



HOUSING and MONETARY POLICY

ACKLEY

DUESENBERY

OTT

HARBERGER

MELTZER

LINDSAY

PUCKETT

SCHWARTZ

SMITH

KAUFMAN

CHASE

FRIEND

ANDERSON

EISENMINGER

SHAPIRO

PLEASE DO NOT REMOVE FROM
THE FEDERAL RESERVE BANK

CONFERENCE
OCTOBER 1970



HOUSING and MONETARY POLICY

Proceedings of the
MONETARY CONFERENCE

Melvin Village, New Hampshire
OCTOBER, 1970

Sponsored by
THE FEDERAL RESERVE BANK OF BOSTON

THE FEDERAL RESERVE BANK OF BOSTON
MONETARY CONFERENCE SERIES

- NO. 1 CONTROLLING MONETARY
AGGREGATES JUNE, 1969
- NO. 2 THE INTERNATIONAL
ADJUSTMENT MECHANISM OCTOBER, 1969
- NO. 3 FINANCING STATE and LOCAL
GOVERNMENTS in the SEVENTIES JUNE, 1970
- NO. 4 HOUSING and MONETARY POLICY OCTOBER, 1970


FOREWORD

We are pleased to make available the proceedings of the fourth in a series of conferences sponsored by the Federal Reserve Bank of Boston.

The papers and comments included in this volume were presented in October, 1970. The conference participants were chosen because of their recognized expertise in the financial aspects of housing policy. We believe that their insights and views deserve wide circulation and discussion.

The previous conferences in this series have explored other important topics in the monetary field. The proceedings of those meetings, listed on the facing page, have been widely distributed.

We hope the current volume will prove to be valuable to those concerned with the impact of public policy upon this sector of the economy.



Frank E. Morris
President

Boston, Massachusetts

October, 1970

CONTENTS

HOUSING AND MONETARY POLICY

FOREWORD

FRANK E. MORRIS

Fiscal Policy and Housing

GARDNER ACKLEY 9

Discussion

JAMES S. DUESENBERY 27

DAVID J. OTT 32

ARNOLD C. HARBERGER 36

Three Points of View: Regulation Q— The Money Markets and Housing

ALLAN H. MELTZER 41

ROBERT LINDSAY 52

AL MARSHALL PUCKETT 60

The Role of Government-Sponsored Intermediaries in the Mortgage Market

HARRY S. SCHWARTZ 68

The Role of Government Intermediaries

WARREN L. SMITH 86

Discussion

HENRY KAUFMAN 102

SAMUEL B. CHASE 107

Changing the Asset and Liability Structure
of Specialized Private Savings Intermediaries

IRWIN FRIEND

110

Structural Reform with the Variable Rate Mortgage

PAUL S. ANDERSON

and

ROBERT W. EISENMENGER

121

Discussion

ELI SHAPIRO

131

*Fiscal Policy
and Housing*

GARDNER ACKLEY

My purposes in this paper are essentially expository, rather than to present the results of any research. However, it is my personal conviction that there is sufficient confusion about some aspects of housing policy to make an expository paper appropriate, especially by way of introduction to the program of this Conference.

I was asked to talk about how fiscal policy can help us to achieve our housing goals, but I can obviously not deal with that subject in isolation. I shall therefore discuss the following topics, in this order:

1. The nature of our national housing goals, and the importance of policies other than general fiscal, monetary, and financial policies in achieving them.
2. The contributions of general fiscal and monetary policies, and the relationships between them.
3. The relationship of fiscal and monetary policies to the problem of housing finance.
4. Some crude quantification of the magnitude of the fiscal policy requirement for meeting the housing goals.

Our Housing Goals

I am sure that all of you recall the nature and magnitude of our national housing goals, so I will review them only very briefly. Those goals, in fact, are two: between fiscal years 1968 and 1978, the production of six million subsidized new or rehabilitated units,

Mr. Ackley is Henry Carter Adams Professor of Political Economy, University of Michigan, Ann Arbor, Michigan.

which will provide better housing for low income families than they could otherwise afford; and, over the same period, the production of a total of 26 million units, including the six million subsidized units. Let me say at once that I will not address myself to the question whether we should have national housing goals as specific as these, or whether these particular goals are appropriate ones. Rather, I am asked to discuss what would be necessary to achieve them.

The first part of the housing goal is obviously of a quite different character from the second, and so are the policies necessary to achieve it. These policies are largely independent of general fiscal, monetary, and financial policies. Needed, rather, are effective legal and administrative mechanisms for supplementing the resources of low income families, and budgetary appropriations adequate to carry them out. It is my impression that this part of the goal by itself presents little problem. According to Charles Schultze,¹ the levels of subsidized construction provided for in the fiscal 1971 budget are already at or close to those needed to achieve by 1978 the six million units required. Provisions in previous budgets have already started a great many of these subsidized units through the exceedingly long administrative pipeline. Now that the Administration has reduced from two million to one million the goal for subsidized rehabilitations—which I gather offer the greater administrative and other difficulties—and substituted another million of subsidized *new* units, it is apparently primarily a matter of maintaining an adequate level of subsidy appropriations. This is not to say that the particular means of subsidization that we are using are necessarily the best. Indeed, I seriously question whether they are. But we can produce six million subsidized units.²

The more difficult questions relate to the overall goal of 26 million units during the decade. To be sure, this goal seems somewhat less ambitious, now that it has been scaled back by the present Administration's reinterpretation of it to include mobile homes, of which four million are expected to be shipped during the decade. However, one of our most able and perceptive housing

¹Setting National Priorities: The 1971 Budget. The Brookings Institution, 1970, pp. 86-91.

²We could, of course, provide subsidies to six million families without building six million—or even 600—new units for them to live in. But for a number of reasons, we feel that we must provide new or rehabilitated units specifically for the purpose of housing subsidized families. That is, the subsidy is tied to a dwelling unit, not to a family.

analysts—Anthony Downs—two years ago flatly predicted that the original goal would not be met, and this was before the depression of housing starts of 1969-70.³ The arithmetic alone is rather staggering. Two of the 10 fiscal years are now completed. During those two years we have produced about 2,900,000 conventional units, and 800,000 mobile homes. That leaves about 19,000,000 conventional units for the remaining eight years, or about 2,400,000 a year, and 3,200,000 mobile units. So far as conventional houses are concerned, this is 70 percent higher than our average rate of homebuilding during the 1960's.

Downs presents a formidable list of obstacles to the construction of this many homes. They relate to the industrial organization of the construction industry, to the supply of trained construction workers, to the design of Federal subsidy and financing programs, to the procedures for compensation and relocation of persons displaced when urban land is cleared for new housing, to the policies to open up the suburbs (where land must be found for *most* of the new housing), to building codes, to technical and economic research—among a great many other things. Downs does not say that the housing goal cannot be met, merely that it would require giving the housing problem a higher priority—among other urgent problems—than the American people are likely to give it once they see what is involved, and a higher priority than Downs thinks they probably should give to housing.

For our purpose, we do not need to examine Downs' list of obstacles nor the policies which he or we might suggest to overcome them. Rather, I refer to it merely to remind us all that the availability of generalized resources on the scale which we might calculate was needed to build 26 million houses, and financial mechanisms for assuring that adequate savings are available in the form needed to finance housing, do not themselves get houses built. It would be folly to free the generalized resources that we calculate are needed until we are sure that the incentives and the indispensable specialized resources of raw materials, labor, land, technology, public administration, and private entrepreneurship are available in the magnitudes necessary to build that many houses.

³"Moving Toward Realistic Housing Goals," in *Agenda for the Nation*, K. Gordon, ed., The Brookings Institution, 1968.

Fiscal and Monetary Policy and Housing

I come now to the contribution of fiscal policy to meeting our housing goals.

In recent years, quite a bit has been said and written on the impact of fiscal policy on residential construction, some of it relevant and correct, and much of it—in my view—less so. For example, it is sometimes held that an (inappropriately) expansionary fiscal policy during 1966-68 somehow inevitably and automatically squeezed housing construction. I prefer to say not that it was an overly expansionary fiscal policy which squeezed housing; rather, that it was a highly restrictive general monetary policy (impinging on some particular institutional aspects of our financial system) that affected housing so adversely. You may consider my reservations on this score purely semantic. Given the fiscal policy, you may say, monetary policy had no choice but to be highly restrictive.

I happen, on balance, to be glad that our monetary managers did decide to do something to make up for the clear deficiencies of our fiscal policy. But they didn't have to. It wasn't inevitable. They could have done something else, which might have let inflation run its course. In that case, it is not clear to me that housing would necessarily have been adversely affected—certainly not to the extent that it was. Or the Fed could have pursued a highly selective monetary policy designed primarily to affect other forms of credit-financed expenditure.⁴ Or the Congress might have adopted direct price and wage controls, with or without some form of allocations or rationing, applied either to the use of credit or of other resources in various industries or to the purchase of various kinds of output. Unpalatable as some or even all of these alternatives may seem, the word policy has no meaning if it doesn't imply choice among alternatives. The Fed did choose (with or without the consent or the urging of the Administration) a highly restrictive general monetary policy, and I say that this is what “clobbered” housing.

Let us take the reverse case. Suppose that fiscal policy at some stage becomes “inappropriately” restrictive—judged by your or my standard of what is “appropriate”. Would you hold that this makes inevitable an extremely easy general monetary policy, which

⁴This might have required some legal authority which the Fed does not have. But the fact that it has not sought such authority is itself a policy decision.

(especially given our institutions) would also tend to be highly stimulative of private housing? And should we say, therefore, that, if this happened, it was the restrictive fiscal policy that stimulated housing? I am tempted to believe that, at least in this case, you would respect my preference to distinguish among the separate impacts of separate policies.

What is a Neutral Monetary Policy?

The real source, I rather think, of much of our semantic confusion in these matters is that we have never agreed (so far as I know) on what is a “no policy” or a “neutral policy” at least so far as monetary policy is concerned. This, I think, is unfortunate. If fiscal policy is shifted toward tightness or toward ease,⁵ this fact has impacts on the variables which monetary managers must consider. If we could agree to define (however arbitrarily) what would be a “no response” to these new circumstances, we could then define what is a policy response. Without a definition of neutrality, we cannot define non-neutrality—i.e., a policy.

Now one familiar line of thought would, I believe, define a neutral monetary policy as one which would promote a steady change in the money supply (or in reserve assets) at a rate of X percent per annum.⁶ If the Central Bank were to maintain neutrality on this definition—by achieving a steady, unchanged advance of M_1 or M_2 —then, when fiscal policy became more or less restrictive, fiscal policy would indeed have predictable impacts on the general level of interest rates, and, given the particular institutional structure, predictable impacts on mortgage rates, the availability of mortgage funds, and the volume of residential construction.

We could then, in principle at least, figure out what fiscal policy would be necessary in order to achieve any given rate of residential construction, assuming monetary policy were neutral. Unfortunately,

⁵This expression implies that we have a standard of neutrality in so far as fiscal policy is concerned. Many of us would express it as no change in the full-employment surplus.

⁶Some of those who support this definition of neutrality would also advocate the adoption of the neutral “no-policy” as a permanent monetary policy—carried out, if possible, by the programmed responses of a computer.

if our goal were a high rate of residential construction, and if X (the growth rate of money) were a moderately low number, I suspect that the fiscal policy necessary to achieve our goal--if it could be achieved at all--would then be one which required heavy unemployment and stagnation of overall production.⁷ It would be much easier if monetary policy were to contribute actively to the result. We have known for quite a while that if we have two goals--in this case, housing and full employment--we really need to have at least two policy tools.

However, a steady growth of the money supply is not the only conceivable definition of a neutral monetary policy, nor is it even the one I think I would prefer. Another possible definition of neutrality would run in terms of no change in some particular interest rate.⁸ If monetary policy remained neutral on this definition, fiscal policy would still affect the overall economy--and have to take most of the blame for inflation or unemployment. But because most interest rates would be quite stable, fiscal policy could have relatively minor impacts on the volume of housing. Unless the "neutral" interest rate were quite low, achieving an ambitious housing goal would be impossible without an actively stimulating monetary policy.

However, *defining* monetary neutrality and *having* a "no-policy" monetary policy are two quite different things. I am very much in favor of an active, discretionary monetary policy. But in order to know when it is monetary policy that is at work and when it is fiscal policy, or both, we do need definitions of neutrality for each of them. Without that, I do not see how we can intelligently communicate with each other. For instance, we find ourselves

⁷We could, of course, (and some do) define a steady growth of M as a neutral monetary policy and advocate setting the dials once and for all at the neutral positions for both monetary and fiscal policy. This view, traces of which appear in the Council of Economic Advisers' *Annual Report* for 1970, rejects nearly everything economists have learned for a century or more--and particularly in the past 35 years--about the sources of instability in private spending and the ability of prices, wages, and interest rates to counter these forces of instability. However, this is only tangential to the subject of my paper, so I shall leave its discussion for another time.

⁸This is also a "no-policy" policy that could be programmed into a computer. It would stabilize the interest yield on some Government security--by buying and selling that security freely at fixed prices.

assuming--or denying--that fiscal policy determines interest rates. Further, without such definitions, we cannot unambiguously assign blame or credit to the makers of fiscal and monetary policy. All this might be unnecessary if *one* agency were responsible both for monetary and fiscal policy decisions. But when, as is presently the case, the responsibility is divided, the absence of such definitions can lead not only to confusion, but perhaps also to significant policy failures. If, as now, both authorities operate under a single mandate (presumably that of the Employment Act, as presently reinterpreted), is it neither that is responsible when that mandate is not fulfilled? Or is it both?

Can Fiscal Policy Contribute To Housing Goals?

How, then, can fiscal policy best contribute to meeting our housing goals? By itself, it seems to me, it can contribute very little. I would thus disagree rather profoundly with one form of statement which claims that fiscal policy--by being sufficiently restrictive--can do a great deal for housing. It runs this way:

Fiscal policy can contribute to the achievement of our housing goals by providing a sizeable full-employment surplus. This surplus is needed not to prevent inflation, but because it generates saving. The funds accruing from a Federal surplus will be poured back into the capital markets, where they can be used to finance housing. As residual claimant in the capital markets, housing stands at the far end of the trough. But if enough savings are poured in, there will be enough left over for housing.⁹

One thing we know, however, is that savings does not create investment. You don't get houses built simply by depressing aggregate demand. If some other force does not stimulate housing, the houses won't be built, the economy will slump, and the hypothetical full-employment budget surplus will turn into a low-employment actual budget deficit.

On the other hand, if the ambitious housing goal is met, then, without a sizeable full-employment surplus, aggregate demand might well be excessive, and inflation would result. It is precisely to avoid

⁹I am sure that, given a little time, I could find almost precisely these words in statements of some policy makers and some leading members of the financial community.

inflation from excessive demand--assuming the houses *are* built and that other sources of aggregate demand are at "normal" levels--that the full-employment surplus would be needed. The contribution of fiscal policy is not to get houses built but to reduce sufficiently *other* demands on our resources when and to the extent that another set of policies stimulates housing.

Sometimes I tell myself that everybody knows this. I shouldn't get so excited when people engage in a bit of shorthand that everyone understands. But other times I am not so sure. On last February 9, the members of the Council of Economic Advisers appeared before the House Committee on Banking and Currency to discuss "economic aspects of the housing situation." I quote the concluding sentence of their prepared statement, which is also one of its principal themes: "The most basic contribution that Government can make to housing is a substantial budget surplus, on an on-going basis, that will assure adequate financing at reasonable interest rates for the economy's total investment needs."

What Policies Are Needed?

This form of statement tend to divert attention from policies that are really needed in order to get houses produced--policies which do *not* consist merely of the provision of a budget surplus. (I hasten to add that the Council's own attention was not so diverted. It did discuss many of the other policies that are needed.) A second trouble with it is that it contributes to confusion about the relative roles of monetary and fiscal policies, by implying that it is fiscal policy that determines interest rates, a point which I have already beaten to death. But a third trouble with it is that it can lead to what I think is bad policy advice under conditions of less-than-full employment. I quote further from this statement.

... The Administration's goal [for 1970], as stated in the President's Economic Report, is to 'permit residential construction to revive and begin a rise toward the path of housebuilding required by our growing number of families needing homes and apartments.' A critical part of a combination of policies to achieve that is the moderate budget surplus projected for fiscal 1970 and 1971. It is hard to conceive of anything that would so certainly block the revival of housing as the return of budget deficits, forcing the Federal Government into the capital markets again as a net borrower. Indeed, the outlook for housing in 1970 and 1971 would be much brighter today if a larger surplus were in prospect. The tax reductions going

into effect this year, which substantially exceed the Administration's recommendations, have now made that impossible. Indeed, only with Herculean efforts to hold down expenditures was it possible to project the small surplus for fiscal 1971.

We believe that the budget surplus, combined with the moderation of monetary restraint which should become possible, and a continued high rate of support for the mortgage market by FNMA and FHLBB projected in the budget, should provide the financial conditions for a revival of housing starts during fiscal 1971.

