Loan Bank Board, one of the many Federal agencies involved in the mortgage market (see AGENCY INVOLVEMENT . . .), may help S&Ls to get around the disintermediation problem should it become serious again. Under the changes, S&Ls were authorized to issue short-term commercial paper. This development is still relatively new and untested, so it is not yet possible to judge its impact on the housing market. But some observers believe that it offers institutions suffering from disintermediation the opportunity to attract capital from nondeposit sources and thus to maintain an adequate supply of mortgage funds.

All in all, the reform of certain regulations imposed on the mortgage market probably has helped to prevent a housing slump in recent months.

. . . And Try To Lend a Helping Hand. In addition to reforming regulations, the Federal government also has taken a more active role in the mortgage market in the last few years through its credit agencies. This role

[3]See statement attributed to G. William Miller, *New York Times*, December 21, 1978. But recent changes in the rules for CDs may make them slightly less effective. Previously, all institutions could compound the stated interest rate on CDs, and thrifts could offer an additional quarter-point on them. Now, however, these practices may not be carried on in general. Savings and loan associations now may offer a quarter-point differential on the rates they pay on MMCs only when the Treasury bill rate is 8 3/4 percent or less. And when the T-bill rate is 9 percent or higher, they may offer no differential at all. Also, as of July 1, 1979, financial institutions no longer may compound interest earned on MMCs.

AGENCY INVOLVEMENT IN THE MORTGAGE MARKET

FHA-VA. The Federal Housing Administration and the Veterans Administration were established in 1934 and 1944 respectively. They represent two of the earliest attempts by the Federal government to lend a hand to housing. With very few exceptions, they do not make loans outright but rather insure repayment to the lender.

FNMA. The Federal National Mortgage Association (FNMA)—Fannie Mae—was established in 1938 to provide liquidity to mortgage lenders when it was needed most. FNMA issued government bonds and used the proceeds to buy existing FHA-VA underwritten mortgages, thus increasing the supply of loanable funds in the market. In 1954, FNMA started issuing common stock. In 1968 it became a private corporation, and two years later it started dealing in conventional as well as insured mortgages. FNMA no longer issues government bonds but raises funds in the private capital market by issuing her own bonds and debentures.

GNMA. When FNMA became a private corporation in 1968, Congress created her sister, the Government National Mortgage Association (GNMA)—Ginnie Mae. Although their aims are similar, FNMA and GNMA operations are different.

Ginnie operates mainly through mortgage backed pass-through securities—securities backed by a specific package of mortgages and insured by Ginnie Mae. These are, in effect, government securities, with one difference. Whereas the holder of an ordinary government note or bond gets periodic interest payments and a check for the principal when the security matures, the holder of a GNMA security receives a monthly check that is part interest and part principal, just as any mortgage holder would. Repayment of the mortgage in the package is passed through to the security holder, hence the name. An arrangement such as this means that the holder of the GNMA security is subject to fluctuations in return stemming from prepayment or default.

FHLBS. The Federal Home Loan Bank System was created in 1932 for the purpose of supplying credit to its member institutions —savings and loan associations and some savings banks. It does this by lending funds to those institutions at a stated rate of interest for a stated period of time. (This period can be as long as ten years.) By granting an advance to an S&L, the Federal Home Loan Bank increases the inflow of funds to the mortgage market. The Federal Home Loan Banks raise capital through the issuance of consolidated notes and bonds in the money market.

FHLMC. The Federal Home Loan Mortgage Corporation—Freddie Mac—was established in 1970 and is a branch of the Federal Home Loan Bank System. Freddie is a cross between Fannie and Ginnie. He raises funds through the private money market by issuing notes and bonds *and* by selling securities backed by mortgages. The path of his impact on the mortgage market is similar to that of GNMA's.

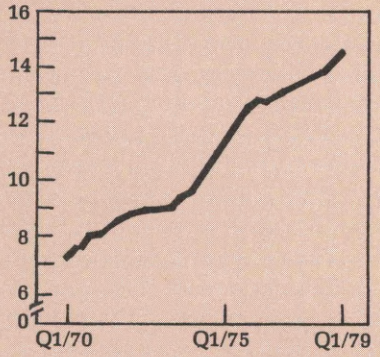
FMHA. The Farmers Home Administration operates a direct loan program. It makes home loans to individuals buying a house in a rural political subdivision who have been turned down for conventional financing. Loans are made at below-market interest rates. The funds from which the lending takes place are raised by issuing fully guaranteed FMHA government securities. These are backed by a pool of mortgages but are not of the pass-through type. They are hence very similar to Treasury securities but carry a higher interest rate because they are less marketable.

FLB. The Federal Land Banks were established by the Federal Farm Loan Act of 1916 and now operate in accordance with the Farm Credit Act of 1971. Their purpose is to make direct loans on farms, rural houses, ranches, and farm-related businesses through local Federal Land Bank associations. Funds are raised by market sales of consolidated issues of the 12 Federal Land Banks.

has been not so much making outright loans to borrowers as channeling funds to private lenders by buying previously issued mortgages from them. Growth of programs in this area has been impressive. The Federal government now backs about 15 percent of all mortgage debt in some way or other—about one and a half times the percentage it backed at the end of the last recession (Figure 4).

FIGURE 4
THE FEDERAL ROLE IN THE MORTGAGE MARKET HAS GROWN APPRECIABLY

Outstanding Mortgage Debt Held or Backed by Federal Agencies (percent)



SOURCE: Board of Governors of the Federal Reserve System.

Many economists say that by buying existing mortgages with funds raised in other markets, these Federal agencies increase the volume of mortgage funds available, thus closing the gap between supply and demand created by artificial interest rate ceilings (but see A DIFFERENCE OF OPINION).

Looking at all of these developments together—continued strength in demand, regulatory reform, and government participation in the mortgage market—the fact that the housing industry has not taken a nosedive so far in this business cycle is easier to understand. But many of the economic forecasters are expecting a larger drop fairly soon.

A DIFFERENCE OF OPINION

Many economists argue that agency operations in the mortgage market have a positive effect on housing. They say that by offering low-risk securities, like GNMA pass-throughs and FNMA bonds, the agencies attract to the mortgage market the money of some investors who might have directed their funds elsewhere.

While many researchers concede that this may be the case in the short run, there is some evidence that the effect of government mortgage activity in the long run is negligible.* There are two explanations for this. The first is that at least part of the money used to purchase government-guaranteed mortgage-backed securities and the like comes from investors who would participate in the home loan market anyway but find agency securities more attractive than mortgages. In this case, the supply of funds is not really increased but merely rerouted. The second explanation is that agencies must finance their activities by selling debt. When they do this, the market interest rates on instruments that are close substitutes for their debt (such as Treasury bills) rise. These higher rates cause investors to channel their funds out of the mortgage market to take advantage of the higher yields available elsewhere.

Thus the effect of the capital injected into the mortgage market by official agencies may be partially offset by funds withdrawn from the market by private investors.

*See, for example, Dwight M. Jaffee, "An Econometric Model of the Mortgage Market," *Savings Deposits, Mortgages, and Housing* (Lexington: D. C. Heath and Company, 1972) and Dwight M. Jaffee and Kenneth F. Rosen, "Estimates of the Effectiveness of Stabilization Policies for the Mortgage and Housing Markets," *Journal of Finance* 33 (1978), pp. 933-946.

WHAT ARE THE FORECASTERS SAYING?

The real issue is not whether housing will be affected by business cycle movements but

just how severe the impact will be. Depending on how heavily economic forecasters weight the changes in the mortgage market since the last recession, they offer a range of answers.

Housing starts were at their peak—about 2.1 million per year—in the second quarter of 1978. Since that time they have faltered and recovered twice, and in the second quarter of 1979 they stood at slightly over 1.8 million per year. Most forecasters now foresee a steady decline in the number of starts, but they differ over where the decline will stop. Some of the more pessimistic predictions put starts as low as 1.4 million in early 1980, while others project a trough of about 1.6 million. Relative to peak activity, starts are expected to drop between 24 and 33 percent.

Is this a soft landing? The answer to that depends upon what's chosen as the standard. From the 1950s forward, housing slowdowns have ranged from as little as 23 percent to as much as 60 percent. By this standard, the currently predicted slowdown in housing would be neither the softest nor the hardest, though it would be toward the lower end of the scale.

But it may not be fair to compare current observations with the whole of this past history. The reason is that, in 1966, a major change in the financial-institutions industry raised the possibility of much deeper housing declines than had been seen prior to that time. In that year, with interest rates taking an unusually sharp rise, deposit rate ceilings were extended to nonbank thrift institutions, the nation's major source of mortgage funds. Since then, we have undergone our two worst housing slumps, one in 1966 and the other in 1974, with housing starts dropping by 39 percent and 60 percent respectively. In this light, the projected drop of 24 percent to 33 percent looks better than the housing industry reasonably might have expected.

Finally, another way to consider what would count as a soft landing is to look at how steep the housing dropoff is—how fast housing starts fall from peak to trough. One way to measure this is to take the average rate of decline in housing activity per quarter in each of the past slumps. Again, history yields a wide range of figures, with the steepest drop coming in the 1966 housing crunch. Housing starts dropped then at an annual rate of 9.7 percent per quarter. The softest drop so far occurred between 1954 and 1958, at 2.6 percent per quarter. But here again the watershed appears to be the 1966 extension of deposit ceiling regulations to thrifts, and comparison of years on the two sides of that watershed may not be appropriate. The more appropriate standard to use is what has happened since 1966.

Current forecasts indicate that the present housing slowdown should show starts dropping off at about 4.4 percent per quarter. A slowdown as gradual as this would be comparatively mild by post-1966 standards. Thus it looks as if the current business expansion may finish up with a relatively moderate slowdown in the housing sector.