Now a larger prospective budget surplus in 1970 and 1971 may possibly have seemed desirable to the Council in order to depress economic activity farther below potential, thereby (probably) reducing more rapidly the rate of inflation. But did it really want a different level of aggregate activity, or a different mix of housing and other outputs? Was a larger surplus really needed in order to provide saving to finance housing? If there had been to Tax Reform Act and it had been possible to program a larger surplus, would the prospects for housing *really* have been brighter? Did the Council *really* want a larger surplus, or a larger surplus coupled with an appropriately easier monetary policy? When, in fact, the programmed surplus turned into a deficit because the economy was much weaker than expected, did this depress housing starts? If so, was it by reducing the pool of available savings, or for some other reason? Would housing have been helped if, when demand slumped, tax rates had been increased or Federal expenditures reduced in an effort to restore the surplus?

I ask these questions that seem to me to be raised by this statement of the Council not because I am critical of the degree of sophistication of its public pronouncements--which on the average contain probably no more and possibly less pabulum than is found in those of earlier Councils--but rather to help us here to clarify our own thoughts and expression. Let me state how I think the relationship of fiscal policy to housing should be put.

Relationship of Fiscal Policy to Housing

One determinant of housing demand and thus of housing production is aggregate disposable income. *Ceteris paribus*, housing will be larger, the higher the level of disposable income. Disposable income is a determinant which fiscal policy can clearly affect. Other, doubtless more important, determinants are the level of mortgage interest rates and the supply of mortgage credit. These are

determinants which monetary policy can primarily affect. I realize that these statements are ambiguous until one defines a neutral monetary (and fiscal) policy. But, ambiguous as they are, I think that most of you would understand and perhaps even accept them.

If our goal were to maximize housing construction and we had only these two tools--general monetary and fiscal policy--I would prescribe their use as follows. First: determine what level of aggregate output and employment seems to provide the desired balance between high employment and price stability objectives. Second: make monetary policy as easy as possible (I have in mind potential limitations relating to international capital flows, and perhaps others). Third: figure out how much housing (and other forms of investment) can be expected to be forthcoming with that monetary policy at the desired level of output. Fourth: set fiscal policy in such fashion as to produce the desired level of employment and output, given the housing projection and the expected inherent strength of all other elements of private and state and local government demand (including, of course, the impact of the projected monetary policy on other forms of investment).¹⁰

These calculations may imply a sizeable full-employment budget surplus. If so, the reason for this surplus is to avoid undesirable inflation, not because a higher level of aggregate demand would necessarily reduce housing. If we should want to avoid the "fine

¹⁰I am grateful to Warren Smith for pointing out that, to the extent that an easy monetary policy stimulates other forms of investment as well as housing, this means that we get more houses only by also getting more investment in, say, plant and equipment. To avoid inflation, fiscal policy must then reduce consumer spending by enough to make room at full employment both for the added housing and for the added production of plant and equipment. But we may not want more plant and equipment spending. The combination of two policies--monetary and fiscal--works to permit achievement of two goals (more housing and full employment without inflation) because and to the extent that fiscal policy operates primarily--though not exclusively--on consumption rather than housing, while monetary policy operates mainly on housing and secondarily (if at all) on consumption. But we also have a third use of resources--business investment--which our monetary policy will probably stimulate more strongly than our fiscal policy will restrain. To achieve a desired balance among three classes of output, we need at least one more policy tool. Or perhaps we should conclude that general monetary and fiscal policies are simply instruments too blunt to use to determine both the composition as well as the level of output, and that we should find more specific tools to do the former.

tuning" of either fiscal or monetary policy, these calculations should be made on the basis of expected averages over a three to five year period. Or, fiscal policy could be set on that basis and monetary policy varied for stabilization purposes. But the principles are still essentially the same.

The Role of Finance

As I have described the role of fiscal policy, it is essentially that of freeing sufficient generalized resources of labor, materials, and enterprise to build the houses that other policies--including monetary policy--can stimulate and facilitate. This way of putting it says nothing about "finance." Has the pool of savings argument no relevance?

In my view, essentially none. We all know that gross saving and investment are always and inevitably identically equal, and that, moreover, in "equilibrium"--whatever that precisely means--the total of the "desired" or "willing" or "planned" saving of the nation must equal the total of its "desired" or "planned" investments. The problem of housing finance is not basically one of providing an adequate volume of total saving. Rather, it is one of the allocation of that saving. Although our financial intermediaries do an excellent job of shifting saving flows among various uses through relatively minor changes in relative interest rates, our institutions are such that--particularly when money is tight--housing faces either a sharp rise in the *relative* as well as absolute interest rate it pays, or the rationing of credit supplies. Some of these institutional obstacles operate less severely when general monetary policy is easier. Still, the sharp increase in the volume of residential mortgages which seems to be implied by the housing goals could cause problems. New or altered financial institutions can permit the necessary shift of funds to housing with a minimum *relative* deterioration of the terms on which housing is financed. This means that other policies--including, particularly, the easing of general monetary policy--will not have to be pushed so far as otherwise in order to encourage the desired volume of housing production. The task of fiscal policy, however, is best thought of as that of freeing resources from other uses, not that of providing saving.

The Magnitude of the Fiscal Requirement

My final purpose in this paper is to provide some rough estimates of how large a full-employment surplus would be needed in order to restrain inflation in the years ahead--on the assumption that our housing goals are fully achieved, through whatever combination of policies is necessary to accomplish this. Would it require a full-employment surplus well outside our range of past experience?

I have limited my calculations to fiscal years 1975 through 1978. My reason is that it seems to me highly unlikely that full employment will be restored prior to then. Even assuming that a 4 percent annual rate of real GNP expansion can be achieved during the first half of calendar 1971 (which seems to me highly optimistic), and 5 percent in the second half, a rate of real GNP expansion averaging just over 6 percent a year would be needed over the subsequent 2½ years to reach potential output by the second half of calendar 1974.

I believe that I could demonstrate that, during this period of rapid climb toward full employment, *both* the targets levels of housing starts *and* a reasonably permissive fiscal policy would be *needed* in order to achieve the necessary real growth of aggregate demand. Put another way, during this period, the probable weakness of business fixed investment spending, and the continuing decline in real defense spending will leave free all the resources needed to produce the target levels of housing without requiring any diversion of resources away from consumer spending, state and local purchases, and non-defense Federal purchases. In any case, projections for this period are more complex than for the period after full employment is regained, when the economy can be assumed to be moving smoothly along a path of potential output.

I have tried to prepare mutually consistent estimates of the volumes of all items of gross saving and of all categories of gross investment--including residential construction at target levels--in a full-employment economy in 1975-78 (all as defined in the U.S. National Income and Product Accounts). The Federal surplus is computed as the residual needed to equate gross saving and investment. The following tabulation summarizes the basis for each of the estimates.

Potential real GNP--estimated by extrapolating the projections now available through calendar 1975 at an annual rate of growth of 4.3 percent.

GNP deflator and GNP in current prices--the rate of increase in deflator assumed to slow gradually to 2.5 percent by second half of 1973 and to remain at that rate.

Residential construction expenditure in current prices--construction cost estimates (less land costs and mobile homes) taken from President's *Second Annual Report on Housing Goals*, revised to a deflator in line with (but increasing more rapidly than) my assumed general deflator, and adjusted to consistency with GNP residential construction account for fiscal 1969.

Business fixed investment--two alternative estimates (and, correspondingly, two estimates of the necessary Federal full-employment surplus): the first takes real business fixed investment at 11.3 percent of real GNP--the highest annual percentage for any year since 1948; the second uses 10.0 percent--the lowest in any high-employment year since 1953; estimates inflated to current prices by a deflator related to and rising slightly less rapidly than the assumed GNP deflator.

Change in inventories--taken at 0.75 percent of current dollar GNP, about average for the period 1953-69.

Net foreign investment--assumed at 0.6 percent of GNP, close to its record high.

Capital consumption allowance--projected as a percentage of current-price net dollar stock of private structures plus producers' durables, extended through 1978 on perpetual inventory basis; depreciation percentage extrapolates the steady upward trend (since the 1962 depreciation reforms) of the percentage which CCA is of the current-price stock.

Undistributed profits and IVA--corporate profits before taxes taken as 10.5 percent of current-price GNP, corporate profits taxes at present rate, and dividends at 45 percent of after-tax profits.

State and local government surplus--taken as zero, above its average value in recent non-recession years.

Personal saving--taken as 8.3 percent of personal disposable income, less projected consumer interest (consumer spending has averaged 91.7 percent of disposable income since 1947; a bit less than that during the 1960's); disposable income projected from current-price full-employment GNP, projected capital consumption allowances, projected corporate undistributed profits, and projected Federal and state and local government surpluses and purchases (which between them imply aggregate taxes, social insurance contributions, transfers, government interest, and subsidies less current surplus).

Statistical discrepancy--projected at 1970 level.

Federal government surplus--two residuals, consistent with the two levels of business fixed investment; estimated simultaneously with personal saving which depends (inter alia) on the size of the surplus.

My projections and assumptions are summarized in Tables 1, 2, and 3. So far as I can see, they show no need for any great diversions of resources to be accomplished through a restrictive fiscal policy. Given the *high* projections of business fixed investment, a Federal full-employment surplus averaging \$8.2 billion is needed in fiscal years 1975 through 1978; given the *low* projections of business fixed investment, a Federal full-employment *deficit* averaging \$12.9 billion is appropriate. The best estimate presumably lies somewhere within this range. The two figures are respectively 0.6 percent and -0.8 percent of GNP. According to Okun and Tecters,¹¹ we have had full-employment surpluses of 0.5 percent or more of potential GNP in 11 of the past 14 years. Thus the finding is hardly very startling.

The really significant fact is that--as tremendous an effort as seems to be implied by housing starts averaging 2.4 million over the next eight years, it is not a significantly large effort in a rapidly growing economy. To be sure, housing starts have been shrinking relative to the size of the economy for two decades. But even at the target

levels, residential construction would average only 4.1 percent of GNP in 1975-8. It was a higher percentage in every post-war year until about 1964.

I have no great confidence in my particular projections of the needed Federal full-employment surplus. But I have sufficient confidence in their general orders of magnitude to conclude that there has probably been a certain amount of wasted rhetoric dispensed on the subject of how much fiscal discipline is going to be necessary if we are ever to meet our housing goals.

My impression is that some of the other contributions to meeting our housing goals are going to prove far more vital and far more difficult than the contribution that fiscal policy may be called upon to make.

¹¹"The Full Employment Surplus Revisited," in *Brookings Papers on Economic Activity*: 1, The Brookings Institution, 1970.

TABLE 1

**GROSS NATIONAL PRODUCT, GROSS SAVING, AND GROSS INVESTMENT
1966-69, AND PROJECTIONS FOR 1975-78
(ALL DOLLAR FIGURES IN BILLIONS AT CURRENT PRICES)**

	CALENDAR YEARS				PROJECTIONS—FISCAL YEARS							
	1966	1967	1968	1969	1975		1976		1977		1978	
					H	L	H	L	H	L	H	L
GNP in Current Prices	749.9	793.9	865.0	931.4	1413.3		1510.9		1615.3		1726.8	
Business Fixed Investment	81.6	83.3	88.7	99.3	151.7	134.2	162.2	143.6	173.4	153.4	185.3	164.1
Residential Construction	25.0	25.1	30.3	32.0	61.2		63.5		65.4		66.4	
Net Foreign Investment	2.4	2.2	-.3	-.9	8.5		9.1		9.7		10.4	
Change in Inventories	14.8	8.2	7.6	8.5	10.6		11.3		12.1		13.0	
Total Gross Investment	123.8	118.8	126.2	138.9	232.0	214.5	246.1	227.5	260.6	240.6	275.1	253.9
Capital Consumpt. Allow.	63.9	68.9	74.0	78.9	117.7		128.1		139.0		151.0	
Undistributed Profits + IVA	27.4	24.1	21.6	18.5	45.7		49.0		52.5		56.1	
State & Local Gov't Surplus	1.3	-1.6	-1.1	-.6	0		0		0		0	
Personal Saving	32.5	40.4	40.4	37.6	57.9	59.5	62.3	63.9	67.5	69.3	72.8	74.7
Federal Gov't Surplus	-.2	-12.4	-6.2	9.3	15.3	-3.8	11.4	-8.9	6.3	-15.5	-0.2	-23.3
Statistical discrepancy	-1.0	-.7	-2.4	-4.7	-4.6		-4.6		-4.6		-4.6	
Total Gross Saving & Statistical Discrepancy	123.8	118.8	126.2	138.9	231.9	214.5	246.1	227.5	260.6	240.6	275.1	253.9

NOTE: Columns headed "H" are based on a high projection of business fixed investment; those headed "L" on a lower projection (see text).

TABLE 2

**GROSS SAVING AND GROSS INVESTMENT
AS PERCENTAGES OF GROSS NATIONAL PRODUCT
1966-69 AND PROJECTIONS FOR 1975-78**

	CALENDAR YEARS					PROJECTIONS—FISCAL YEARS									
	1966	1967	1968	1969	Average 1966-69	1975		1976		1977		1978		Average 1975-78	
						H	L	H	L	H	L	H	L	H	L
Business Fixed Investment	10.9	10.5	10.3	10.7	10.6	10.6	9.5	10.7	9.5	10.7	9.5	10.7	9.5	10.7	9.5
Residential Construction	3.3	3.2	3.5	3.4	3.4	4.3		4.2		4.0		3.8		4.1	
Net Foreign Investment	.32	.28	-.03	-.10	.12	.60		.60		.60		.60		.60	
Change in Inventories	1.97	1.03	.88	.91	1.2	.75		.75		.75		.75		.75	
Total Gross Investment	16.5	15.0	14.6	14.9	15.3	16.4	15.2	16.3	15.1	16.1	14.9	15.9	14.7	16.2	15.0
Capital Consumpt. Allow.	8.5	8.7	8.6	8.5	8.6	8.3		8.5		8.6		8.7		8.5	
Undistributed Profits + IVA	3.7	3.0	2.5	2.0	2.8	3.2		3.3		3.3		3.3		3.2	
State & Local Gov't Surplus	.17	-.20	-.13	-.06	-.05	.0		.0		.0		.0		.0	
Personal Saving	4.3	5.1	4.7	4.0	4.5	4.1	4.2	4.1	4.2	4.2	4.3	4.2	4.3	4.2	4.3
Federal Gov't Surplus	-.0	-1.6	-.7	1.0	-.4	1.1	-.3	.8	-.6	.4	-1.0	.0	-1.4	.6	-.8
Total Gross Saving and Statistical Discrepancy	16.5	15.0	14.6	14.9	15.3	16.4	15.2	16.3	15.1	16.1	14.9	15.9	14.7	16.2	15.0

NOTE: Based on data from Table 1.

TABLE 3
SUPPLEMENTARY SERIES: DEFLATORS, PROFITS, DIVIDENDS,
GOVERNMENT PURCHASES, CONSUMER INTEREST

	CALENDAR YEARS				PROJECTIONS—FISCAL YEARS			
	1966	1967	1968	1969	1975	1976	1977	1978
GNP Deflator ¹	113.9	117.6	122.3	128.1	154.0	157.9	161.8	165.9
% change from previous year	2.7	3.2	4.0	4.7	2.5	2.5	2.5	2.5
Residential Construction Deflator ¹	117.4	123.1	129.7	137.7	172.8	178.4	184.2	190.2
Ratio RC Deflator to GNP Deflator	1.03	1.05	1.06	1.08	1.12	1.13	1.14	1.15
Business Fixed Investment Deflator ¹	110.2	113.8	117.5	122.8	146.3	150.0	153.7	157.6
Ratio BFI Deflator to GNP Deflator	.97	.97	.96	.96	.95	.95	.95	.95
Federal Purchases Deflator ¹	118.8	121.5	126.4	133.9	161.7	165.8	169.9	174.2
Ratio Fed. Purch. Deflator to GNP Deflator	1.04	1.03	1.03	1.05	1.05	1.05	1.05	1.05
Corporate Profits Before Taxes ²	84.2	79.8	88.7	91.2	148.4	158.6	169.6	181.3
Corporate Profits After Taxes ²	49.9	46.6	48.2	48.5	85.0	90.9	97.2	103.9
DIVIDENDS ²	20.8	21.4	23.3	24.7	38.3	40.9	43.7	46.8
IVA ²	-1.8	-1.1	-3.3	-5.4	-1.0	-1.0	-1.0	-1.0
Federal Gov't Purchases ²	77.8	90.7	99.5	101.3	113.2	119.4	125.7	134.1
State & Local Gov't Purchases ²	79.0	89.4	100.7	110.8	184.7	203.2	223.5	245.8
Consumer Interest and Transfers Abroad ²	13.0	13.9	15.0	16.5	22.0	23.0	23.6	24.2

¹ 1958 = 100

² In billions of dollars, current prices.

DISCUSSION

JAMES S. DUESENBERY

As Gardner said, I was his student, and I have found that I've been able to learn things from Gardner all along, and still am able to learn something this morning. In fact, I am in a little bit of a difficulty because I've always found that the ideal paper to discuss is one that is wrong in some interesting way, but unfortunately, as far as I can see, Gardner's paper is basically right, and that doesn't leave me a lot to say. All I can do is to reinforce a couple of points that Gardner made, add a couple of quibbles, and then raise with you one problem which has come to my mind after having read this paper.