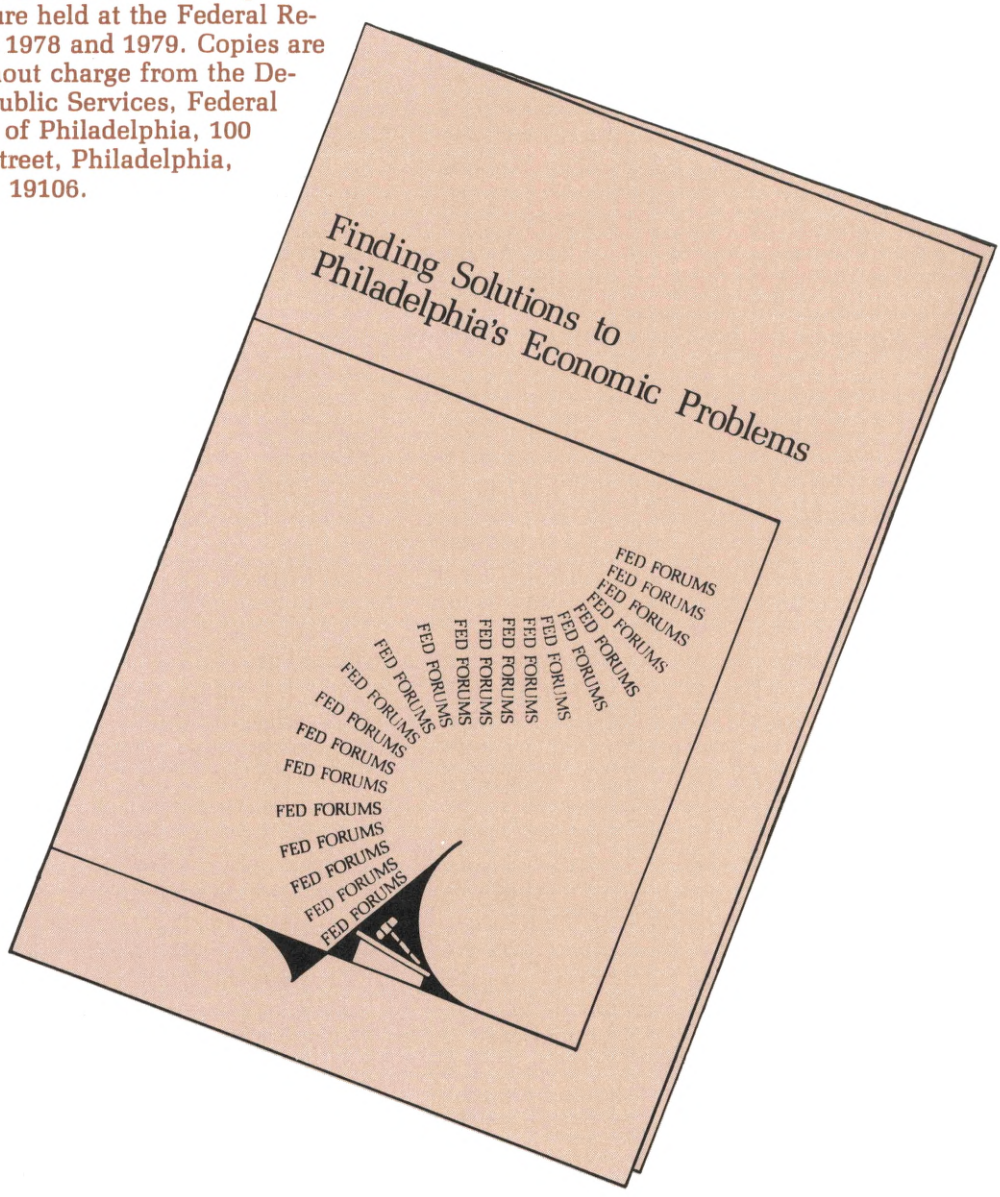
OUTLOOK

Concern with the housing industry has become ingrained in the minds of U.S. policymakers and the public. The health of that industry affects consumers directly, when they look for a place to live, and indirectly, in complex ways, through its varied impacts on other sectors of the economy. With the threat of a recession on the horizon, the state of the housing industry may be drawing more attention than ever before.

But for the present, at least, indications are that housing has become less vulnerable than it was in the past. Real mortgage interest rates are not high by historical standards, and government has strengthened the mortgage market through regulatory reforms and credit agency efforts. Barring developments that now are unforeseen, and as measured by some of the more common yardsticks, housing may be able to weather the storm with only a mild contraction.

From the Philadelphia Fed . . .

This new booklet contains summaries of four panel discussions of Philadelphia's economic future held at the Federal Reserve Bank in 1978 and 1979. Copies are available without charge from the Department of Public Services, Federal Reserve Bank of Philadelphia, 100 North Sixth Street, Philadelphia, Pennsylvania 19106.



Thrifts Compete with Banks:
Getting a Clearer View of a Changing Picture

*By Howard Keen, Jr.**

The U.S. financial system has seen large-scale changes in recent years, and there is no shortage of change in sight. Rulings by regulators in the 1970s have transformed the environment in which commercial banks and their rivals compete. And current legislative proposals, along with a recent court ruling, open the door for even more far-reaching innovations.

In the process of trying to adjust to this new climate, and perhaps to shape it, policymakers, bankers, and consumers alike need to get a clear view of just what the competitive landscape looks like. There is more than one way to take a picture of this landscape, however, and as a study of banking markets in the Third Federal Reserve District shows, the angle that's chosen can make a big difference in what the camera records.

*The author, who received his Ph.D. from Bryn Mawr College, is an economist at the Philadelphia Fed. He specializes in banking and business conditions analysis.

A CHANGING WORLD OF COMPETITION

Because commercial banks are the department stores of the financial industry, they compete on many fronts and with various types of other financial institutions. And while the forces of change probably are active on most of these fronts, nowhere are they more in evidence than in payments services. This is an area that has undergone considerable change already and one that is likely to undergo even more in the near future.

New Payments Powers for Thrifts. Regulatory developments in the 1970s have given thrift institutions—mutual savings banks (MSBs), savings and loan associations (S&Ls), and credit unions (CUs)—the authority to offer their depositors various forms of checking-type services which used to be the exclusive domain of commercial banks (banks).

New payments services give depositors the opportunity to write what are essentially checks on their accounts at thrifts. Negotiable order of withdrawal (NOW) accounts, non-interest-bearing negotiable order of withdrawal (NINOW) accounts, and share draft accounts are examples of this; and in the case of NOWs and share drafts, interest is paid on the funds to boot. Further, preauthorized bill-paying allows depositors to make payments to third parties from their savings accounts, and automatic transfer services (ATS) provide for the automatic transfer of funds from a savings account to a checking-type account at the same institution. Finally, innovative banking devices, such as remote service units (RSUs) and automatic teller machines (ATMs), increase the spendability of funds held in thrift savings accounts by permitting consumers to make deposits, withdrawals, and transfers from one account to another without a trip to the MSB or S&L office (Figure 1).

Allowing thrift institutions to offer payments services adds a new dimension to the banking business. It gives consumers a larger menu of financial institutions to choose from and in some cases (such as NOW accounts and preauthorized transfers from savings accounts) allows them to earn interest income on their transaction balances. At the same time, it provides thrifts with an additional weapon in their battle with banks for household funds. Thrifts can use their

FIGURE 1

NEW PAYMENTS POWERS FOR THRIFTS*

September 1970	Federally chartered S&Ls permitted to make *preauthorized nonnegotiable transfers* from savings accounts to third parties for household-related expenditures.
January 1974	Federal legislation permits all banks and thrifts (except CUs) in Massachusetts and New Hampshire to offer *negotiable order of withdrawal (NOW) accounts*. NOW accounts are functionally equivalent to interest-bearing checking accounts.
January 1974	Federal S&Ls authorized to establish *remote service units (RSUs)* on experimental basis. RSUs are electronic terminals located in retail establishments. They enable S&L customers to make deposits, withdrawals, and transfers of funds between accounts without going to the S&L office in person. †
August 1974	Three Federally chartered CUs permitted to offer *share drafts* which are functionally equivalent to interest-bearing checking accounts. These three Federal CUs and two state CUs began six-month pilot program in October 1974. By year-end 1978, 740 Federal CUs had share draft service in operation. †
April 1975	Federally chartered S&Ls permitted to make *preauthorized transfers* from savings accounts to third parties for any purpose.
July 1975	Banks, MSBs, and, with the approval of the Commissioner of Banking, state chartered S&Ls in New Jersey authorized to establish *manned RSUs and off-premise automated teller machines (ATMs)*. Such units permit customers to make deposits, withdrawals, and transfers between accounts without making a trip to the bank, MSB, or S&L office.
February 1976	Congress extends *NOW account* authority to all New England states.

new payments powers to attract funds that normally would be held in a bank checking account. Moreover, because one-stop banking is convenient for many depositors, checking-like powers also can help thrifts attract savings funds—particularly in light of the quarter-percentage-point higher maximum rate that thrifts are permitted to pay.[1] All in all, the trend in payments powers clearly has been one that could make thrifts better able to compete with banks. In view of this trend and with the possibility of additional innovations in the future, an assessment of the competitive strengths of banks and thrifts can be of use to policymakers, bankers, and consumers alike.

Assessing Competition Is Fundamental. The competitive structure faced by banks and thrifts has important implications for the earnings and safety of these institutions as well as for the price and quality of financial services they provide to the public.

As a rule, greater competition lowers the cost to the public of various financial services. But it also lowers the earnings of banks and thrifts. It's been estimated that the introduction of NOW accounts in New England, for example, reduced after-tax earnings

[1] As part of a regulatory realignment designed to aid small savers, ceiling rates on passbook accounts at Federally insured institutions were increased as of July 1, 1979 to 5 1/4 percent at commercial banks and to 5 1/2 percent at savings and loan associations and mutual savings banks. Credit unions are subject to different regulations which permit even higher rates to be paid.

March 1977	MSBs in Pennsylvania granted authority to offer *non-interest-bearing negotiable order of withdrawal accounts (NINOWs).* NINOWs are functionally equivalent to checking accounts.
October 1978	Federal legislation extends *NOW account* authority to New York State.
November 1978	Federally insured banks and MSBs authorized to offer *automatic transfers* from a savings account to a checking account or other type of transaction account.†

*The developments listed in this table do not necessarily give the complete picture of new powers for thrifts. In some cases, state chartered institutions have begun to offer the same services as their Federal counterparts without any express enabling legislation.

† On April 20, 1979 the U.S. Court of Appeals in Washington, D.C. ruled that share drafts, RSUs, and ATS are illegal and must be discontinued by January 1, 1980 unless Congress acts to legalize them.

SOURCES:

American Banker, various issues.

American Bankers Association, *State Banking; Credit Union and Savings and Loan Association Legislation 1975*, Washington, D.C.

Alfred Broaddus, "Automatic Transfers from Savings to Checking; Perspective and Prospects," *Economic Review*, Federal Reserve Bank of Richmond, November/December 1978, p. 4.

Ann Marie Laporte, "Proposed Redefinition of Money Stock Measures," *Economic Perspectives*, Federal Reserve Bank of Chicago, March/April 1979, pp. 7-13.

Jean M. Lovati, "The Growing Similarity Among Financial Institutions," *Review*, Federal Reserve Bank of St. Louis, October 1977, pp. 6-7.

New Jersey Department of Banking, *1975 Annual Report of the Commissioner of Banking*, Division of Savings and Loan Associations, February 27, 1976.

for all banks in Massachusetts and New Hampshire by about two and a half percent in 1974 and by a little over eight percent in 1975.[2] In more extreme cases, the pressure on earnings from stiffer competition could result in the failure of some banks or thrifts. An institution might fail, for example, if to cover its increased costs, it began to take on significant amounts of high-interest—but very risky—loans. Thus additional competition could spell rough going for less efficient banks and thrifts. In light of this possibility, knowledge of the competitive structure of these institutions can be crucial to policymakers and to the institutions themselves.

Policymakers, for example, who must consider proposals that could affect the competitive balance among banks and thrifts, have to know whether an imbalance has developed before they can decide on what should be done to correct it. A competitive profile of financial markets is part of the information needed to make this determination.

A profile of competition can be useful for bankers and consumers as well. New regulations that make thrifts more competitive will not have the same impact on all banks. Bankers in markets where thrifts are weak are not likely to feel the same impact as those in markets with strong, aggressive thrifts. Similarly, for consumers to project how a new regulation would affect the banking services available to them, they too need an assessment of competition in their area.

In short, a clear picture of the competitive landscape is a crucial ingredient in decisions made by policymakers and the public.

COMPETITION: TWO VIEWS FROM THE THIRD DISTRICT

Two views of the market for savings deposits in the Third District offer examples of different ways to draw competitive profiles.[3] One of these views is derived from measures that recap the District as a whole, while the other focuses on local banking markets. The definitions of local markets have been developed by the Federal Reserve Bank of Philadelphia expressly for use in assessing competition.[4]

Even when the market in question is a small geographic area, District-wide or statewide figures might be used, for example, when data for the local market areas are not available or when there isn't enough time to gather and analyze more detailed measures. While the picture that results may not always be a very fine-grained reflection of the underlying conditions in local markets, the broad-brush approach can be expedient. Also, in assessing competition, both kinds of measures can be used to describe the competitive strength of banks and thrifts at certain times as well as changes that might take place over time. Such changes can alert policymakers to the possibility of shifts in

[2]See Howard Keen, "Why Bankers Are Concerned about NOW Accounts," *Business Review*, Federal Reserve Bank of Philadelphia, November/December 1977, p. 9.

[3]Savings deposits used in this article consist of the following: for credit unions, total savings including public unit accounts, retirement plans, and special share accounts such as Christmas and vacation accounts; for savings and loan associations, total savings capital including time deposits; and for commercial banks and mutual savings banks, total time and savings deposits of individuals, partnerships, and corporations (IPC). Deposit data are as of December 31 for credit unions, September 30 for savings and loan associations, and June 30 for commercial banks and mutual savings banks.

[4]For a description of the original work in this area, see Cynthia A. Glassman, "Banking Markets in Pennsylvania," *Changing Pennsylvania's Branching Laws: An Economic Analysis*, Federal Reserve Bank of Philadelphia, March 1973, pp. 19-41. For examples of broader measures of competitive structure, see American Bankers Association, *Financial Institution Facts*, 1978, and U.S., Congress, House, Committee on Banking, Finance, and Urban Affairs, *Consumer Financial Services Act of 1977 (NOW Account Legislation)*, Hearing before a subcommittee of the Committee on Banking, Finance, and Urban Affairs; House of Representatives, on H.R. 8981, 95th Cong., 1st sess., September 7, 1977, pp. 214-218 and p. 254.

the relative competitive strengths of banks and thrifts.

In the Aggregate, Thrifts Are Close Rivals to Banks. Using the aggregate measure, it appears that thrifts are formidable competitors for savings deposits in the Third District. Thrifts had a sizeable share of deposits earlier in the decade and have managed to add a bit since then.

One way to assess the competitive strength of banks and thrifts is to look at their number of offices and share of deposits. Number of offices is a rough measure of how hard they're trying to attract deposits, and share of deposits is a measure of how successful they've been in this effort.[5]

In both 1972 and 1976, banks had more offices and more savings deposits than all thrifts combined, but the thrift share of total savings deposits was far from negligible. Thrifts as a group held more than two-fifths of total savings deposits in both years. Further, the number of thrift offices increased at a noticeably faster clip than the number of bank offices, and thrifts were successful in upping their share of total savings deposits in the District from 44 percent in 1972 to 45 percent in 1976. For the most part, the faster rate of adding offices and the gain in deposit share were accounted for by S&Ls (Figure 2).