I think there is no question about the basic logic that Gardner has put before you. Our problem in trying to achieve a housing goal makes sense as a problem only when we say that we are trying to achieve a housing goal, *while at the same time* trying to achieve some goal in terms of the levels of aggregate output and employment. Presumably the latter goal is to be chosen with a view to finding an appropriate balance between unemployment and inflation. So that what we are discussing here is the problem of the kind of fiscal policy required to achieve some limited total GNP in any particular year, and at the same time to reserve some piece out of that total for a particular type of product. To do that you need at least two policy instruments, and those instruments are not used separately. You don't have one instrument which you use to control the total GNP, and another instrument that you use to control a volume of housing; that is obviously impossible since the housing expenditures are a part of the total GNP. That means, as Gardner said, that what we must do is select a total GNP target at any point in time and then try to find a combination of fiscal and monetary policy which will reach that total while also making it possible to have the required amount of housing.

Another way of putting this, I suppose, is that the negative of that approach consists of two kinds of wrong approaches. One is the assumption that if you do something which will in itself tend to increase the sum of public and private saving—e.g., raise taxes, lower

Mr. Duesenberry is Professor of Economics, Harvard University, Cambridge, Massachusetts.

government expenditures—a compensating amount of some other kind of expenditure automatically occurs. That is equivalent to saying that potential saving automatically flows into investment. It obviously doesn't. We had full employment surpluses, some of them very large, in 8 out of the last 14 years. We could not or did not find a monetary policy which made all that full employment potential saving become actual saving and actual investment. So that one fallacy is to assume that all you have to do is to provide the potential saving at full employment and that will take care of the problem. It won't. One has to have a monetary and financial mechanism to bring those potential savings into reality in the form of some particular type of investment.

The opposite approach, which is also a mistake and is one Gardner didn't mention, is to assume that if you invent some new financial devices which will stimulate a particular kind of investment, housing in this case, that thereby you are solving the housing problem. Now, if you have a given fiscal policy, it appears to many people that easier money or more financial gadgets which help to channel money into housing, will solve the housing problem. I think our experience suggests that what comes out of that may be more inflation than you want; or higher interest rates than you want; or that it will turn out that your financial program doesn't succeed in directing the resources into housing. I think it is important to deal simultaneously with the fiscal policy and with monetary policy.

If we want to select our GNP total with a view to considerations of inflation and unemployment, and then use monetary policy as one instrument to direct resources into a particular area as a part of that GNP total, we must at the same time select our fiscal policy in such a way as to leave room for the amount of housing which the monetary policy can stimulate. We have great expositional difficulty here, I think, trying to make simple statements about these matters, and almost anything anybody can say can be faulted unless he says something at great length or writes it out in a tabular form. So much for general principles.

The second part of Gardner's paper, which he dealt with very briefly, was his calculation of the amount of surplus that might be needed in order to meet the specified housing goals. I can't quibble with that calculation. I've been through that same exercise, and what one finds is that one always comes out in the same ballpark. Pushing the assumption so as to favor one side may lead you to the conclusion that what's required is a full employment surplus of a one to one-and-a-half percent order of magnitude. If you push the

assumptions all in the other direction, a little more perhaps than Gardner did in his calculations, I think you could reach the conclusion that you need a full employment deficit of a percent or so. The fact of the matter is that none of our calculations about expenditure functions, consumption functions, business fixed investment functions, inventory functions, state and local government behavior, has the degree of precision which can produce an answer right down to the last tenth of a percent. I think it's remarkable, probably suspicious, that we all managed to agree about the answers to within a percent or two, because the fundamental accuracy of our knowledge is perhaps somewhat lower than that. None the less, I think that everyone who has played this game arrives at somewhat the same conclusion.

I think the important conclusion is not that the answer under certain assumptions is that a surplus of 1.2 percent is required, and that under some other assumptions a deficit of .2 percent is required. What is important is that the range that we are talking about here is surpluses or deficits of the order of magnitude of 1 percent or so of the GNP, and also that there is a good deal of uncertainty about which side of the zero point we will come out on. This does mean that there is no basis for saying that on account of the housing program we ought to go gung-ho for big, long-term full employment surpluses. I do have one qualification to that, and it's one whose significance I can't really judge. I mentioned earlier that there are people who try to solve problems by financial gimmicks. The fact is, of course, that in these days when any congressman has a group of people who want a little service from him, he finds that the cheapest and easiest thing he can do for them is to invent a new loan program.

We have been talking about the problems of housing finance, and subsidized housing programs. There has been a great proliferation of new types of loan programs which show up someplace in the accounts, and the proliferation of loan programs may turn out to place a greater burden on our resources than we allowed for in these calculations. We don't have too much experience with them so that it is a little bit hard to judge their impact. My only qualification to Gardner's calculations is that our programs for rail transportation, local transportation, water and sewer finance, and other forms of pollution removal, and for neighborhood health centers, and other things of that sort financed through loan programs may really turn out to be very large. Then indeed a larger federal surplus may be required at full employment than these calculations allowed for. As I say, I can't give you any kind of numerical judgment on that point.

Now let me follow up then finally with what I regard as the painful implication of our inability to reach a precise conclusion on this point about whether and how much of a surplus would be required at full employment in order to achieve these housing goals, assuming that the financial mechanisms and monetary policy are there to make good on the surplus if we have it. If we don't know with any precision how much of a surplus will be required, then we can't plan in advance a long term fiscal policy. And I think that we have to admit that we don't know. What's more, Gardner has a little trouble defining a neutral monetary policy--that doesn't worry me so much, I can't define any monetary policy. I think Gardner did not address himself at all to the question of what specific monetary actions would be required to get the interest rates, and the availability of funds for all those houses. I don't intend to turn the discussion in that direction, except to note that I don't think we know the answer to that question. That means that in fact we are going to have to make a sequence of decisions as events unfold to try to see a little ahead and then move our policies to achieve our objectives as best we can.

Now, if we look at the past history in the case of housing I think what we find is that the only time that we got favorable conditions for housing is when we goofed up everything else, and managed to get into a situation where we were in a recession. Then we had plenty of room within the GNP constraint and turned on an easy monetary policy. Later we said that housing made a great contribution to the recovery and sort of used it like a first-stage rocket. It helped us to get off the ground and then we threw it away. Our problem now seems to be a similar one. Gardner suggested that he wasn't even going to bother doing this arithmetic about full-employment surpluses for the next couple of years because full employment is not what we are going to have. He suggested, if I read him rightly, and I agree that there ought to be plenty of room in the economy for all the housing that is likely to be effectively demanded in the next couple of years. Well, that's back where we were some years ago, and one hopes that we will get a substantial buildup in the volume of housing in the next couple of years. That will be good in itself, and also help in the recovery process.

Our problem then is what happens next. What Gardner said is that he can't tell us what kind of a fiscal policy to have as of 1975; probably nobody can. What we would like to have is some fairly flexible mechanism by which we could make that choice when we move a little bit closer to it, but since we can see ahead only a short

distance we have to be able to act fairly fast when we find out how much of a surplus is required, in order to take action to bring it about. We need a much more flexible kind of fiscal policy than we now have. So I do have some concern that we will be unable to predict a long-term policy in a solid way, and on the other hand unable to find the flexibility that is required in order to move the policy a little bit at a time as events unfold. So I leave you then with emphasis not on the conclusion that Gardner reached as to the magnitude of the surplus, but on the fact that there is a considerable slippage in anybody's conclusion and we have no effective mechanism as of now, I think, for making decisions which allow us to adapt to what we learn about what kind of surplus is required.

DISCUSSION

DAVID J. OTT

As I finished Professor Ackley's paper, I tried to imagine how the argument might have been laid out if he had been discussing it with his students. Reconstructing this outline of his hypothetical lecture is fruitful in commenting on his paper.

1. We have learned that equilibrium GNP is determined by the intersection of the IS and LM curves.

2. We know one goal of public policy is to stabilize GNP at a level most consistent with our full-employment and price stability objectives. This can obviously be theoretically done with an infinite number of combinations of the IS curve (reflecting fiscal policy) and the LM curve (which reflects monetary policy), or, to put it another way, the target GNP is consistent with any level of interest rates, if the proper mix of monetary and fiscal policy is used.

3. We also know that interest rates are the dominant factor determining the volume of residential construction.

4. Now the Boston Fed wants me to discuss how fiscal policy can contribute to meeting the 1968 housing goals.

5. Since the number of housing starts implied by these goals for fiscal years 1970-78 is substantially higher than starts in recent years, this means, essentially, that we must have lower interest rates than in the near past.

6. Thus the IS and LM curves are constrained to intersect opposite the "housing goals interest rate," and the target level of GNP.

7. Unless the LM curve is vertical, which means fiscal policy only affects interest rates, *both* monetary and fiscal policy actions are

Mr. Ott is Professor of Economics, Clark University, Worcester, Massachusetts.

DISCUSSION

OTT

33

required (and we all know that the LM curve is not vertical!). The contribution of fiscal policy, then, is to be more restrictive *by enough* to free resources to let the monetary authorities ease up so that we achieve our two goals--the specified number of housing starts and the target GNP--with the two instruments of monetary and fiscal policy. *Most important, we should not lose sight of the fact that we have two instruments--fiscal policy and monetary policy* and the fiscal policy contribution to the achievement of the housing goals can only be met in combination with the appropriate monetary policy.

To put it another way, Ackley quite properly warns us that the problems posed should be treated as but another variant of the Mundell internal-external stability policy problem, a variant which in fact produces more clear-cut conclusions as to the appropriate changes in the *direction* of policy than are possible in the Mundell case. Barring the case where the demand for money is completely interest-inelastic, the course of monetary policy is every bit as important as the course of fiscal policy in meeting the housing goals, and the clear prescription would be for a tighter budget policy coupled with an easier monetary policy. Yet when Ackley is done with his calculations, it is not at all clear that a more restrictive fiscal policy is necessary to meet full employment surplus a bit. What happened in between the theory and his empirical results?

It is possible to indicate where some of Ackley's assumptions might have led him astray. His equation for the required full employment surplus may be written as follows (in terms of requirement for Net Taxes):

$$T_n = [CCA + UCP] + \frac{[BFI + RES + (EX-IM) + INV + G - aGNP]}{1 - a}$$

where

T_n = Required Net Federal taxes (NIA)

CCA = Capital Consumption allowances

UCP = Undistributed Corporate Profits

BFI = Business Fixed Investment

RES = Residential Construction required to meet 1968 goals

- (EX-IM) = Net Exports
 INV = Inventory Investment
 G = Government purchases, Federal and state-local
 GNP = Current dollar potential GNP
 a = Personal savings rate

Now clearly the S_F estimates will be very sensitive to the assumption about the personal savings rate. For example, using Ackley's "high" estimates for BFI, RES, (EX-IM), INV, G, and GNP, a change in the assumed savings rate from Ackley's 7.5 percent to the CEA assumption of 6.5 percent (1970 *Annual Report*, p. 81) increases the required full employment surplus (Net Taxes) by about \$11 billion in FY 1975. Judging from the recent past, Ackley has picked a relatively high savings rate; from 1960-69 the savings rate ran from 4.9 to 7.4 percent of disposable personal income and only reached 7.5 percent in 1970 II and 1970 III.

More fundamentally, I suspect that the crux of the apparent discrepancy between Ackley's theory and empirical results lies in his failure to attempt to quantify the effect of the low interest rate policy required for RES to meet the housing goals on BFI and perhaps INV. If we have learned anything from recent years, it is that monetary policy is potent, and he makes no effort to quantify the effect of the required monetary policy on private spending other than RES. If RES must be raised by 70 percent over the average of the 60's, then interest rates might have to fall by some 40 percent from their present levels, if as some works suggest, the elasticity of RES with respect to interest rates is in the neighborhood of -1.5.

Furthermore it seems to me that the really meaningful question to ask, which Ackley did not ask, would be: Given Federal purchases during FY 1975-78, how much will net taxes have to be to produce the required full employment surplus? The CEA projections of Federal purchases for calendar 1975 translate (using Ackley's deflator) into roughly \$137 billion in current dollars, some \$17 billion more than Ackley's fiscal 1976 estimate. I am led to believe he has sadly underestimated the built-in growth likely to occur in government spending, especially since the CEA estimate of Federal G was a conservative one to begin with. Furthermore given present tax law and projections of transfers, will taxes have to be raised or lowered to obtain the desired full employment surplus (or will G

have to be cut or increased)? Even if the "correct" answer is \$13 billion dollar full employment surplus, while this may be in line with past experience, the critical question revolves around whether it is obtainable with given budget and tax projections or whether tough decisions have to be made about priorities in spending or tax law changes because of the housing goals.

Finally, it occurs to me too that we might really pause and ask whether achieving the housing goals is made more difficult by present tax laws. In some work my wife and I are currently doing, we estimate that, in 1970, we gave over \$10 billion annually in subsidy to owner-occupied homes, which typically have a higher cost per unit than multifamily units. Eliminating this tax preference might make possible achieving the goals of 2.4 million housing units per year with less of a resource drain and fewer complications for stabilization policy.

In summary, the logic of Ackley's exposition supports that we need a tighter fiscal policy and easier monetary policy to simultaneously meet our housing and stabilization goals. Yet this is not borne out by his calculations because, I have argued, he takes no account of the impact of monetary policy on other types of spending, assumes an unrealistically low savings rate, and underestimates Federal spending. Finally what we most need to know is not how "reasonable" the implied full employment surplus requirement is, but how this compares with projected outlays and taxes. This, I think, is the critical question for the President's advisers, and as for now, we do not have an answer.

DISCUSSION

ARNOLD C. HARBERGER

As I read through Professor Ackley's paper and listened to his presentation, I wondered whether you had picked the right Chicago economist. There is very little, in fact practically nothing, that I can put my finger on with which I seriously disagree. And yet, it also is true that as I independently focus on the problem, the picture that emerges is somewhat different. What one sees varies with the point of view from which one looks and though Gardner Ackley and I are observing essentially the same phenomena, we see them differently. I begin from a rather fundamentalist point of view, which I imagine is characteristic of Chicago people. Let me start out with a proposition: I don't believe that fiscal policy is designed for the fine tuning of the economy. I think that our experience with the temporary surcharge shows that if people know that an extra tax is temporary and that it is soon going off, it doesn't much affect their behavior. Nor does a temporary reduction in taxes much affect their behavior.

The permanent income hypothesis and a number of other explanations of consumption behavior all lean in the direction of saying that the reaction of people to unexpected or short-run changes in their income position is much weaker than their reaction to longer-run changes in fiscal policy. Reactions to price changes, on the other hand, are quite different. The reaction of a housewife to a permanent reduction in the price of white sheets will be smaller than the reaction of the same housewife to the January white sale. Since sheets are cheaper only so long as you buy them in January, the response to a short-term price reduction will be larger than that stemming from a permanent reduction of the same magnitude in the price of sheets.

Monetary policy is like that. When interest rates go down in a fashion which is not regarded to be permanent, you get people to enter the market as borrowers in order to take advantage of the bargain price of credit. When interest rates go up in a way that is not regarded to be permanent, people hold off the market in a way that

DISCUSSION

HARBERGER

37

they would not do if those higher interest rates were to prevail forever. So, you get a lot of bang out of fine tuning the economy by way of monetary policy--an amount of bang that I do not think can be duplicated readily by temporary movements in fiscal policy. As a consequence I think that the proper way of operating the economy--not just proper, but even almost necessary--is to set fiscal policy with regard to relatively longer term considerations, and to leave to the monetary authority the job of helping us attain our particular policy goals in the shorter run. This is my first major point.

If one accepts that position, there is a consequence that almost inevitably follows. That is that historically the construction industry has been what I call the handmaiden of monetary policy. When monetary policy is tight, the construction industry is squeezed. The purpose of tight monetary policy is to free resources some--to reduce the total demand for resources, if you like--and that squeeze takes place largely by pushing resources out of the construction industry. And, when monetary policy is easy, somehow the resources crawl out of the woodwork to allow housing starts to go up by three or four hundred thousand, as between a tight and an easy period.

Now, because the housing industry has acted as a sponge, absorbing resources when money is easy and releasing them when it is tight, I have always been very skeptical of the idea, very worried about the idea, that our government should have a set of housing goals which would try to get a given number of housing starts per year and keep housing on a certain preset track. That is, in my view, the easiest conceivable way of emasculating monetary policy.

Now, I don't want to say that having a set of housing goals of 26 million over a decade requires that one must try to keep housing on a particular track through time, but I am disturbed that so much of the discussion that I've heard over the last couple of years on this question reflects a preoccupation that our tight monetary policy has hurt housing. I'm not worried by this. Quite to the contrary, I think that I'd be worried if housing were not being squeezed, because then the tight monetary policy would not be having its desired effect. I think that in the other areas in which monetary policy can affect real spending it is much less powerful than it is in housing, and we have got to continue to allow tight monetary policy to squeeze housing, and easy monetary policy to stimulate housing, if we are going to have an effective fine-tuning or short-run stabilizing policy tool in our kit.