All in all, these aggregate measures show that thrifts were strong competitors for savings deposits in 1972 and that they gained on banks, especially in number of offices, from 1972 to 1976.[6]

But Banks Are Far Stronger in Most Local Markets. An alternative approach to

[5]Number of offices is only a rough measure because it fails to take into account the fact that institutions must obtain regulatory approval to open new offices. Hence, differences in new offices opened also reflect differences among the regulators in their propensities to approve additional offices.

[6]The data used to calculate the measures in the tables are for all insured commercial banks and MSBs, for Federally insured CUs, and, with a minor exception, Federally insured S&Ls. This includes all Federally chartered S&Ls and CUs and some of those with state charters. In the Delaware-New Jersey-Pennsylvania region, 93 percent of all CUs were Federally insured at year-end 1976 and they held 95 percent of CU assets in the area. For S&Ls, 65 percent were Federally insured with 99 percent of all S&L assets.

FIGURE 2
THRIFTS SHOW GAINS IN THE THIRD DISTRICT
1972-1976*

	Number of Offices		Share of Total Savings Deposits (percent)	
	1972	1976	1972	1976
Commercial Banks	2,395	2,913	56	55
Mutual Savings Banks	143	228	20	20
Savings & Loan Associations	537	720	22	23
Credit Unions	947	1,104	2	2
All Thrifts Combined	1,627	2,052	44	45
Total	4,022	4,965	100	100

*The numbers above represent the sum for all local markets completely or partially within the Third District. Therefore, they include offices and deposits of institutions that are located outside the District but in a market that straddles District boundaries.

SOURCES: Federal Deposit Insurance Corporation, Federal Home Loan Bank Board, and National Credit Union Administration.

gauging competition is to look behind the aggregate numbers at measures for local markets. But getting behind the big numbers requires a study of economic and financial data in order to define the geographic boundaries of a market. From information on pricing patterns, geographic factors, industry structure, population density, and commuting behavior, markets for savings deposits in the Third District were defined by researchers at the Federal Reserve Bank of Philadelphia in the early 1970s.[7] These markets—identified by a number and a name—are outlined on the map overleaf and are profiled in the Appendix. Bank analysts use them when assessing the likely impact on competition of one bank's acquiring another bank.

When competition is viewed within the framework of local markets, the battle for savings deposits among banks and thrifts takes on a different perspective. Measures from local markets tell the same story as the aggregate measures when it comes to changes in competition over time, but they tell a very different story about absolute competitive strength at a given time.

Looking first at the four-year period 1972-76, figures from local banking markets tell the same basic story as the District-wide measures. The figures for bank offices as a percentage of all offices fell in the period in 25 out of the 47 local banking markets, and the bank share of savings deposits declined in 28 out of the 47 markets (Figure 3). In most of the 28 markets, the market share lost by banks was on the order of a few percentage points, although in ten markets their share fell by five percentage points or more. Losses of five to eight percentage points occurred in certain scattered markets in Pennsylvania such as Reading (4), Allentown-Bethlehem-Easton (5), Honesdale (11), Matamoras-Middletown (12), Bedford (33), and Indiana (41), as well as in the seaside Atlantic City (64) and urban Trenton (67) markets; the bank share fell by 11 points in the Clearfield (35) market and by 15 points in the Long Beach Island-Toms River (66) market. In the Reading, Allentown-Bethlehem-Easton, and Long Beach Island-Toms River markets, both MSBs and S&Ls fattened their share of the savings deposit market, but in the other markets, the loss of bank share came almost exclusively at the hands of S&Ls.

Although District-wide measures tend to mask the variation among local markets, the story they tell about the change in the competitive landscape is a reasonably accurate description of developments in the Third District during the four-year period ending in 1976. Gains by thrifts in the market for savings were widespread in the District during that time, and changes in the broad measures are consistent with these gains.

The conformity of aggregate measures with those for local markets breaks down, however, when the focus shifts to the absolute competitive strength of banks and thrifts at a given time. For both 1972 and 1976, District-wide figures show banks with only a slight edge over thrifts in the battle for savings deposits. But numbers from the local markets tell a different story.

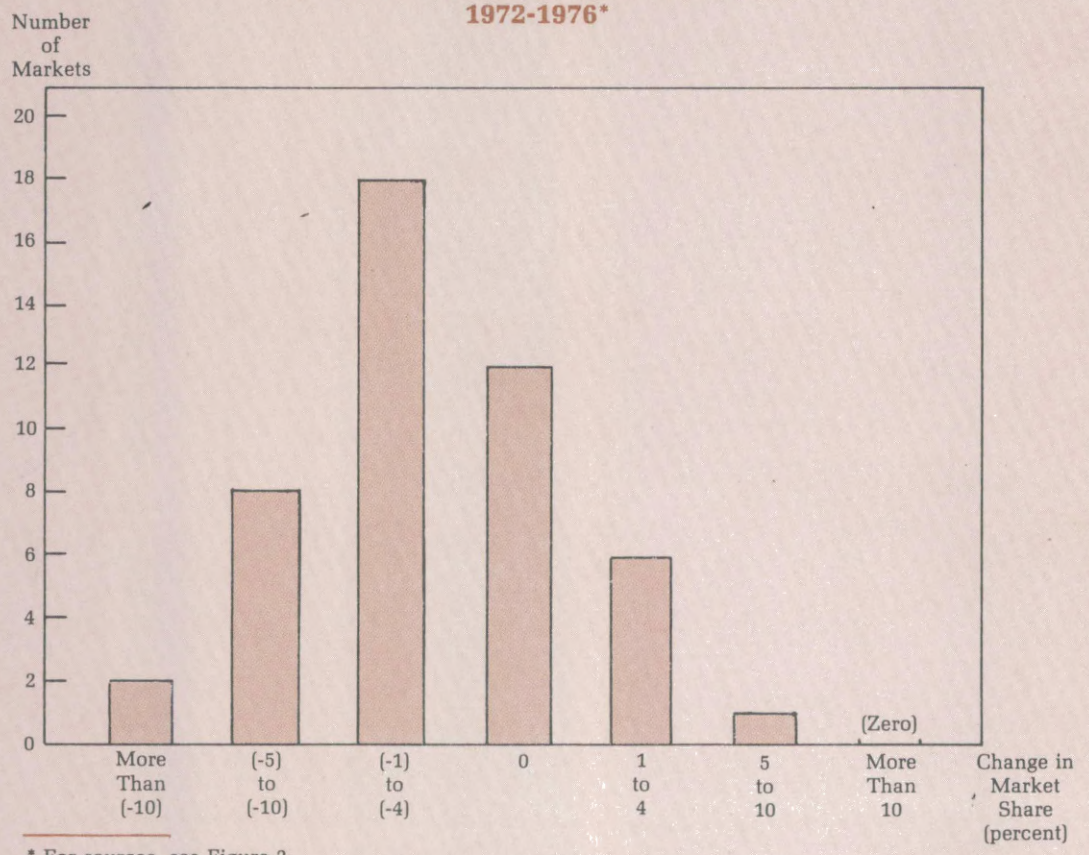
In number of offices and market share, local market data make banks appear to be much stronger in the Third District than the aggregate measures would suggest. In 1972, banks had over three-fifths of total offices in 34 of 47 local markets and more than four-fifths in 11 markets. Concurrently, banks held more than 60 percent of total savings in 36 markets and over 80 percent in 20 of these markets. This widespread strength of banks was evident in 1976 as well. Banks had more than three-fifths of all offices in 32 markets and more than four-fifths in 10 markets. At the same time, there were 34 markets in which banks held more than 60 percent of total savings and 16 markets where the bank share exceeded 80 percent.

This is not to say that thrifts were not in

[7] Modifications to the original definitions have been made as economic and demographic characteristics have changed over time. The market definitions used in this article are those currently in effect.

FIGURE 3

BANK SHARE OF SAVINGS FALLS IN MANY THIRD DISTRICT MARKETS 1972-1976*



* For sources, see Figure 2.

evidence in the marketplace. As the statistics show, there were 11 local banking markets in 1972 and 13 in 1976 where thrifts held 40 percent or more of total savings. S&Ls held the largest thrift share in 9 of these markets and MSBs held the largest thrift share in the remaining four.

Why is one picture so different from the other? The reason is that while thrifts hold 40 percent or more of total savings in fewer than a third of the markets in the District, some of the markets in this third have a relatively large volume of deposits. The use of aggregate measures for the District gives more weight to these markets and therefore can overstate the strength of thrifts.

The Philadelphia-Camden market is a good example. In 1976, thrifts held 60 percent of all savings here while in the rest of the District they held only 34 percent. Because the Philadelphia-Camden market, with 44 percent of the total savings in the

FEDERAL RESERVE BANK OF PHILADELPHIA

Third District Has 47 Local Market Areas Some Cross District Boundaries

NEW YORK
PENNSYLVANIA
Steuben
Schuyler
Chemung
Tioga
Chenango
Broome
26
10
Susquehanna
McKean
37
Potter
27
Tioga
Bradford
25
Wayne
11
Sullivan
12
9
Wyoming
Lackawanna
Orange
Elk
36
Cameron
Clinton
28
Lycoming
24
Sullivan
8
Luzerne
Monroe
7
Jefferson
40
Clearfield
35
29
Centre
Union
23
Columbia
22
Montour
6
Carbon
Northampton
NEW JERSEY
Indiana
41
Cambria
34
Blair
Mifflin
30
Juniata
North umberland
21
Schuylkill
20
Lehigh
5
Hunterdon
Somerset
31
Huntingdon
Perry
19
Dauphin
14
Lebanon
Berks
4
Middlesex
Mercer
67
42
18
Cumberland
Lancaster
13
3
Chester
Montgomery
Delaware
Monmouth
Ocean
Bedford
33
Fulton
32
Franklin
York
16
Burlington
66
Somerset
PENNSYLVANIA
17
Adams
Camden
Gloucester
62
Salem
Atlantic
64
92
Cecil
New Castle
1
Cumberland
MARYLAND
WEST VIRGINIA
Kent
93
Kent
Cape May
63
Queen Anne's
DELAWARE
VIRGINIA
Caroline
Suss
94
Dorchester
Wicomico
Somerset

— Market Areas
□ Third Federal Reserve District

District, is such a big market, it has a heavy influence on the aggregate figure.

In short, thrifts were a noteworthy force in the competition for savings in both 1972 and 1976, and they made gains against banks over the intervening years. But they were not nearly as strong in either year as District-wide measures appear to show, nor was the competitive structure as homogeneous as might be suggested by such aggregate numbers.

LOOKING AHEAD

This examination of thrifts and banks in the Third District shows that thrifts are viable competitors in the market for savings deposits and ought to be considered by regulators in assessing market conditions. In 1976, thrifts held one-fifth or more of total savings deposits in 31 of the District's 47 local markets. Thus to exclude these institutions from measures of competition is to risk distortion in the picture of the underlying market structure.

The analysis of Third District markets shows also, however, that the way thrifts are included can make a big difference. This was illustrated in the competitive profiles of the District for 1972 and 1976, and it can be illustrated further from what the two approaches imply for banks if thrifts gain additional powers in the future. The aggregate approach, for example, suggests that banks throughout the District might feel immediate pressure from thrifts since the latter are almost as strong as banks in the market for savings already. The local market approach, however, suggests that banks in some markets could feel more intense pressure from thrifts while those in other markets (where thrifts are weak) may feel little or no immediate effect. Banks in the urbanized Philadelphia-Camden (1) and Binghamton (10) markets, as well as in the more rural Matamoras-Middletown (12) and Hammonton (62) markets, for example, could feel a lot of additional competitive heat if thrifts gain new powers, while banks in the less populous Millersburg-Lykens (19), Towanda-Wyalusing (25), Coudersport (27), and Huntingdon (31) markets, among others, might feel only minimal effects in the near term.

These points are especially relevant today, when sweeping changes in the competitive ground rules seem to be closer than ever before. The possibility of significant change is evident in current proposals to establish NOW accounts nationwide, to eliminate the differential maximum rates on savings for banks and thrifts, to broaden the lending powers of thrifts, and to expand the branching authority of Federal S&Ls. Altering the current balance of powers possessed by financial institutions could result in shifts in the competitive positions of banks and thrifts.