In this sort of framework I think that you can see that *ceteris paribus*, if monetary policy is going to attempt to reach full employment, the tighter is fiscal policy, the easier will monetary policy have to be. Likewise the easier is fiscal policy, the tighter will monetary policy have to be in order to prevent unwanted inflation. And broadly speaking, here I am sort of restating the quotation that Gardner Ackley cited and proceeded to disagree with. Well, I'm putting the same idea in a framework where I think it is not so easy to disagree. Professor Ackley's summary position was that one should make monetary policy as easy as one can, and then find out what fiscal policy meshes in with that to produce full employment, etc. I have no theoretical quarrel with that; I have a practical quarrel in the sense that I cannot see fiscal policy in the residual role--i.e. the fine tuning role. In my opinion it's a question of priorities or possibilities rather than any question of fundamental theoretical disagreement--and I see fiscal policy as the primary set of tools for long-term policy, and monetary policy as the residual regulator of the economy against short-term fluctuations.

Now let me turn to the current problem. I think that Professor Ackley made an interesting point in saying that really between here and the next couple of years, full employment isn't in the cards anyway, and therefore there should be ample resources available to meet our housing goals and others as well. Again, while in a sense agreeing with the statement I look at the problem from a different viewpoint. The way I see it is as follows. Our federal policy aims at a targeted reduction in the rate of inflation. The policy is to gradually squeeze out the expectations of continued inflation that have been built into the economy. But in order to reduce the rate of inflation you can't give people what they expect. You have to give them less inflation than they expect, or else they will keep on expecting inflation as before. In order to give people less inflation than they expect the economy must operate with some abnormal slack. You can't push down the rate of inflation and keep full-tilt full employment.

So, as I interpret our policy, as I read the report of the Council, as I listen to policymakers talk, I think that the aim is to have a targeted rate of unemployment which is slightly above the normal level--perhaps on the order of 5 percent or so instead of a "normal" 4. But a targeted rate of unemployment which is somewhat above 4 percent for a time (until the inflationary expectations get wrung out) implies a targeted path of GNP that is lower than the full-employment path. If things were all rosy, the targeted path of

GNP would be the full employment path. But when we are trying to defuse inflationary expectations, the targeted path of GNP has to be somewhat below, even though perhaps not much below, the full-employment path. Once this is granted, it once again becomes true that if an easier fiscal policy must be accompanied by a tighter monetary policy in order to stay on that targeted path, and a tight fiscal policy must be accompanied by an easier monetary policy to keep the economy on that path. So, taking Professor Ackley's quotation as my point of departure, I come back to something like the traditional trade-off between monetary and fiscal policies.

Finally, the question arises as to what our aims should be. Here let me put on my public finance hat and say that I am extremely disturbed and distressed by the 26-million-unit housing goal. To me the tax treatment of housing is one of the greatest scandals of our federal revenue system. By failing to tax imputed rent on owner-occupied housing, we provide implicitly a 70 percent subsidy to Governor Rockefeller's several dwellings. We provide a 20 percent rent subsidy to the average assistant professor, and we provide zero rent subsidy to all of the people who are living at poverty levels, and are subject to zero marginal rates of income tax. There may be some people who don't think that this is scandalous, but I do. Moreover, it is well known that, as far as its incidence across income brackets is concerned, housing is a luxury good, in the sense that over a substantial range at least the fraction of income spent on housing, and particularly on owner-occupied housing, rises with income level.

So, I am much in favor of housing policies aimed at trying either to equalize the incentive to housing, or perhaps to give special housing incentives to those at the poorest end of the scale--but I certainly see no reason to provide any special incentive to owner-occupied housing for people who have adequate levels of living, let alone an incentive that gives proportionately more benefit to the rich than to the poor. So, I suspect that if we were to adopt a housing policy which was at all rational in economic terms, which tried to get away from the mess that we are currently in as far as tax laws are concerned, we would end up with far less than 26 million housing starts over the next decade. And I think that such a policy would also be consistent with substantial growth in our housing stock, even though not as much as is now projected. Certainly subsidized housing can be provided for the very poor. I certainly suspect that if I were to start writing the laws or advising on the matter, this is a direction in which I would go.

Perhaps this is in the idealistic tradition of Chicago. Henry Simons

used to write and make speeches about all the ways in which our society was messing itself up, and how it could all be improved, and in his case the things that he talked about were fairly obvious and straightforward, and his conclusions were equally--what shall we say--visionary and utopian as mine. I don't want any of you to think that I really believe that it is politically likely that we are going to turn about 180 degrees in our tax treatment of housing, but I do feel that an honest and clear economic appraisal of the system that we have would reveal tremendous deficiencies, which have the effect of having far too much housing--particularly in the middle and higher income brackets. In my own view there is no sound economic or other justification for this kind of treatment.

Regulation Q: The Money Markets and Housing—I

ALLAN H. MELTZER

The critic of controls who is persuaded that one control begets another certainly finds supporting evidence in the history of regulation of deposit rates. Although many years passed before increased market rates and the prohibition of interest payment on demand deposits induced a sufficiently large substitution of time for demand deposits to make the original Regulation Q rates into a binding constraint, not many additional years later we find a new and very complex set of controls on both the assets and liabilities of banks and non-bank financial institutions. Supplementing the direct control of commercial bank demand and time deposit interest rates, there is now a regulated spectrum of rates for liabilities classified by age, maturity, and type of institution and a companion set of reserve requirement ratios and borrowing arrangements that would take more than my allotted time to describe fully. That the present regulations are not regarded as satisfactory to those who believe regulations are useful quickly becomes clear to any reader of the financial press. Proposals for selective controls on assets compete for space with expressions of concern about the unregulated Euro-dollar market and explanations of new or substitute regulations.

There is not much that needs to be said about the subject of this session, Regulation Q ceilings on interest rates paid to small savers. It is easy to point out that the regulations cannot be defended on grounds of equity, but doing so comes close to tilting with a windmill, since I don't know anyone who argues the contrary case. The usual argument for ceilings is that because small savers are less responsive to changes in interest rates, the government can "protect"

the institutions holding their savings deposits and, at the same time, encourage home building. This is an attempt to justify inequity by pointing to some alleged improvement in welfare that more than compensates for the welfare loss from a reduction in the interest paid to small savers.

Putting the argument for Regulation Q on this basis makes any resolution of the issues hopeless. More importantly, treating the issue as a problem of competing equity claims covers up the economic issues where analysis and evidence can be brought to bear.

Arguments for Selective Controls on Deposit Rates

There are two main economic arguments for selective controls on deposit rates. First, the controls are said to protect one or another institution or group of institutions from failing and/or protect the depositors in the institution from losses. Second, the controls are defended as a means of increasing the supply of mortgages and, therefore, the supply and stock of houses.

There is an obvious flaw in the first argument. The effect of the controls is to force the more knowledgeable, more skilled, or better informed to rearrange their assets and/or liabilities so as to avoid the controls whenever it is profitable to do so. The holders of small savings accounts do not adjust their balances as much in percentage terms as the holders of large CD's. Regulation Q ceilings produced quarterly average annualized rates of change ranging from +100 percent to -100 percent for holders of large CD's and +18 percent to -6 percent for holders of small savings accounts. But the financial structure is not strengthened and the savings institutions are not "protected" by regulations that encourage borrowers or lenders to transact their business in newly formed markets using unfamiliar or less familiar instruments. Yet, few would deny that this has been not only a principal result of control policies for both large and small borrowers but also a main reason for the spread of controls.

Cost of Recent Policies

Recent events suggest some of the costs of recent policies. The financial position of various borrowers and lenders was strained to a point where some went bankrupt. Others incurred relatively large costs of developing new instruments in new credit markets or

learning about unfamiliar but previously existing arrangements. Since these adjustments involve the services of highly skilled professionals, much of the cost is social as well as private. The resources used to circumvent controls are, from the standpoint of society, wasted resources. There are only a few benefits to offset against the social costs of organizing markets and spreading information about the products that are produced and sold in various markets. The recent expansion and subsequent shrinking of the Euro-dollar market was not costless to the societies involved. The same can be said of the expansion of the commercial paper market. Nor is it socially desirable to force these changes, even if some owners of small and large savings or time deposits found it privately profitable to pay these costs so as to avoid Regulation Q. Few would now deny that the expansion and contraction of alternative markets, and other similar shifts in the allocation of financial assets, were the main results achieved by Regulation Q in recent years.

Since I regard the net social cost of controls as a main issue, I want to devote most of my time to what I believe is the main argument for ceilings—ceilings help to produce more housing. I will argue that the alleged social benefits are, for the most part, illusory and that the illusion itself is a consequence of using incorrect economic arguments to defend inappropriate economic policies. These questions are somewhat broader than the narrower question about Regulation Q that I was asked to discuss, but evidence that the controls do not accomplish their purpose may contribute more to the discussion than concentration on the narrow topic.

Selective Controls and Housing

The main defense of Regulation Q and other selective controls is that they assist the housing industry by increasing the supply of mortgages. In the words of two knowledgeable observers,¹ "No matter how housing problems are defined, credit has almost invariably been singled out as the key to the solution." I believe that this statement is wrong, that our housing policy rests on this misconception, and it is the misconception and not the failures of lenders to offer mortgages that explains the failure of the housing stock to expand at a rate similar to the rate of expansion of other real durables or other consumer goods.

¹Leo Grebler and Sherman Maisel, "Determinants of Residential Construction: A Review of Present Knowledge," *Impact of Monetary Policy*, Prentice-Hall, 1963.

Even at the first glance the assertion that credit is the main resource required to increase the stock of housing is peculiar economics. How or why does an increase in the amount of mortgage credit, offered at a given mortgage rate, increase the number of houses built? The former is a nominal amount--the number of dollars that lenders are willing to pay to acquire pieces of financial paper called home mortgages. The latter is a real quantity denominated in units and representing square feet of space enclosed by brick and mortar with plastered walls, dishwashers and garbage disposals. One depends upon the portfolio decisions of lenders; the other results from the allocation of real resources. It is by no means clear that financial decisions change the use of real resources. Most often economists do not regard money or credit as a factor of production, much less the principal factor of production, in the sense required by many discussions of housing. There must be something very special about housing that makes the binding constraint a financial resource, rather than the real resources required to produce other products.

To structure the problems, let me introduce a simple framework that captures some essential features of the housing industry. I use the framework to generate some predictions about the effects of subsidies and selective controls that encourage lenders to increase the supply of mortgages and buyers to increase expenditure on housing. Then I compare the predictions to the events that have occurred.

The Real Factors of Production for Housing

The housing industry uses three factors of production. One, labor, is provided by a monopolist, or more correctly, a group of co-operating monopolists who restrict both the number of union members and the number of licensed journeymen so as to raise the real wages of the members of the monopoly unions. The principal threat to the monopoly power of the unions comes from the existence of substitutes in the form of (1) items produced away from the building site using more capital-intensive processes and (2) nonunion laborers--many of whom would be willing to join the union if restrictions on entry were lifted. Nonunion laborers produce many of the single-family homes built in suburban areas.

The unions long ago recognized the threat posed by substitution of the second factor of production, capital, for labor and were able to get state and local governments to pass laws making it illegal to

use many of the substitutes. Since many of the restrictions on substitution are now part of the building codes, the restrictions acquire the force of law. Where this is the case, the union is able to limit the substitution of capital for labor in the nonunion sector as well as in the union sector. In this way the unions reduce builders' opportunities to substitute capital for labor in construction.

The third factor of production is land, a relatively poor substitute for labor in production. By building in suburban areas, however, builders are able to reduce the per acre cost of land--the per acre cost of raw land--and the unit cost of labor. The reduction in the unit cost of labor is obtained by using nonunion labor, thereby avoiding those union restrictions that do not have the force of law.

Congress became convinced that increased housing production and ownership were desirable socially and encouraged various administrations to develop programs to expand the housing stock. The experts responsible for developing these programs appear to have reasoned as follows: Many potential buyers of houses are deterred by their inability to finance costly durable purchases. The way to encourage production is to develop an industry with the principal purpose of making mortgage loans. The housing industry will expand to provide for the increased demand and, in this way, the housing stock will increase in amount and perhaps in quality.

Throughout, this argument ignores the effect of the monopoly unions. In the presence of the monopoly unions one expected effect of the numerous government programs to encourage home building is an increase in the wage of the workers in the building trades. If the government programs increase the power of the unions sufficiently, the main effect of subsidizing expenditure on housing is to raise the relative price of housing and the relative wage of workers in the building trades.

Both of these results are confirmed by the data for the postwar years. From 1950 to 1969, the deflator for nonresidential structures increased by 90 percent and the deflator for residential structures increased by 67 percent, both substantially greater increases than the 52 percent increase in the price deflator for total private expenditures--that is, for GNP minus the compensation of total government employees--or the deflator for any of the components of private expenditure. During the same period 1950-1969 hourly wages in contract construction rose to 260 percent of their 1950 base, that

is, by 2.6 times, while wages in manufacturing rose by 220 percent. During the same period the number of houses built fell, as the price of houses rose relative to other prices.

These results are, as I said, partly to be expected if the government encourages expenditures and does little or nothing to limit the monopoly power of the building trades unions or eliminate the laws restricting the substitution of capital for labor. Encouragement of the savings and loan industry, restrictions on their portfolios, on the rates of interest that they pay depositors—restrictions including but not limited to Regulation Q—schemes to supplement mortgage payments, and tax benefits to homeowners are only a few of the better known subsidies, prohibitions, and restrictions designed to increase expenditures on housing. They have succeeded. Expenditure has increased both relatively and absolutely. But housing starts and houses built have both declined.

Monopoly power is not sufficient to explain both the decline in housing starts and the rise in price. Increased degree of monopoly or some other factor shifting the supply curve to the left must be invoked to explain the combination of declining real output and the rising relative and money prices of housing.

Nor is the decline in output small. New housing starts in 1969 are only 76 percent of new housing starts in 1950. One may argue that 1950 and 1969 are exceptional years, since housing starts in 1950 were at an all-time high of nearly 1.9 million units and housing starts in 1969 were depressed by the particular policies being pursued in that year. But no other industry has received so much attention and so much encouragement to expansion yet produces less real output after two decades of "encouragement" and subsidy. Moreover, we can ignore the peak year, 1950, and compare the most recent four years, 1966-69, to the four years 1951-54. The qualitative result is the same; output for the latter years is 15 percent *smaller* in real terms than output 15 years earlier.

Other data give similar results. The nominal amount of housing—the market value of new houses privately built—has increased by 50 percent during a period in which the price of residential structures rose 67 percent. During two decades in which production of consumer durables doubled and production of other nondurables more than doubled, the production of housing declined. Doubtless some allowance must be made for change in the quality,

size and mix of housing, but these qualifications seem insufficient to me to explain the 15 to 25 percent reduction in the number of units produced. Table 1 presents these data.

TABLE 1

NUMBER AND VALUE OF HOUSING UNITS PRODUCED
AND WAGES IN CONSTRUCTION AND MANUFACTURING
(1969 AS A PERCENTAGE OF 1950)

YEARS	Number of Housing Units	Value of New Units Privately Produced	Wages in Contract Construction	Wages in Total Manufacturing
1969/1950	76%	152%	257%	221%
<u>1966-69</u> 1951-54	85%	150%	195%	175%

Source: Economic Report of the President, January 1970.

Reasons for the Failure

A very basic misconception is responsible for the failure of the housing program—selective controls and subsidies—to produce more houses. The misconception is that permanent increases in output can be pulled out by increasing expenditures—that an increase in the dollars of credit made available to finance expenditure on housing produces a proportional increase in real output, i.e. in the number of houses built. The base of this reasoning is the familiar argument that increased nominal expenditure stimulates production of real goods and services. The result of the policies based on this conception, as the data I cited suggest, has been an increase in the relative price of housing and a reduction in the number of houses built.

When we look at the time series more closely, in Table 2, we find that, during the period 1950-1969, expenditures for residential structures rose 11 percent more than total consumption expenditures. In the 1950's and early 1960's expenditures for residential

structures increased at about the same rate as total consumption expenditures. After 1962, expenditures for residential structures increased much more than total consumption expenditures, while the number of housing units built remained below the average for the 1950's. One reason, and I believe it is a main reason, is the combination of government policy and monopoly union power. The government's program, aimed at increasing housing output by increasing housing expenditures, increased the value of the union monopoly and the power of the building trades unions. The building unions were able to use their market power to increase relative wages; wages of construction workers rose relative to the wages of other unionized workers. The data show that the ratio of wages in construction to wages in total manufacturing, after remaining relatively unchanged from 1953 to 1959, rose by more than 12 percent in the 1960's.

TABLE 2

HOUSING STARTS, RELATIVE HOUSING EXPENDITURES
AND CONSTRUCTION COSTS

YEAR	Ratio of expenditures for residential structures to total consumer expenditure	New Private Housing Starts (thousands of units)	Ratio of wages in contract construction to wages in manufacturing
1950	.996	1908	1.291
1951	1.000	1420	1.296
1952	1.002	1445	1.290
1953	1.001	1402	1.310
1954	.978	1532	1.340
1955	1.000	1627	1.320
1956	1.025	1325	1.318
1957	1.020	1175	1.320
1958	1.000	1314	1.336
1959	1.018	1495	1.338
1960	1.014	1230	1.360
1961	1.011	1285	1.379
1962	1.017	1439	1.382
1963	1.025	1583	1.386
1964	1.044	1502	1.402
1965	1.052	1451	1.418
1966	1.053	1142	1.430
1967	1.077	1268	1.460
1968	1.095	1484	1.459
1969	1.111	1446	1.491

Policymakers and some economists apparently believe that there are some very special and peculiar features about housing. In most industries the recommended way to increase real output is to shift the supply curve by increasing the quantity and quality of labor and capital inputs, reducing monopoly restrictions and improving techniques of production. In housing most of the programs seek to reduce the cost of mortgage loans or the cost to the purchaser of buying a house.