Moreover, the relative strengths of banks and thrifts are likely to be at the heart of discussions about share drafts, automatic transfer services (ATS), and remote service units (RSUs). All of these competitive tools have been authorized by Federal regulators within the past few years, but a recent court ruling makes them illegal as of January 1, 1980 unless Congress expressly authorizes them before that time.[8]

STAYING ON TOP

Current proposals for change in the U.S. financial system, along with pressure to address the recent court ruling, should provide ample stimulus for considering the competitive balance of the financial sector. As a look at the Third District shows, though,

[8] American Bankers Association and Tioga State Bank v. Lawrence B. Connell, Jr., Administrator of the National Credit Union Administration, United States Court of Appeals for the District of Columbia, September Term, 1978 (No. 78-1337); Independent Bankers Association of America v. Federal Home Loan Bank Board, United States Court of Appeals for the District of Columbia, September Term, 1978 (No. 78-1849); United States League of Savings Associations v. Board of Governors of the Federal Reserve System, United States Court of Appeals for the District of Columbia, September Term, 1978 (No. 78-2206).

measuring the competitive structure of a market at any given time can be a tricky business. And as the rules of the game change over time, the appropriate measure of competition may change as well, affecting decisions about which institutions should be included in the calculation as well as which geographic area should be covered. If thrifts are allowed to compete for funds the way banks do, then measures of competition, say for deposits, should include both kinds of institutions. Such inclusion might be appropriate, for example, when regulators try to assess the impact of one bank's acquiring another. Likewise, if thrifts get lending powers similar to those of banks, then any analysis of competition in the market for loans should include thrift institutions. In a similar vein, if electronic banking makes office location much less important than it is now, then a measure for local markets could be less relevant than large-area measures such as District-wide ones or even national ones.

In short, as long as these changes are in the works, the issue of competition for deposits by banks and thrifts is likely to remain a hot one.

For Appendix, see overleaf . . .

APPENDIX: A DETAILED PROFILE OF BANKING MARKETS IN THE THIRD DISTRICT

Forty-seven distinct banking markets have been defined by researchers at the Philadelphia Fed for the Third District. A competitive profile of these markets is presented in the figures below. For each market area and each kind of institution, statistics on number of institutions, number of offices, and share of total savings deposits are presented. A few of the markets extend outside the boundaries of the Third District, and they are identified in the figures with the following symbols: * for part of the Second District portion of New Jersey; † for part of New York State; ‡ for part of the Fourth District portion of Pennsylvania; and § for part of Maryland. In these figures, market share is rounded to the nearest whole percentage point. Because of rounding, the individual shares may not add to 100 percent and institutions with a share of less than one-half percent will appear in the figures with a share of zero. Because credit unions typically have no branch offices, the number of institutions listed equals the number of offices in their case.

NUMBER OF INSTITUTIONS/NUMBER OF OFFICES/SHARE OF SAVINGS BY MARKET AREA

1972

Market	Commercial Banks	Mutual Savings Banks	Savings and Loan Associations	Credit Unions	Total
1 Philadelphia-Camden	55/694/39%	6/99/35%	157/288/24%	307/307/2%	525/1,388/100%
3 Coatesville	7/15/49	0/0/0	6/6/44	7/7/8	20/28/100
4 Reading	18/76/71	2/2/2	8/12/24	57/57/3	85/147/100
5 Allentown-Bethlehem-Easton*	40/130/83	1/1/0	17/23/14	50/50/2	108/204/100
6 Hazleton	7/20/80	0/0/0	3/3/19	10/10/0	20/33/100
7 Stroudsburg	4/17/77	0/0/0	2/2/19	9/9/4	15/28/100
8 Wilkes-Barre	17/43/77	0/0/0	5/9/21	39/39/2	61/91/100
9 Scranton	29/49/90	0/0/0	5/6/9	23/23/1	57/78/100

NUMBER OF INSTITUTIONS/NUMBER OF OFFICES/SHARE OF SAVINGS BY MARKET AREA

1976

Market	Commercial Banks	Mutual Savings Banks	Savings and Loan Associations	Credit Unions	Total
1 Philadelphia-Camden	58/794/40%	9/143/35%	115/326/24%	360/360/2%	542/1,623/100%
3 Coatesville	12/25/49	1/2/3	6/10/41	7/7/7	26/44/100
4 Reading	22/98/64	3/6/6	11/25/27	65/65/4	101/194/100
5 Allentown-Bethlehem-Easton*	40/165/76	3/9/3	16/30/19	55/55/2	114/259/100
6 Hazleton	7/23/80	0/0/0	3/4/19	13/13/1	23/40/100
7 Stroudsburg	5/19/75	0/0/0	3/3/22	10/10/4	18/32/100
8 Wilkes-Barre	15/47/76	0/0/0	5/15/22	47/47/2	67/109/100
9 Scranton	25/60/89	0/0/0	4/9/10	37/37/1	66/106/100

1972 (Continued)

Market	Commercial Banks	Mutual Savings Banks	Savings and Loan Associations	Credit Unions	Total
10 Binghamton†	15/58/48	1/3/40	3/3/5	23/23/7	42/87/100
11 Honesdale	8/10/100	0/0/0	0/0/0	0/0/0	8/10/100
12 Matamoras-Middletown†	21/70/49	5/9/41	4/4/10	10/10/0	40/93/100
13 Lancaster	20/67/84	0/0/0	4/4/14	20/20/2	44/91/100
14 Lebanon	10/26/89	0/0/0	2/2/10	6/6/1	18/34/100
16 York	14/54/75	0/0/0	3/6/23	30/30/2	47/90/100
17 Gettysburg-Hanover	13/28/96	0/0/0	1/1/4	2/2/0	16/31/100
18 Harrisburg-Carlisle	22/75/48	0/0/0	8/14/48	33/33/4	63/122/100
19 Millersburg-Lykens	10/17/99	0/0/0	0/0/0	1/1/1	11/18/100
20 Pottsville	14/39/91	0/0/0	4/6/9	9/9/1	27/54/100
21 Shamokin	10/15/73	0/0/0	2/2/28	0/0/0	12/17/100
22 Bloomsburg	16/31/92	0/0/0	4/4/8	4/4/1	24/39/100
23 Lewisburg-Middleburg-Sunbury	11/21/86	0/0/0	2/3/14	2/2/1	15/26/100
24 Williamsport	11/20/82	0/0/0	2/2/15	19/19/3	32/41/100
25 Towanda-Wyalusing	9/15/100	0/0/0	0/0/0	1/1/0	10/16/100
26 Wellsboro-Mansfield-Elmira†	18/53/51	2/6/16	7/8/26	28/28/8	55/95/100
27 Coudersport	4/6/100	0/0/0	0/0/0	0/0/0	4/6/100
28 Lock Haven	6/9/82	0/0/0	1/1/18	3/3/0	10/13/100
29 State College	13/30/57	0/0/0	2/5/41	5/5/1	20/40/100
30 Lewistown	9/20/77	0/0/0	3/3/22	2/2/1	14/25/100
31 Huntingdon	5/14/96	0/0/0	1/1/3	1/1/1	7/16/100
32 Chambersburg	15/41/91	0/0/0	3/3/8	9/9/2	27/53/100

1976 (Continued)

Market	Commercial Banks	Mutual Savings Banks	Savings and Loan Associations	Credit Unions	Total
10 Binghamton†	17/79/44	3/7/39	3/7/7	29/29/9	52/122/100
11 Honesdale	8/12/92	0/0/0	1/2/8	0/0/0	9/14/100
12 Matamoras-Middletown†	22/89/43	8/15/42	9/14/15	11/11/0	50/129/100
13 Lancaster	16/89/84	0/0/0	7/12/14	23/23/2	46/124/100
14 Lebanon	11/32/87	0/0/0	2/2/12	6/6/1	19/40/100
16 York	14/69/72	0/0/0	4/10/26	33/33/2	51/112/100
17 Gettysburg-Hanover	13/35/93	0/0/0	2/3/7	2/2/0	17/40/100
18 Harrisburg-Carlisle	21/99/48	0/0/0	10/23/48	38/38/4	69/160/100
19 Millersburg-Lykens	10/19/99	0/0/0	0/0/0	1/1/1	11/20/100
20 Pottsville	14/42/88	0/0/0	4/6/11	9/9/1	27/57/100
21 Shamokin	10/16/72	0/0/0	1/1/28	0/0/0	11/17/100
22 Bloomsburg	14/32/88	0/0/0	5/5/10	7/7/1	26/44/100
23 Lewisburg-Middleburg-Sunbury	11/29/83	0/0/0	2/3/17	5/5/1	18/37/100
24 Williamsport	10/29/81	0/0/0	4/4/15	20/20/4	34/53/100
25 Towanda-Wyalusing	10/17/97	0/0/0	1/1/3	1/1/0	12/19/100
26 Wellsboro-Mansfield-Elmira†	17/59/50	3/8/16	7/10/25	37/37/9	64/114/100
27 Coudersport	3/6/100	0/0/0	0/0/0	0/0/0	3/6/100
28 Lock Haven	5/11/79	0/0/0	1/2/20	3/3/1	9/16/100
29 State College	12/37/58	0/0/0	2/5/40	6/6/2	20/48/100
30 Lewistown	9/21/77	0/0/0	3/3/22	2/2/1	14/26/100
31 Huntingdon	6/18/96	0/0/0	1/1/4	1/1/1	8/20/100
32 Chambersburg	15/47/89	0/0/0	3/3/8	9/9/3	27/59/100

1972 (Continued)

Market	Commercial Banks	Mutual Savings Banks	Savings and Loan Associations	Credit Unions	Total
33 Bedford	8/14/91	0/0/0	1/1/9	2/2/1	11/17/100
34 Altoona	11/33/62	0/0/0	8/11/36	17/17/2	36/61/100
35 Clearfield	3/6/88	0/0/0	1/1/12	1/1/0	5/8/100
36 St. Mary's	6/10/74	0/0/0	4/4/26	3/3/1	13/17/100
37 Smethport	7/15/54	0/0/0	3/4/44	13/13/3	23/32/100
40 Du Bois‡	9/17/95	0/0/0	1/2/5	2/2/0	12/21/100
41 Indiana‡	9/21/80	0/0/0	2/2/19	5/5/1	16/28/100
42 Johnstown‡	15/50/61	1/2/15	3/4/23	18/18/1	37/74/100
61 Vineland-Bridgeton-Millville	15/45/51	0/0/0	5/9/46	12/12/3	32/66/100
62 Hammonton	5/6/13	0/0/0	2/2/87	2/2/0	9/10/100
63 Cape May	6/14/62	0/0/0	3/7/38	1/1/0	10/22/100
64 Atlantic City	10/43/67	0/0/0	5/11/32	14/14/1	29/68/100
66 Long Beach Island-Toms River *	14/59/68	0/0/0	4/13/31	9/9/2	27/81/100
67 Trenton*	27/100/65	3/4/8	20/25/24	54/54/2	104/183/100
92 Wilmington§	24/110/48	2/12/36	10/17/12	64/64/4	100/203/100
93 Dover§	17/34/78	2/4/15	2/2/1	11/11/7	32/51/100
94 Sussex County§	21/55/81	1/1/2	1/1/14	9/9/4	32/66/100

SOURCES: See Figure 2.

1976 (Continued)

Market	Commercial Banks	Mutual Savings Banks	Savings and Loan Associations	Credit Unions	Total
33 Bedford	9/17/85	0/0/0	2/2/14	2/2/1	13/21/100
34 Altoona	11/44/65	0/0/0	7/11/32	20/20/3	38/75/100
35 Clearfield	4/8/77	0/0/0	1/1/22	1/1/0	6/10/100
36 St. Mary's	6/10/76	0/0/0	4/5/23	5/5/1	15/20/100
37 Smethport	7/17/51	0/0/0	3/4/46	14/14/3	24/35/100
40 Du Bois‡	9/23/94	0/0/0	1/3/5	6/6/1	16/32/100
41 Indiana‡	8/25/74	0/0/0	3/3/25	6/6/1	17/34/100
42 Johnstown‡	14/59/61	1/4/14	3/6/22	21/21/2	39/90/100
61 Vineland-Bridgeton-Millville	17/58/54	1/1/1	6/12/43	15/15/3	39/86/100
62 Hammonton	7/10/20	0/0/0	2/2/80	2/2/1	11/14/100
63 Cape May	7/16/62	0/0/0	5/10/38	1/1/0	13/27/100
64 Atlantic City	9/58/61	0/0/0	6/19/37	15/15/2	30/92/100
66 Long Beach Island-Toms River*	20/83/53	3/4/4	13/37/42	9/9/1	45/133/100
67 Trenton*	32/125/59	3/5/8	24/38/30	62/62/3	121/230/100
92 Wilmington§	24/131/50	2/17/33	9/24/13	67/67/4	102/239/100
93 Dover§	17/41/76	2/5/17	1/1/1	11/11/6	31/58/100
94 Sussex County§	23/70/78	1/2/4	2/3/15	10/10/4	36/85/100

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