Increases in the relative wage of the unionized construction workers and in the relative price of housing do not by themselves explain the sizable shift in the supply curve of housing that produced the 15 to 25 percent decline in the number of houses built. Most of the single-family houses are, I believe, built by nonunion laborers who receive less than the monopoly wage and possess much less market power than the unionized workers. Increased wages for the unionized workers are expected to induce a substitution of nonunion workers for union workers in home construction. This has occurred. The problem is now to explain why an increased supply, or at least an unchanged quantity of houses, is not built using more nonunion and less unionized labor. To explain the decline in housing, we must look at some indirect consequences of union power and government policy.

The main sources of the unions' strength in housing are the building codes and regulations. These limit the ability of builders using nonunion labor to substitute capital for labor when wages increase. Consequently, when faced with an increase in total expenditure and in the aggregate demand for labor, builders in the nonunion sector must, to a much greater extent than other producers, either increase wages or lose labor to other industries. In industries other than housing, the effect on profits of increased labor costs resulting from inflationary policies and increased demand for labor can be offset to a much greater extent by substituting capital for labor.

Two main implications follow from this argument. One is that the price of housing rises more than other prices in periods of economic expansion. There is some evidence that this occurs, although I do not want to rely entirely on evidence of this kind because it is difficult to separate the effect of economic expansion on the relative price of housing from the effect of expenditure subsidies and controls that I discussed earlier. The confounding is particularly serious because the

combination of usury laws and controls like Regulation Q do not have a uniform effect. The difference between market clearing rates and the rates paid by those who are able to borrow at savings and loan associations changes as market rates of interest change. Since market rates rise in periods of economic expansion and fall in periods of recession, the effect of fixed ceiling rates and usury laws increases in periods of rising output and prices.

The second implication is that the number of houses built increases following declines in economic activity and declines during periods of rising economic activity, or more simply put, the most expansive periods for housing construction are periods in which other industries reduce the demand for skilled and semi-skilled labor. There are five relative peaks in the housing-start data: 1950, 1955, 1959, 1962-63, and possibly 1968. Each of these years follows a year of recession. In each of the years, the economy was expanding but had not reached full employment.

Conclusion

Let me summarize my argument in a few sentences. Housing like any other product is produced by using inputs of labor and capital. Housing policy is based on the notion that loans and mortgages are the principal scarce factors of production. Acting on this belief, the government attempts to increase expenditure on housing. Expenditure has increased, but the increase has not been accompanied or followed by an increase in the number of houses built. In the past 15 to 20 years, housing starts and completions fell.

Housing is a cyclical industry. It is an expected consequence of the use of policies to slow inflation or to expand output that postponable expenditures for durables are affected more than nondurable consumption. This point is often overlooked. Discussions of housing seem to confuse the postponement of housing that results from increases in market interest rates with the permanent reduction in the stock of housing that would occur if real rates of interest remained permanently higher. The restrictive monetary policies that at first raise market rates of interest ultimately bring about reduction in prices, output and employment and thus lower market interest rates. Temporary reductions in market and mortgage rates of interest encourage expenditure on housing; the temporary increases in measured unemployment add to the supply of labor available to build houses.

To repeat what I said on a similar occasion several years ago, the housing industry is relatively labor-intensive and has a relatively low rate of productivity increase. Given the very large adjustments that mistaken public policies—fiscal and monetary—force on the private sector from time to time, it is hard to think of another industry that can release so many skilled workers at such low social cost. To the extent that regulations like Regulation Q prevent a decline in housing, they transfer the effect of restrictive policies to other, more capital-intensive industries. The social cost of the decline in output is therefore increased by these policies.

The message in this analysis is that the proponents of housing ought to remember that production depends on the use of real resources. Few I think would argue that increased production of autos or butter requires an increase in the amount of credit offered to buyers of cars or cubes at the current market interest rates. The same reasoning applies to housing. If policymakers decide to increase the production of houses, the most useful methods of expanding output are: increase the use of available technology by the industry; expand the input of trained, productive factors; and weaken the monopolies that restrict output. Indeed social policy ought to find some merit in breaking down the monopoly restrictions, whether or not the public desires a higher rate of production of housing.

Policies of keeping real rates of interest low do, of course, encourage purchases of durable assets. To the extent that monetary and fiscal policies keep the real rate of interest lower than it would be in the absence of such policies, monetary and fiscal policies make it less costly for the public to achieve a particular long-term housing goal. This method of encouraging the accumulation of real capital in general, and housing in particular, should not be confused with policies of market interest rate manipulation and regulation or selective controls on particular lenders.

Regulation Q: The Money Markets and Housing—II

ROBERT LINDSAY

It is hard to stand this close to Allan Meltzer and not feel singed by the lightning of the Lord. I would like to talk, however, about Regulation Q. And I find it hard to cover the Regulation Q ground and not see some flowers of evil growing there.

My chief concern about rate ceilings on consumer-type deposits starts with the consumers in question. I think we have put them at a considerable disadvantage, particularly those of moderate means. In a time of sharply and continuously rising prices, we force them, as a consequence of public policy, to make a bad choice. They must either accept interest yields well below the going rate, or else they must venture into the open market where their inexperience and small size expose them to capital risk and high transaction costs. In effect, rate ceilings raise the cost of institutional intermediation for small savers without reducing the cost of self-intermediation. Indeed, as Allan Meltzer has pointed out, ceilings may *raise* the costs of self-intermediation, as savers venture into new markets that are not yet fully developed.

Public policy, however, is often faced with the necessity of favoring some groups at the expense of others. The question before us is whether the benefits flowing to *mortgage borrowers* in some way justify the burdens placed on the small lenders.

One immediate possibility is that mortgage borrowers are not essentially different in economic status from consumer-type savings depositors. The deposits might even be the seeds of future down payments against such loans. Rate ceilings, in that context, would

REGULATION Q—II

LINDSAY

53

still force one group to subsidize another, but at least the general economic standing of the saver would give him a possibility of getting over on the other side. In fact, this does not seem to be the case. The figures are somewhat limited, but mortgage borrowers, at the time the loan is made, seem to have higher incomes than the average depositor at the savings institution making the loan. It would also appear that the need for a downpayment requires an accumulation of funds beyond that of the average depositor at an S & L or a mutual savings bank.

Perhaps this should be expected. Another quite separate defense of the Q type ceilings assumes that institutions will charge the highest mortgage rate they can get. The low cost of input money is not designed, that is, to provide mortgage funds for low income borrowers, but rather to help keep the institutions from perishing. And, in fact, concern for the health of these institutions as mortgage lenders often generates a plea for abolishing ceilings on lending rates while reinforcing them on deposit rates.

A second possible benefit of Q type ceilings might be, however, that they keep all interest rates lower than otherwise. I have in mind here the possible contribution to the efficiency of monetary policy. This touches on an area that Frank has enjoined us to stay away from, having to do with the large corporate CD's. But the argument has pertinence for the large individually owned claims too. The structure of ceilings we currently have breaks off at deposits of \$100 thousand. Thus there might be a lot of people below that \$100 thousand level who respond in the way that the large holders of CD's, the corporate holders, respond. In any case, I think you are familiar with the argument. The idea runs something like this: the most vigorous force for credit expansion takes the form of business loan demand. With the emergence of liability management as a bank strategy in the early 60's, rate ceilings offered a direct means of containing these expansive forces. Banks were financing business loans by selling CD's. QED: hold down the ceiling and choke back excessive lending. Tighten where tightness was most needed, and thereby avoid restricting the entire economy to get at one part of it. The mortgage market would benefit accordingly.

The flaws, or what I view as flaws, in this reasoning have now been well ventilated. If CD ceilings are kept too low, the large depositors will take their funds into the open market. They will lend them directly, and only rarely will the recipients be residential mortgage borrowers. The 1969 Annual Report of the Federal Reserve Bank of New York puts it this way. Using Regulation Q "to hold down bank

credit growth . . . did not fully take into account the ability of many borrowers—particularly the larger corporations—to by-pass the banking system and obtain funds directly in the open market . . . Indeed the distortion and supervisory problems that developed during 1969 as a result of noncompetitive rate ceilings suggest that more sparing use of this type of limitation is probably desirable."

To which I would add that the ceiling structure we have now seems to acknowledge this strong market competition for the large corporate depositors. The earlier reasoning does seem to linger on, however, in the much lower ceilings for all deposits under \$100 thousand.

In passing, one might also note that the various efforts of banks to escape through the Eurodollar markets and the commercial paper markets need not be associated peculiarly with Regulation Q. They could be expected to flow from any sharp tightening that encompassed banks of national and international scope. If the System has decided to meet the expansion of these banks by raising their reserve requirements, or rationing them more sharply at the Discount Window, the same kind of search for escape routes would probably have been stimulated.

We come finally to the viability of the principal mortgage lenders—that is, to Regulation Q type ceilings as a contribution to the viability of these lenders. There are, as I understand it, two healthy correctives that rate controls are said to supply. One is to prevent excessive rate competition among the non-bank intermediaries, as well as between them and the banks. This sort of competition serves everyone poorly, it is said, because it leads to rash lending decisions. In the end it threatens a rise in bankruptcy. Individual depositors will then, at best, be inconvenienced, and they may lose something important, as will we all, if confidence in the financial sector in general is undermined.

Widespread failure of financial institutions would certainly create genuine dangers. What is less clear is whether rate ceilings will prevent these failures and, if so, whether they are the most desirable means to that end. I have been unable to judge from the two papers in the Irwin Friend study whether higher deposit rates played a major role in the Illinois and Chicago S & L's which closed in such large numbers. Obviously, it is not enough to establish that fail institutions were paying high dividends. It must be shown that their

rates were higher than those offered by continuing institutions and that high rates contributed significantly to their failures.

The other strand of the viability issue stems not from mismanagement, but from what is judged to be a fundamental weakness of non-bank intermediaries. Their ability to compete for savings, particularly the S & L's, is almost entirely derived from the mortgage market. Much of the *bank* demand for these savings deposits, on the other hand, is derived from the market for business loans and consumer credit. If these demands are much less interest-elastic than the mortgage demand, or if the net yield on them tends generally to be higher than mortgages, then banks can outbid the non-banks in the savings market. In addition, if the savers get some psychic return from doing business with banks, the non-banks must bid still higher.

Thus, on this logic, a set of ceilings is needed that neutralizes the inherent advantage of banks over non-banks. And this, I would take it, is the underlying aim of the ceiling structure we have now. Ceilings on bank rates should keep the banks from climbing over into the savings markets on which the non-banks depend. Ceilings on the non-banks protect them from each other, and perhaps from their own foolishness, but also make the banks more willing to accept their own ceilings. The mortgage lenders are thus free to keep mortgage money flowing to borrowers.

Quite obviously, the effort at neutralization has not maintained the flow of mortgages from these private intermediaries. With wires and pulleys strung all around the banks and non-banks, the call of the open market has grown stronger and stronger. To be sure, funds have continued to flow, at varying speeds, into time and savings deposits and not on balance out of them. But obviously many savers have ventured into the open market, braving the capital risk and the search costs that may eat up their gain in gross yield, particularly for the smaller savers. The consequence, as we all know, has been a very thin flow of mortgage money from private savings going through private mortgage lending institutions.

The flow would be even nearer to disaster, were it not for the Federal intermediation that we will hear about tomorrow morning. But that solution also *discriminates against the small savers*. For the market instruments by which Federal intermediation is financed, as I understand it, are deliberately placed beyond the reach of the small depositor by making the minimum unit quite large.

Thus an important source of funds for housing in the last couple of years has come from *outside* the neutralized sector of finance. Still another accommodation was made by shifting the *use* of funds as well as the sources. I have in mind here the mobile home phenomenon. These homes accounted in 1969 for a third of all one-to-four-family housing starts. They are financed chiefly, however, by consumer credit from commercial banks. Thus neutralization through rate ceilings on time and savings accounts did not keep the banks out of this market. Indeed, the particular channels of savings seem to have little at all to do with the matter. One can guess that the success of mobile homes represents, among other things, the coincidence of cheap housing and expensive credit. The borrower-buyer can pay the high cost for credit because it goes with a low cost house. The lender is pleased to supply the high cost credit on what is a repossessable and marketable consumer durable. The point is that on this, a second count, the neutralizing effect of deposit rate ceilings has done little to help the flow of housing finance. Of the flow that did occur, an important fraction came from Federal agency mortgage money, and another important fraction came from commercial bank installment credit.

A different set of deposit rate ceilings might have been more successful. It seems to me very unlikely, however, that we can ever find a structure that will just fit. We are looking, remember, for appropriate relationships between non-bank deposit rates and mortgage rates, between non-bank deposit rates and open-market security rates, between non-bank deposit rates and bank time and savings deposit rates, between demand deposit rates set at zero and bank savings deposit rates and non-bank rates. Then there is the subdivision in each case by maturity, by size of deposit, by negotiability of the claim, by timing of interest payment, and by timing of notification of withdrawal. The path we are headed down is the one Allan mentioned, it seems to me.

Add to this the division of authority among the Federal Reserve, the FDIC, and the Federal Home Loan Bank Board, and the flexibility of the arrangement is still further reduced. The weaker rival for savings deposits will always be fearful of raising the ceiling. It may be losing deposits to the open market, but higher ceilings will seem to threaten new losses to the rival institutions as well. It seems to me that no amount of wisdom and goodwill is likely to allay this anxiety. And while the negotiations go on, the rise of market rates toward and through the ceilings will create market confusion and market disturbances.

So my view is that ceiling rates on consumer-type deposits have not served us well. They have denied many small savers the chance to share the high returns on their capital during a capital shortage. At the same time they have not headed off the strong rival demand from business borrowers. Where the private flow of mortgage money has shown a fresh vigor, i.e., in mobile homes, only in a perverse way has the ceiling been the cause. In addition, the flow itself has been expensive as credit and doubtful as a feature of national housing policy. Mostly, of course, the flow has been public money--again, not a success for the rate ceiling policy.

Yet I do not think that the basic problem has gone away or will go away. Continuing prosperity does seem to militate against the residential mortgage market. Moreover, in this particular time, population growth and relocation suggest an enormous need for new housing. We, of course, need appropriate monetary and fiscal policies and subsidy programs--whatever "appropriate" means here. Within this context, however, my own conviction, that is to make more effective use of the private finance sector, our public policy must continue to encourage specialization in mortgage lending. Separate investigations by George Benston, and by Brigham and Pettit--both done for the big savings and loan study--have found considerable economies of scale in residential mortgage financing. As a result, and as Irwin notes in his summary of the study:

Mortgage lending can ordinarily be handled more efficiently by a specialized rather than by a diversified intermediary in view of the relatively small size of the great majority of savings and loan associations and commercial banks in this country.

He adds that, at present, the median asset size of S & L's is larger than that of commercial banks, and this is even more true of the comparative size of their mortgage portfolios. I think one can say the same for mutual savings banks. As for life insurance companies, they might be able to realize their own economies, but they have been moving out of the one-to-four family market, which makes it all the more important to deepen the specialization of non-bank intermediaries of the deposit type.

The problem is *how* to promote this specialization and how, at the same time, to protect the flanks of these specialized institutions that are left exposed by the specialization itself. Ceilings on deposit rates are an effort to protect by neutralization, by freezing the rate structure. But this takes the competitive decision out of the hands of

individual thrift institutions, and rigidifies it into a detailed code for the entire nation. Individual associations that might meet the open-market competition by different combinations of rates, maturities, notice periods, and other terms of the trade, find the way made hard. They have to wait for the lowest common denominator to be found by the regulatory authorities.

This seems the wrong direction to me. But what might be the better way of protecting mortgage specialization? The hopper is full of ideas, and we are going to be talking about them for quite a while. There are two possible reforms, however, on which I would like to comment briefly.

One of them, in my view, would also take us in a wrong direction. This is the proposal to allow checking accounts at savings and loan associations and mutual savings banks. This, it seems to me, would protect the specialized institution but would do so by undermining the specialization. It is hard to see how checking accounts would be much help to the S & L, unless depositors make sizable use of the service. But if they do, the S & L is taking on an expensive specialization of another sort. It is no accident that commercial banks, with their checking accounts, have a very different structure of assets than S & L's do. And it is no accident that checking account proponents within the S & L industry link this proposal to a petition for consumer credit authority as well. S & L's would have to grow very much larger to realize both the economies of scale in the mortgage market and the quite distinct economies of scale in demand deposit management. In the meantime, they will be much tempted to make consumer loans *instead of* mortgage loans. And we will not have aided our cause.

I would like to urge that we continue to nurture the non-bank lenders but that we do so by taking the opposite tack. Instead of throwing up walls to keep bankers out of the savings market, we should move to draw bankers' energies more deeply into their own specialization.

It is not clear that we know just how to do this, but one possibility might be to reward the banks more handsomely for what is now their special expertise—the management of the payments mechanism. For example, suppose we were to reduce reserve requirements behind demand deposits down to the same level as those behind time deposits. This would take away an important incentive that banks now have for encouraging customers to shift from demand deposits to time deposits. Indeed, under the current arrangement, we keep the rate ceiling on time and savings deposits

below market to discourage the expansion of these deposits, but we offer a reserve ratio differential that encourages this expansion.

If we abolished this differential by reducing the reserve ratio for demand deposits, we would increase the relative value of demand deposits to banks. If we also reduced total reserves accordingly, we would give this new relative appeal to demand deposits without creating excess reserves in the system. If we then continue to have the zero rate ceiling on demand deposits, which is a very different kind of institutional animal anyway, banks would have an incentive to offer non-price inducements to depositors. Among other things, banks would have a new incentive to develop services associated with the payments mechanism.

One can look at this from several sides. Some people feel that there is a great deal of urgent work to be done if the payments mechanism is not to slip away from the banks in any case. Thus, one could think of a reduction in the reserve requirement differential as simultaneously a means of (a) encouraging this urgent development, (b) financing the development, and (c) getting the banks out of the savings deposit business or making them less fierce competitors in that business.

The notion is still a bit raw. One obvious risk is that a bigger shelf of services attached to demand deposits would make banks even tougher competition for the non-banks. It might greatly expand the appeal of one-stop banking. To head off this danger, maybe it would be necessary to *raise* the time deposit reserve ratio, persuading the banks to accept this in exchange for sharp and permanent reduction in demand deposit requirements. There is also a question whether this introduction of non-price competition would lead to any higher yield for small savers on their non-bank claims. This would be a particularly important question if the new bank services take forms that small savers cannot use. Even then, however, we would free the savings rate to greater flexibility in market response than we have now.

Whatever the mechanism, it seems to me that we must search for some positive way to retain the specialization of our chief mortgage lenders and, if we possibly can, do a better job by our small savers. If we can do this by enriching the payments mechanism specialization of our banks, so much the better. It does seem to me that ceilings on deposit rates are not taking us down any roads we want to travel.

Regulation Q: The Money Markets and Housing—III

A. MARSHALL PUCKETT

As I understand it, my assignment today is to present the case for continuation--over the near term only--of the existing authority to set maximum rates payable on small-denomination savings and time deposits of commercial banks, mutual savings banks, and savings and loan associations. Even with the time horizon limited to the short run, I must confess to mixed emotions about undertaking this task. I share the general aversion to these controls, fully subscribing to the usual arguments that, when effective, interest-rate ceilings, among other things, discriminate against small savers, distort the allocation of financial and real resources, and serve to perpetuate the underlying inadequacies in the financial structure. I am, moreover, fully aware that arguments for inaction over the short run can be mounted over the long run.

Yet I do feel that there is, in fact, a compelling case to be made for deferring to a later date the suspension or abolition of our authority to set the maximum deposit rates in question. The particular changes which I happen to view as appropriate cures for the competitive ailments of the thrift institutions and the mortgage markets would involve considerable time to bring to fruition, and during the transition period the power to set maximum deposit rates would continue to be needed for whatever protection such competitive regulation can afford against renewed disruption in the markets for thrift deposits and mortgage money. Indeed, a premature abolition of the deposit ceilings would run the risk of causing the creation of other devices to protect the thrift institutions and the

Mr. Puckett is Manager, Domestic Research Department, Federal Reserve Bank of New York, New York, New York.

mortgage market that might be even more detrimental to the free functioning of the financial markets. In this connection, a good case can be made for the view that had we not had the deposit rate setting authority as a means of protecting the thrift industry and mortgage market in recent years, other means of direct control for achieving that end would have been invented. Thus, one certainly cannot overlook the possibility that the Regulation Q ceilings now and for some time to come may be the best insurance we have against worse alternatives being devised for directing the allocation of credit.

Some Observation on the Thrift Institutions' "Problems"

The source of the cyclical difficulties of the savings and loan associations, and to a lesser extent the mutual savings banks, is well recognized and hardly needs repeating in detail here. Among the major financial institutions, the thrift institutions by all odds have the greatest disparity between the average maturity of their liabilities, largely deposits, and the average maturity of the investments, primarily mortgages. Thus, the responsiveness to interest rate movements of their cost of funds is much faster than is their rate of return on investments. Consequently, when interest rates move sharply higher, as they did almost continuously over the last half of the 1960's, the thrift institutions are hard pressed to pay competitive rates on deposits out of earnings on investments that reflect past average mortgage rates rather than the current rate.

The "problems" of the thrift institutions are currently almost always described, as I have done, in the context of increasing interest rates--perhaps because the current period of inflation and high rates has been so long that it exceeds the recall of most observers, and particularly those who write for the financial press. I feel, therefore, compelled to point out that there is an opposite side of the cycle in which interest rates do in fact fall, resulting in "problems" for the thrift institutions and the mortgage market of an entirely different nature than those of the past five years.

The first half of the past decade provides a good case in point. During those years of comparatively low interest rates, thrift institutions enjoyed a clear competitive advantage over those institutions with shorter average portfolio maturity. The problem with the thrift institutions and mortgage market then was certainly not lack of ability to compete for funds. They were, in fact, on average paying deposit rates equal to or greater than those available in the market on high grade corporate bonds. And, you may recall

that in those days writers for the financial press, not to mention more than a few economists, were competing for attention with cries of alarm about the deteriorating quality of mortgage credit, the great overbuilding in the housing industry, and the growing availability and use of mortgage credit for nonhousing purposes. It is certainly true that at the time, the deposit rates thrift institutions were able to pay--and were paying--far exceeded that which they needed to pay in order to mobilize the financial resources needed for adequate home building.

The past decade, therefore, divides about equally between periods of good and bad years for the thrift institutions as far as relative earnings power is concerned. Now, the point I would like to make is that because of this the boom and subsequent bust that occurred in the mortgage market need not have been anything like as severe as it was. The heart of the problem was (and still is) not the cyclical nature of the thrift institutions per se, but rather the failure of these intermediaries and the relevant regulatory bodies to manage themselves and the industry in an appropriately counter-cyclical fashion. All that would have been necessary to achieve reasonable stability in the thrift industry and the mortgage market over the past decade was a policy of dividend stabilization somewhat along the lines of that practiced by cyclical industrial corporations. Very simply, had the thrift institutions paid out less than their earnings in the 1960-65 period, and thereby accumulated substantial earned reserves, they would have been able to consistently and quite legally pay dividends well in excess of their portfolio earnings during the intermittent tight money episodes of the succeeding half decade. Such a procedure would have not only improved the thrift institutions' relative financial position in those more recent years, but also would have avoided the earlier excesses that contributed as much as anything else to the mortgage market crunch and home building collapse of 1966.

I believe, therefore, that it is quite fair to argue that the problems of the thrift institutions ultimately derive more from management and regulatory shortcomings than from basic flaws in their concept. And, while changing the concept to fit the way thrift institutions are managed and regulated is one way to solve their difficulties, it does seem to me that it ought to be more widely recognized that this is precisely what most proposals in this area largely involve. At the least, the fact that we do have the alternative of trying to do a better job with the thrift institutions as they are presently constituted justifies careful scrutiny of the structural reforms that are being

proposed. Those reforms are by no means as essential as seems to be commonly accepted.

*Giving Thrift Institutions
Greater Balance Sheet Flexibility*

As stressed at the outset, my case for keeping the authority to set interest rate ceilings on thrift deposits rests on the belief that the institutional framework that has created the need for the ceilings is likely to remain little changed over the foreseeable future. This is especially true in the case of the various proposals to increase the balance sheet flexibility of the thrift institutions--proposals which I largely support provided they are applied cautiously and with a view to their effects in the mortgage market and elsewhere.

The speed of transition to a more diversified and hence financially flexible thrift industry would, of course, be limited by the managerial resources in that industry. I have no idea how long it would take those institutions to develop the necessary expertise and competitive strength to carve out a significant share of, say, the consumer credit market, but certainly the time frame would be measured in terms of years--not months--even in the best of circumstances. Moreover, in the financial environment that now seems to be emerging, the incentives to diversify are limited and the speed of response to new borrowing and investment opportunities is therefore likely to be lessened. Indeed, the structure of interest rates in recent months has become increasingly favorable to the process of borrowing very short and lending very long--a fact that would tend to encourage thrift institutions to maintain the status quo rather than taking advantage of new powers to diversify. It is not altogether unlikely that we may now be moving into a period much like 1960-65 in which mortgage rates, because of their inherent stickiness, offer a superior rate of return over almost all alternatives of comparable risk. Moreover, because of the steeply increasing term structure that appears to be emerging, the movement of thrift institutions into longer-term sources of funds would increase their average cost. Thus, at the moment at least, diversification on either the asset or the liability side of the thrift institutions' balance sheets would involve heavy costs in the form of reduced average rates of return on the one hand, and higher total interest payment obligations on the other. The incentive for balance sheet diversification is strongest when interest rates are under upward pressure and the term

structure of interest rates is relatively flat, yet we seem to be moving rapidly away from that situation.

Moreover, any move to achieve a more flexible balance sheet position would need to be paralleled by other changes in the financial system to avoid any severe dislocation in the flows of funds, especially in the flow of home mortgage credit. Certainly, permitting and encouraging the savings banks and savings and loan associations to diversify out of mortgages should be tied in with steps to improve the flow of mortgage credit from other sources. That would, however, involve making the mortgage a "better capital market instrument," and it is difficult to envision that being achieved on any large scale in the foreseeable future. The problems involved with gaining simplified and uniform state laws in this area are sufficient alone to guarantee that progress on this front will be agonizingly slow. Too, I suspect that public acceptance of a less direct relationship between mortgage borrower and lender--an almost inevitable outcome of creating an impersonal national mortgage market--will be difficult to achieve.

Finally, while I believe that changing the institutional framework of the thrift industry and the mortgage market will in any event be a slow process--requiring continued Regulation Q authority to protect that segment of the financial markets if necessary against further stress--it is also legitimate to raise the question at this time as to whether this is the appropriate moment to begin the change. The nation's housing problem has now reached near-crisis proportions, and we might well be abandoning our existing private mortgage finance system at the very time when financial conditions are emerging that make that system capable of producing a massive shift of funds into the mortgage market. Certainly, the magnitude of the housing problem makes it imperative that it be given temporary priority over the considerably less pressing consideration of the "efficiency of the capital markets."

The Variable Rate Mortgage

Since my defense of continued Regulation Q authority in the area of small time and savings deposits rests on the argument that there is no quick way out of the tight money problems of the thrift institutions, I am compelled to address some comments to the variable rate mortgage scheme. This means of injecting greater cyclical flexibility into the portfolio earnings and, hence, the deposit-paying capabilities of the thrift institutions has captured considerable interest. Un-

deniably, its widespread application would quickly give the nonbank savings institutions the effective equivalent of a very short average portfolio maturity, thereby eliminating the lag between investment earnings and deposit costs.

However, the development of this new type of mortgage instrument has been slow, and I think for very good reasons indeed. Certainly, public acceptance has hardly been enthusiastic--though there does not appear to have been any repetition recently of the near-riots that greeted the earliest attempts to apply this technique--and I suspect that the mortgage borrowing public will continue to resist attempts by financial institutions to place the risk of interest-rate changes on their shoulders. I must also confess to considerable sympathy with that resistance, since it seems to me that the risk-absorbing function should continue to rest with the financial intermediary as a matter of economic principle.

Of course, many proponents of the variable rate mortgage argue that the risk burden on borrowers could be eased by varying the maturity of the mortgage to hold monthly payments constant. However, that would leave the cash flows to thrift institutions unchanged, and in a world of symmetrical interest-rate fluctuations such a procedure would, from the standpoint of the mortgage lender, average out to nothing more than a device for cyclically varying the accounting allocation of cash flows between interest income and repayment of principal. While I am somewhat sympathetic with such a device for escaping the tyranny of accounting procedures, I would prefer that it not involve such heavy potential costs to individual mortgage borrowers. And, of course, my enthusiasm for this arrangement is further limited by the fact that the earlier comments on the cyclical problems of the thrift institutions could be crudely summarized with the statement: thrift institutions don't need variable rate mortgages; they only need to determine earnings available to pay deposit interest as though they had them.

Moreover, I suspect that the thrift institutions themselves are about to discover that the variable-rate mortgage is no panacea for their cyclical earnings problem. Their ability to sell such debt instruments is likely to be limited primarily to periods of tight credit (and high interest rates) when mortgage borrowers are in a weak bargaining position. At times of ample mortgage credit availability and strong borrower bargaining powers, they may find it virtually impossible to lend on variable-rate contracts if the typical home buyer is as rational as I suspect he is. Therefore, the thrift institutions that have been most aggressive in this type of lending are apt to

find that they have indeed increased the cyclical flexibility of their earnings, but mostly on the downside.

Finally, I might note that management of the variable-rate mortgage scheme involves some problems. The variable rate would have to be adjusted in accordance with changes in short-term interest rates, since as far as we know those are the most important rates against which the thrift institutions must compete in order to attract funds. Two proposals that I am aware of would in one case gear the mortgage rate to the Treasury bill rate and in the other to a measure of the cost of funds in the deposit markets.¹ Such procedures, while satisfactory on other grounds, would of course anchor the financial fortunes of a good segment of the public to changes in money market conditions arising in part out of Federal Reserve and Treasury debt management policies, with a fair potential for mischief as a result.

Finally, given the politics of home ownership in this country, I would like to express my severe doubts that a system of variable-rate mortgages, if it ever affected a significant proportion of mortgage borrowers, could survive a period of extraordinarily high interest rates in unregulated form. For instance, had the variable-rate mortgage come into widespread use during the 1960-65 period, massive political pressures would no doubt have been generated in later years to impose limits on the extent to which mortgage rates could be raised. Indeed, I have the suspicion that any variable-rate mortgage scheme, once given widespread application, would ultimately become surrounded by controls of a more severe nature than Regulation Q. In that connection, I understand that a few states have already imposed, or are considering imposing, severe constraints on the use of variable-rate mortgages.

Concluding Comments

In arguing for continuing authority to set maximum rates on the small time and savings deposits of commercial banks, savings associations, and mutual savings banks, I have stressed that we should

¹Messrs. Anderson and Eisenmenger, in another paper presented at this conference, argue for the use of current market yields on fixed-interest mortgages as the proper guide for setting variable mortgage rates. However, that approach seems clearly inappropriate since the term structure of interest rates does vary, and quite sharply. There is no fixed relationship between the going mortgage rate and the deposit rate needed to attract short-term funds.

approach financial change with great caution. I think this conservative approach is fully warranted. The past years are full of instances where seemingly minor tinkering with the financial system gave rise to totally unforeseen developments of great magnitude. One need only reflect on the events set in motion by the 1962 increase in commercial bank time deposit rate ceilings or the later imposition of the interest equalization tax--actions taken largely out of narrow balance-of-payments considerations--to refresh his memory on that score. Another point that should be kept in mind is that the severe problems of the thrift institutions in recent years reflected the extreme financial situation that developed during the period. Perhaps our time and energy would be better spent in improving our economic policies to avoid such financial storms than in trying to make the thrift institutions more able to weather them.

The Role of Government-Sponsored Intermediaries

HARRY S. SCHWARTZ

Mortgage and housing market activity has been a matter of national concern for several decades. As early as 1918, Congress considered proposals for a credit facility to support the residential mortgage market.¹ The creation, in 1932, of the Federal Home Loan Bank System, consisting of 12 banks, was a direct outgrowth of one of the 1918 proposals. This set of institutions can be regarded as the first permanent Government-sponsored intermediary in the residential mortgage market.

The history of the other major intermediary, the Federal National Mortgage Association, dates from 1934. Title III of the National Housing Act, June 1934, provided for the establishment of national mortgage associations to support the market for FHA-insured mortgages. The first, and so far the only mortgage association, created pursuant to this legislation came into being in February 1938 as a subsidiary of the Reconstruction Finance Corporation. Through a series of legislative changes, the Federal National Mortgage Association evolved into a privately-owned, Government-regulated, secondary market facility for Government insured or guaranteed mortgages.²

¹ See testimony in *Hearings before Senate Subcommittee on Banking and Currency* re S. 2959, 72nd Congress, 1st Session, 1931, p. 613.

² One may also call attention to the Government National Mortgage Association and the Farmers Home Administration which make contributions to residential mortgage market activity. The ensuing discussion, however, deals with the first two entities.

*This paper represents the personal views of the writer and does not reflect the position of the Federal National Mortgage Association.

Mr. Schwartz is Vice President and Economist, Federal National Mortgage Association, Washington, D.C.

The function of these intermediaries reflects two important characteristics of the mortgage market. To a large extent mortgages are a residual investment for a number of lenders—insurance companies, commercial banks, and, to a degree, mutual savings banks. The second characteristic is that the flow of savings to commercial banks, mutual savings banks, and savings and loan associations has proven quite sensitive to fluctuations in market interest rates, the savings flows rising when market interest rates are declining and falling when market interest rates are rising.³ The net effect on the availability of mortgage money of changing credit conditions, consequently, is greatly amplified in comparison with the economy as a whole. The discussion which follows traces the development of these institutions, examines the goals which they pursue, and reviews some of the issues that they have raised.

The Federal Home Loan Bank System

The legislative history of the Federal Home Loan Bank System, while lacking specific standards, does outline in rather general terms the goals that Congress had in mind.⁴ The language of the House Committee Report is fairly extensive, but the broad intent is mirrored in the following precis.

One can distinguish the desire for a mechanism to equilibrate the supply of mortgage funds in relation to demand regionally. The eradication of geographic barriers or frictions to flows of funds is an end long honored in economics, and the founders of the System deserve high marks for their adherence to this cardinal principle. In fact, the Federal Home Loan Bank Board, as the governing body of the System and other regulatory mechanisms has performed admirably in trying to achieve this goal. That it may not have succeeded completely, that is interest rates on mortgages are not everywhere uniform, is not an indictment. Flows, and rather large ones at that, have been generated which otherwise would probably not have

³ Note should be taken of the fact that policy loans at life insurance companies increase substantially when market interest rates rise introducing an impact on life insurance companies not unlike that affecting thrift institutions but to a lesser degree.

⁴ Report No. 1418, House of Representatives, 72nd Congress, 1st Session, May 1932, pp. 10 et seq.

occurred. Beyond these brief observations, this goal need not detain us further, except to note that more work could be done in this area and, although desirable, an improved inter-regional flow may not be as urgent a matter as the other goals.

There was also evident a desire to create a credit reservoir to buttress the lending capabilities of thrift institutions and to provide them with a short-term cash flow adjustment mechanism.

Most important, however, was the explicit statement that supply of mortgage credit should be regulated so as to avoid building booms and to support normal construction overtime. This is the buffer or contra-cyclical device reinforced by an injunction to prevent excesses in residential construction activity. It is this function which would appear most important to maintaining an adequate volume of mortgage credit, and it is this phase of the FHLB's activity that has been at the center of many episodes of criticism and debate.

During the 1930's the FHLB's provided advances which accounted for from 5 to 8 percent of the mortgage loans outstanding at member institutions, but on a marginal basis, supplied as much as 16 percent of the net increase in mortgage portfolio in given years. After an early postwar peak activity in 1950, both ratios declined rather sharply into the mid-sixties reflecting growth in savings which far exceeded a strong secular rise in advances outstanding.

How did advances behave in relation to the standards discussed earlier of acting as a contra-cyclical force to purely private sources of mortgages and as a device for protecting the soundness of credit in the mortgage market? Prior to 1966, advances moved with no strongly discernible pattern, and to the extent any pattern existed it tended to be procyclical and seemingly perversely so at times. A correlation of changes in advances and mortgage flows reveals a small positive coefficient of correlation with an R^2 of less than .12. Similar results are evident for correlation with housing starts. While no important relationship is supported by the correlation between advances and the need for mortgage funds, a tendency for advances to parallel the availability from other sources is apparent.

An earlier study of the FHLB's described the System as furnishing accommodation for members, or as a lender of first resort.⁵ To some extent, this was unavoidable because the FHLB's extend credit for

balancing day to day as well as more fundamental disequilibria. But the absence of any clearly articulated policy other than to protect the creditor position of the FHLB's, a practice of keeping advance rates as low as possible, and liberal repayment and renewal provisions placed the decision-making process in the hands of the borrowing members without any significant explicit review by the FHLB's.

Two Attempts at Restriction

There were only two attempts at any restriction. The first was during the Korean War and amounted to little more than changing the upper limits for advances to expand mortgage portfolios to an inconsequential degree. A brief period of restriction in 1955, announced in a style that appeared very forceful, induced a great deal of industry criticism of the Federal Home Loan Bank Board and many suggestions for reform, but produced only a slight moderation in the growth in advances. Block discusses this episode in some detail⁶ and argues, but from annual rather than monthly data, that the restriction had no effect.

On the whole Block's description of the operation of credit policy of this Government-sponsored intermediary is well taken. More important than the general accommodative posture was the cyclical variation in advances, particularly in the early 1960's. To an important extent this accommodative posture was reinforced by a desire to stimulate the economy and to use housing for that purpose.⁷ Appropos of the 1962 experience the Board wrote:

The events of 1962 also pointed up the dual role of the Federal Home Loan Bank System. On the one hand, advances by the Federal Home Loan Banks are designed to permit members to meet expanding demand not matched by savings inflow. At the same time, the Board and the several Banks have a responsibility for the soundness of credit and the argument could be made that credit should be restricted. The obvious conflict of the two goals in circumstances such as those in 1962 made the role of the Board difficult. While the Board did take steps to protect the soundness of credit, it did not take any direct action through the advance mechanism to restrain credit levels. The needs of the economy appeared to clearly exceed any imminent threat to credit quality and tipped the scale in favor of continuing existing practices during 1962.⁸

⁶ *Ibid*

⁷ *Economic Report of the President*, January, 1963, p. 49.

⁸ *Annual Report, Federal Home Loan Bank Board*, 1962, p. 6.

⁵ Ernest Block, "The Federal Home Loan Bank System," in *Federal Credit Agencies*, CMC, Prentice-Hall, 1963, pp. 160-1.

It would appear that some recognition of the contra-cyclical role of the System in relation to the mortgage market had developed. But, unlike Saturday's child, the Board and others still had much wisdom to acquire. The following table illustrates the point.

FLows OF RESIDENTIAL MORTGAGE FUNDS
1960 - 1965
(FIGURES IN BILLIONS OF DOLLARS)

	1960	1961	1962	1963	1964	1965
Home mortgages	10.4	11.7	13.5	15.7	15.4	15.4
Multifamily mortgages	1.7	2.6	2.8	3.2	4.5	3.6
Total	12.1	14.3	16.3	18.9	19.9	19.0
Less FNMA	.9	-	-	-.8	-.1	.5
FHLB's	-.2	.7	.8	1.3	.5	.7
Net flow private	11.4	13.6	15.5	18.4	19.5	17.8

Between 1960 and 1963 flows of mortgage funds to the residential market from non-Government intermediaries increased over 60 percent (55 percent for home mortgages alone). In the same interval, however, advances from the FHLB's rose from minus \$.2 billion to \$1.3 billion. This increase reflected not only the factors already mentioned but also the use of advances by some associations to accelerate the growth of book earnings so they could compete more vigorously for savings. The resulting growth, however, created problems for some of these associations because of the high risk accepted, in order to convert funds into earning assets. This occurred in the face of rising vacancies and sharply increased foreclosure rates. Grebler and Doyel have observed that:

On the whole, then, it appears that the bank System from 1961 to 1965 supplied resources in amounts not consistent with the relatively easy conditions in financial markets, with the ample flow of savings into member institutions, and with the funds available from lenders for mortgage investment and housing construction.⁹

⁹Leo Grebler and Tom Doyel, "Study of 1966 Experience," in *A Study of the Federal Home Loan Bank System*, G.P.O. 1970, p. 1333.

The Grebler-Doyel conclusion, while valid in the main, is somewhat too sweeping. It does not allow for the restrictive steps taken by the Board beginning in late 1963, on an informal basis, and put into effect in formal terms in late 1964.¹⁰ The restrictions were based largely on the quality of credit records of individual institutions but did have the effect of reducing the increase in advances substantially from the 1963 level and did impart some contra-cyclical aspect to track advances followed, although it did not fully respond to the type of criticism made by Grebler-Doyel.

More controversial than the 1963-64 action was a program instituted in April 1965 which restricted the borrowing rights of those institutions increasing dividend rates. If the institutions had a superior lending record, operated in the housing market with an average or lower rate of foreclosures, and had to raise dividends to maintain a reasonable flow of funds, the restriction was eliminated. The procedure was quite complex and is discussed in the Board's *Annual Report* for 1965.¹¹ The essence of this program was to protect the quality of credit which had deteriorated sharply at some institutions which were large users of advances and aggressive in their competition for savings. At the same time, the policy recognized the need to limit injections of funds by the FHLB's because of the flows of funds from other sources.

Controversy raged about this program because the entry point for restriction was dividend-rate policy and because its adoption was aimed at institutions with aggressive dividend rate practices. Critics focused on the dividend rate charges as a trigger and argued that it constituted an interference with market forces. They discounted the intent to protect the soundness of credit or to achieve a contra-cyclical effect.

The one element of this program which could be criticized is that it was kept in effect too long, the entire first half of 1966. But part of the reason for keeping it in effect beyond the opening months of 1966 was that some of its more adamant critics in 1965 argued in the second quarter of 1966 that its elimination could result in a savings rate war!

From the 1965 restriction program, the Board was plunged into the debacle of 1966 occasioned by the higher rate ceilings made

¹⁰*Annual Report*, 1964, Federal Home Loan Bank Board, pp. 17-19.

¹¹pp. 50-54.

effective for commercial banks in December 1965. The consequent competition from banks for savings grew apace and became particularly severe beginning in March. As for advances, they increased at an annual rate exceeding \$4 billion in the first quarter.

Forces Hampering Expansion

Had this pace been maintained throughout 1966, or at least through September, the System would have established an enviable record in support of the mortgage market. Three forces, however, hampered continuance of this policy. First, the liquidity reserves of the FHLB's, which had been clearly ample for any previous emergency and had even been criticized as being too large, appeared inadequate for the drain which seemed in prospect; second, the massive uncertainty and the need to have a strong liquidity pool to meet advances for savings withdrawal induced caution; third, the FHLB's had a debt maturity structure so short and so crowded that it impeded raising as much new money as would have been desirable.

The restriction imposed in April 1966 resulted in some slowing in advances, but from March through July advances continued to rise at a \$3 billion annual rate, but then proceeded to decline slowly, at about \$800 million annual rate, through October, and fell sharply in the closing months of the year, at about a \$3 billion annual rate. The latter development was not a choice by the Board and was in contradiction to its intent. It reflected, instead, a pattern that associations had followed before—a sharp reduction in commitments when savings flows decline so that a savings flow recovery results in a repayment of advances for a time. The same phenomenon appeared in April 1970 when advances dropped at an annual rate of over \$7 billion and only a subsidy program to induce members to retain advances avoided massive repayments.

The decline in advances into 1967 has also been a question relevant to the development of this intermediary. The decline was contra-cyclical in relation to flows of funds from other lenders, housing starts did rise very rapidly, mortgage money availability was ample enough to quench the thirst of the most vocal lobbyist for ample housing credit, and FNMA's mortgage purchase pattern paralleled the course of FHLB advances quite closely. Given the massive interruption to the mortgage commitment level and residential construction in process during 1966, the decline in FHLB

advances and FNMA purchases seems to have been inevitable. The Grebler-Doyel argument that the System failed to prime the pump in 1967 and that the repayments of advances reflected only the tighter quality of credit policy¹² seems to be off the mark. This is particularly so since repayment of advances was as prevalent among borrowing members not affected by the tighter standards as it was among those of lesser credit worthiness.

FHLBB's Primary Role to Stabilize Mortgage Markets

What emerged from the experience of the 1960's was a strong recognition by the Board that its primary role was sector stability, with mortgage credit soundness a very close second. This passage from an accommodative, procyclical lender, with occasional dabbling in general stabilization, to a force for stabilizing the mortgage market is clearly stated in the Board's *Annual Report* for 1967.¹³ Similar statements were made in a number of speeches by Board members, particularly former Chairman John Horne.

That the lessons had found their mark is evident from the large liquidity pool accumulated at the end of 1968; the advice to members to count upon prospective advances in making commitments; and the events of 1969. In that year, the FHLB's extended \$4 billion in credit to the mortgage market and supported over 40 percent of members' increases in mortgage portfolios. A correlation test for January 1966 through April 1970 shows a still positive correlation coefficient, but one close to zero for which the R² value is .06. In effect, the cocyclical pattern had almost been eliminated. Examination of a monthly chart reveals substantial contra-cyclical movement in critical periods. The statements of the new Board, since early 1969, reveal a continuing contra-cyclical propensity. It is from the posture of recent years that this mechanism needs to be considered.

The Development of FNMA

The development of FNMA followed a less fortuitous and more consistent role in terms of the objectives of acting as a buffer for the

¹² *op.cit.* pp. 1336-38.

¹³ pp. 50-52.

mortgage market. From 1954 through 1965, there were numbers of periods when its performance was clearly contra-cyclical. Two types of difficulties are apparent if one inspects a chart.

First, is a purely arithmetic problem. Once the net increases in portfolio reach a particularly low or high level, they tend to change more slowly than mortgage flows. This reflects, in part, the fact that FNMA has dealt only with Government-backed mortgages, thus limiting its scope to an important degree. It also reflects a variety of other frictions which are also part of the next problem.

Second, for most of its history so far, that is prior to October 1968, FNMA had either an indirect or a direct effect on the Federal budget. Thus, a chart would reveal a few co-cyclical movements, reflecting restraints imposed by the Bureau of the Budget in efforts to protect the fiscal program of the Government. This, of course, interfered with FNMA's explicit responsibility to support the mortgage market.

However, in contra-distinction to the FHLB's, there has been much less uncertainty about FNMA's role within the organization itself.

FNMA's role in the mortgage market is clearly consistent with sector stability or reallocation of open market credit to the mortgage market. From January 1955 through April 1968, the month before FNMA adopted its present forward commitment process, FNMA's activity produced a small negative coefficient of correlation in relation to flows of mortgage funds from other lenders, reflecting, in large part, constraints imposed by the Federal budgetary process. Although near zero, the coefficient of correlation was minus as was the coefficient of regression. An examination of a chart of monthly data will show sub-periods in which contra-cyclical activity, in relation to other lenders, was much stronger than the correlation itself suggests. This is particularly so for the years from 1961 through 1964 when the FHLB's were strongly pro-cyclical a large part of the time.

Since May 1968 FNMA's contra-cyclical role has been much clearer and statistically more significant. The coefficient of correlation is minus .87 and the coefficient of regression with mortgage flows, as the independent variable, is minus .36. The markedly improved evidence of contra-cyclical activity between the two time periods reflects two developments.

First, FNMA became a private corporation on September 30, 1968, thereby gaining exclusions from Federal budgetary processes. This meant that the restraints on its borrowing of funds were its own net worth, its borrowing ratio, and such limitations as the Secretary of Housing and Urban Development might find appropriate. As matters developed, the Secretary has seen fit to authorize FNMA to take a strong position in support of the mortgage market. At times in 1969, FNMA was committing at an annual rate of over \$10 billion a year. Its net purchases were \$3.8 billion and its gross acquisitions \$4.3 billion.

Second, in May 1968, FNMA adopted a forward commitment program in contra-distinction to its prior over-the-counter program. Even the over-the-counter program had a mild forward component since the contract allowed 45 days for delivery and occasionally 90 days. In addition, standby commitments were made for periods of 12 months but in relatively minor volume. The new commitment process, subject to an auction procedure, offers commitments for as long as 18 months and there is a weekly or bi-weekly announcement of the amount of funds available. A majority of commitments, 60 percent, have been in the six-month category and the one-year and over group has averaged about 24 percent. Thus, the uncertainties of the over-the-counter program have been eliminated, and with substantial forward commitments in hand, loan originators have not tended to cut back on lending as they often did prior to 1968.

Importance of FNMA to Mortgage Market

The importance of FNMA to the mortgage market has varied over the years. From 1955 through 1959 FNMA's purchases were never over 11.5 percent of total home mortgages (i.e. one-to-four family) and 30 percent of the FHA volume. In 1958, FNMA actually supplied mortgages rather than funds and did so again from 1961 through 1964. In 1966, FNMA accounted for more than 60 percent of the volume of FIIA-VA home mortgages, and 18 percent of all home mortgages. In 1968, as the market for FHA-VA mortgages came under pressure, FNMA took 42 percent of the rising volume of such mortgages. In 1969, FNMA took 60 percent of this group and 24 percent of all home mortgages, and in the fourth quarter of the year the ratio to all home mortgages was 50 percent and held at that level in the first quarter of 1970.

The size and importance of FNMA as a stabilizing force is apparent from these numbers. It is also important to recognize that originators of mortgages are reluctant sellers to FNMA. It charges for commitments, requires stock purchases and stock retention, and imposes other costs that lead mortgage bankers in particular to prefer deposit institutions or insurance companies as outlets. Thus, FNMA received offers to sell only as other lenders reduced forward commitments, and currently receives offers for commitments in similar environments. It is important to bear in mind that FNMA does not play an important role until others depart or indicate their intention to depart from the mortgage market.

Some Issues

Can these two intermediaries, which jointly raised \$7.2 billion in credit markets or about 8 percent of total funds raised or about 12.5 percent of capital market and commercial paper flows in 1969, negate the effect of monetary and fiscal policy? An over-simplified set of assumptions would hold that monetary policy sets the overall volume of available credit or loanable funds and various competing entities determine its distribution among sectors. With a pre-determined, fixed supply of loanable funds these institutions merely act as reallocative mechanisms and have no effect in negating monetary policy. This answer somehow seems too pat.

Ample evidence is available that loanable funds are to a degree a function of interest rate levels although the volume of liquidity tends to be dominant. Economic units have the option of holding money or securities and shifts can and do occur between the two. Witness the fact that the income velocity of money has risen from about two in 1946 to almost five currently. The path has not been entirely smooth, with significantly sizeable fluctuations from year to year positively correlated in direction with interest rate changes. The argument could be made, therefore, that an avid issuer of securities could entice loanable funds from the stock of liquidity held by economic units thereby raising the velocity of money and offsetting monetary policy.

If the two intermediaries under discussion here are to have such a consequence then three other conditions must pertain. First, they need to be of sufficient size to have a substantial impact. Second, the elasticity of the supply of loanable funds must be such that increases

in credit demand induce increases in the supply of loanable funds which are significant. Third, we need to be certain that the absence of the FHLB's and FNMA from the fray would not result in other security issuers replacing them.

Importance of Intermediaries

As for the size of these intermediaries in relation to the total credit and equity volume, they have not been important, except in two critical years. Their only year of really substantial size was 1969. Does an 8 percent addition to flows constitute a critical margin? Certainly, if the total credit raised had been 8 percent less, then spending would have been lower, all other forces remaining unchanged. How much lower is an open and perhaps unanswerable question. It would appear, however, that a reduction in spending of \$8.2 billion expanded by some investment multiplier could have been recorded.

Second, the interest elasticity of loanable funds, with interest rates rising as credit demand increases, must be greater than zero and close to unity through the entire range of the supply curve for loanable funds. In effect, a rise in credit demand induces an increase in interest rates which causes a shift by economic units from idle balances to securities almost equal to the increase in credit demand.

While supply curves for loanable funds may have substantial elasticity at low interest rates, the elasticity declines as interest rates rise. The supply curve approaches a near zero elasticity as interest rates reach increasingly higher levels. The more inelastic the supply curve, the less will be the effect of an increase in the quantity of credit demanded on the quantity supplied. Yet, the proposition under discussion argues that elasticity of credit supply is large enough to negate monetary restraint.

This would be a strange world, indeed. For no matter what monetary policy turned out to be, increases in credit demand would attract sufficient supply until interest rates were so high and liquidity so thin that the supply of credit and, therefore, investment would shrink sharply.

In fact, the evidence denies this kind of a world. Funds raised in credit markets tend to be greater, under the circumstances of recent decades, when monetary policy is relatively easy rather than when it

is tight. The years 1966 and 1969 are characterized by reduced rather than increased credit availability; that is, restriction in the growth of money can offset any observable interest elasticity in the supply of loanable funds. The assumption that these institutions negate monetary policy seems unsustainable, although they may complicate the process.

As for the third point, the retreat of these institutions from the market may not solve the problem. Other borrowers may appear to take their place. One of the reasons given for the failure of bond yields to decline substantially so far this year is the entry of borrowers who had been waiting for a better market. If others do enter to take the place of these intermediaries, the reduction in credit demand could be zero or some number not importantly greater than zero. For example, in 1966, these intermediaries took less than 5 percent of the funds raised in credit and equity markets. Although interest rates were lower than in 1969, many of the characteristics of 1969 were evident that year. But the decline in total funds raised was less than 3 percent in 1966 compared with almost 8 percent in 1969.

There are those who argue that these intermediaries may indeed not have an important effect on the total amount of credit raised, but that their reallocation of funds tends to hurt the economy. This, it is said, results from a restraint on business capital spending as credit is diverted to the housing market. To the extent that such a diversion takes place, it may be desirable rather than damaging. Business overspending on capital in boom periods is endemic. At the same time, the restriction of housing in such periods often leads to shortages. These intermediaries may, although quite fortuitously, prevent misallocation of resources.

Insofar as fiscal policy is concerned, the issue is one of definition and relevance. The Federal budget can be defined to include or exclude a significant variety of activities. In addition, the financing by sponsored agencies or Government agencies will, if large, always have a market impact. The issue of where to draw the line around Government expenditures is beyond the scope of this paper. What is significant is how one views the budgetary position of the Government. If the view is taken that fiscal policy should bring balance to the overall demand and supply for goods and services or to the overall demand for investment in relation to savings, then the budget is to be used as a counterweight to the private sector, however defined. The need for a deficit or surplus would be based on what the

analysis of the relevant demand-supply relationship revealed. The degree of surplus or deficit would be related to the budget definition employed, and the more that one includes within the budget the smaller might be the needed deficit or surplus to achieve balance in the appropriate demand-supply relationship. Selecting one or more agencies, because of Government sponsorship, as the critical focus can be misleading. Any imbalance may be in direct Government expenditures and related revenue or in the private sector. If the role of the agencies is emphasized to the exclusion of other sectors of the economy, then the real problem can be hidden from view.

Another hypothesis which has been put forward recently appears to be the converse of the first line of reasoning. It argues that these intermediaries absorb savings that would otherwise be placed with thrift institutions. By so doing, the argument holds, there is no net gain for the mortgage market.

The key assumption here is that the supply of loanable funds is inelastic. Furthermore, it assumes that only the issues of these intermediaries attract savings away from thrift institutions. It also holds that thrift institutions have a propensity for mortgage investments approaching unity in relation to savings flows.

We can pass the assumption that the supply of loanable funds has a zero elasticity. Previous comments suggest the elasticity is other than zero, and proponents of the hypothesis may argue that this is not part of their position.

The second assumption can be rebutted on the basis of experience in other tight money episodes. Flows to thrift institutions in the 1956-57 period averaged slightly less than in 1955 in contrast to substantial increases in earlier years. The amount of funds raised by the two intermediaries averaged less than 2 percent of all funds raised, and residential mortgage flows declined substantially. In 1959, these intermediaries took about 3.25 percent of all funds raised; savings flows declined 10 percent; residential mortgage credit actually increased. The 1966 experience is more revealing. Federally-sponsored intermediaries absorbed just under 5 percent of total funds raised; savings flows declined 50 percent; residential mortgage flows declined 30 percent.

What these figures demonstrate is that flows to thrift institutions are adversely affected even when the intermediaries are relatively minor forces in the market. There seems to be only a modest relationship between savings flows and intermediary activity. For example, in 1969, the Government-sponsored intermediaries took

about 8 percent of all funds raised and savings flows to thrift institutions declined about 40 percent. Yet, in 1966, these flows dropped 50 percent, even though the intermediaries were much less active. Even more important is the fact that in 1969 residential mortgage volume (both home and multi-family) increased over 6 percent against a decline of 30 percent in 1966.

The hypothesis fails on several grounds: first, the absence of significant correlation between the taking of funds by the FHLB's and FNMA and savings flows; second, these intermediaries supply more funds to the mortgage market than they allegedly take from savers of thrift institutions. The 1969 data shows that households acquired \$5.3 billion in agency issues out of \$9.1 billion issued by non-budget agencies. Assuming that the \$5.3 billion is accurate and all of it represented a drain on thrift institutions, the investment in these securities for households accounts for only 58 percent of the funds raised by the intermediaries. Third, agency securities are not the only vehicle for household investment. Households acquired \$8.5 billion in direct Government obligations in 1969. This is reinforced by the fact that households also acquired \$8.7 billion in debt obligations of state and local governments and corporations. Thus, agency securities are not the only competitors of thrift institutions. Finally, the much greater stability of the mortgage market in 1969 than in 1966 can be attributed directly to the efforts of these intermediaries.

The hypothesis can be restated in terms that hold these intermediaries responsible for increasing interest rates just enough to cause a reduced flow of savings to thrift institutions. It would be disingenuous to argue that these intermediaries have no effect on interest rates. However, even if one assumes that their withdrawal from the market would not be offset by other issuers, the impact on interest rates would probably not be enough to stop drains at thrift institutions. As evidence, one can hark back to 1966 or even to the massive purchases by households of other securities in 1969.

The principle, perhaps, is more sharply brought into focus by the events since February when savings flows to thrift institutions have improved very substantially even though the two Government-sponsored intermediaries have remained active in the credit markets. What this suggests is that the aggregate of all credit demand, the supply of loanable funds, monetary policy, and even expectations have to be taken into account in evaluating interest rate changes. Focusing on just these intermediaries can lead to seemingly logical but erroneous conclusions.

The hypothesis that these intermediaries are a dominant factor in causing savings drain may appear to be a purely *ad hominem* argument. In mitigation, however, it should be recognized that continued expansion of the relative size of these intermediaries could have a greater impact on credit and savings markets than has so far been apparent. It should not be concluded that, since an 8 percent share in funds raised has caused little difficulty, there is no upper limit to the amount of funds these intermediaries can take. It may not be possible to specify such a limit and there probably is no fixed threshold. However, the more these intermediaries attempt to take from the market the greater the likelihood that they could have some adverse effects on their own objectives.

This last observation brings us to the crux of the question about the function these intermediaries serve and what we should expect of them.

The desire to use the mechanisms as tools for general economic stabilization has already been mentioned. There is no necessary coincidence between a need for general economic stimulation and a need for supplementing flows to the mortgage market, nor is there any coincidence between the need to restrain economic activity and limit activity in the mortgage market. In fact, the proper strategy may be the other way around.

In many periods of economic slack, the mortgage market may be amply supplied with funds. Indeed, there may be periods of general economic slack in which the housing stock is adequate or in surplus. General economic conditions and economic conditions by sector may not be and have not been in phase for all sectors at all times.

Conversely, general restraint may not necessarily indicate that instrumentalities designed to assist the housing market should reduce or limit their activity. The record demonstrates rather clearly that general credit restraint has a more than proportionate impact on housing and a less than proportionate impact on business investment. Thus, if housing supply is in balance or especially if it is in short supply, these instrumentalities should act to offset that stringency. Any funds attracted away from business investment may ameliorate the chronic tendency for business to overdo capital spending. The role of these intermediaries has to be judged on an *ad hoc* basis given the conjunction of factors in any given cyclical setting.

Nor is it wise to regard credit as the sole and indispensable cure for each and every malaise. One of the participants in Federal Home

Loan Bank System policy formation in the late 1930's related the efforts of that instrumentality to stimulate housing activity by urging member institutions to take advances and pursue mortgage loans more aggressively. This presumed an underlying demand for housing which could not be expressed solely because of the lack of credit. Yet, that was a period when income and expectations about income were the major restraints on housing activity. Expanding an already adequate credit supply in order to reduce mortgage interest rates slightly more seems a rather remote and ineffective way to try to offset depressed income and expectations.

Finally, it is well to look at these intermediaries and their future potential if the notion that they are designed to provide stability to the mortgage market is accepted and the record of 1969 is examined, the conclusion may be that the magic wand is now in hand and no further thought needs to be given to the subject.

Fundamentally, these two entities provide tactical tools for dealing with mortgage market problems. They are means for reallocating the volume of savings and such liquidity in being that can be attracted to securities. These entities do not create money or even savings. As the London *Economist* pointed out in its January 31, 1970 issue, "It is the shortage of money which pushes out (mortgage) borrowers." There is the crux of the issue--money, used in the sense of total credit availability.

The mortgage market needs the assistance of these intermediaries when the demand for credit is outrunning supply. Obviously, they can provide some correction for this imbalance, but one should not conclude that this process can be maintained indefinitely. If the savings-investment equation tends to be overbalanced on the investment side, then interest rates must rise with all the apparent consequences for the mortgage market. What is more, general economic policy which permits this tendency toward imbalance to become cumulative could defeat the efforts of these intermediaries.

While mortgage activity was well maintained in 1969, the volume of funds supplied by sources other than the two intermediaries fell by more than 50 percent between the fourth quarter of 1968 and that of 1969. To maintain a continuing demand for advances by member institutions, the Federal Home Loan Bank Board had to institute a subsidy. Had savings flows continued to fall, the ability of the intermediaries to further expand their assistance would have been severely tested, particularly since the market for agency securities would have been less and less favorable.

As a summary observation, the potential of these intermediaries has to be kept in perspective. The flow of mortgage funds through certain private lenders being a residual moving inversely to general credit conditions, the Government-sponsored intermediaries are needed most in tight money periods. That they can make a substantial contribution to mortgage market stability is evident from the 1969 experience. It is important to avoid the conclusion that they can deal successfully with all degrees of stringency no matter how long or short their duration. These instrumentalities provide us with tactical tools for combating relatively brief episodes of severe credit market imbalance, or the need for a continuing moderate supplement to move traditional sources of funds. Continuing imbalance of increasing severity could offset their effectiveness. Economic policy-makers should not assume that a tactical tool can substitute for appropriate strategic decisions. The crux of the problem is restoring or maintaining a savings-investment balance at interest levels which avoid massive diversion of funds from the mortgage market. This requires above all an appropriate fiscal policy which avoids fear of rapid inflation or induces expectations of ever rapidly expanding demand for capital goods.

and, second, to speculate on the functioning of the new system of housing finance toward which these developments are rapidly leading us.

Structural Changes in the Mortgage Market

Perhaps the most basic change in our attitudes toward housing and the mortgage market can be attributed to the establishment of a quantitative 10-year housing goal, calling for the production of 26 million new or substantially rehabilitated housing units in the Housing and Urban Development Act of 1968. Since 1949, the United States has had a statutory national goal of "a decent home and a suitable living environment for every American family." However, it was not until the passage of the 1968 Act that this objective was translated into a definite quantitative target. While the 1968 Act did not establish a set of policy instruments to be used to achieve the target, it did require the preparation by the Secretary of Housing and Urban Development of annual reports on national housing goals, and two such reports have thus far been prepared. The existence of a statutory quantitative national goal and the requirement of annual reports indicating the actions being taken to achieve that goal have, I believe, served to energize the activities of the Federal Government relating to housing and have led to innovations that would probably not otherwise have taken place. Whether it is desirable to have a specific national target for homebuilding alone among the many desirable activities that compete for our limited national resources is an issue on which I shall not comment.

In the wake of the Housing Act of 1968, a number of institutional and behavioral changes relating to the Federal Government's role in the mortgage market have already occurred, and a number of further innovations are in prospect.

First, the 1968 Act itself provided for an important reorganization of FNMA. FNMA was divided into two parts: A reorganized FNMA, which was constituted as a Government-sponsored private corporation to take over the responsibility for secondary market operations; and GNMA, which was established as an institution to be operated and financed by the Federal Government to continue the special assistance and management and liquidating functions of old FNMA. In May 1968, prior to the reorganization and in anticipation of it, FNMA changed its method of conducting secondary market

The Role of Government Intermediaries

WARREN L. SMITH

The most striking development in the residential mortgage market in recent years has been the massive support provided directly or indirectly by governmental or quasi-governmental agencies. Table I shows the net increases in residential mortgage debt and the portion accounted for by (a) net acquisitions of residential mortgages by the Federal Government (largely GNMA and its predecessor, the special assistance and management and liquidating functions of old FNMA) and by FNMA, and (b) the change in advances by the Federal Home Loan Banks to savings and loan associations. Over the four and one half year period from the beginning of 1966 to mid-1970, Federal support, defined as the increase in mortgage holdings of the Federal Government and FNMA plus the increase in FHLB advances, amounted to 26.1 percent of the total increase in residential mortgage debt. In the latest year and a half--from the beginning of 1969 through the first half of 1970--Federal support amounted to 47.1 percent of the increase in mortgage debt. The recent volume of Federal support is much greater than was forthcoming in earlier years; from 1954 through 1965, Federal support averaged only 5.5 percent of the total increase in residential mortgage debt and in only two years did it exceed 10 percent.¹

There can be no doubt that a portion of this exceptionally high level of Federal support for the mortgage market in the last few years can be attributed to a desire to offset a part of the disproportionate impact of restrictive monetary policy on the housing sector. At the same time, however, I believe a substantial part of it can be attributed to a change in the importance attached to housing among our national goals and to changes in the structure and functioning of the mortgage market, the full implications of which we have not yet seen. In this paper, I shall first attempt to sketch the structural changes in the mortgage market as they relate to the establishment of a greater role for governmental or quasi-governmental intermediaries,

¹These two years were 1957 (13.2 percent) and 1959 (18.0 percent).

Mr. Smith is Professor of Economics, University of Michigan, Ann Arbor, Michigan.

TABLE 1

NET INCREASE IN RESIDENTIAL MORTGAGE DEBT
AND PORTION ACCOUNTED FOR
BY FEDERAL SUPPORT ACTIVITIES
1966-1970
(AMOUNTS IN BILLIONS OF DOLLARS)

YEAR	(1) Total increase in residential mortgage debt ^a	(2) Net acquisitions by U.S. Govern- ment ^b	(3) FNMAL ^c	(4) Change in FHLB Advances to Savings and Loan Associations	(5) Total Federal Support	(6) Ratio of Federal Support to Total Increase in Mort- gage Debt [(5) ÷ (1)] percent
1966	\$13.5	\$0.9	\$1.9	\$0.9	\$3.7	27.4
1967	16.1	0.9	1.1	-2.5	-0.5	-
1968	18.8	1.1	1.6	0.9	3.6	19.1
1969	20.0	0.8	3.9	4.0	8.7	43.5
1970 ^b	15.5	0.7	5.5	2.6	8.7	56.1

^a Includes the categories, "home mortgages" and "multifamily residential mortgages" as shown in the Federal Reserve flow of funds accounts.

^b First six months, at seasonally adjusted annual rate.

^c Prior to September 1968, data relating to the special assistance and management and liquidating functions of former FNMA are included under U.S. Government while secondary market operations are included under FNMA. Beginning with the division of former FNMA into GNMA and new FNMA in September 1968, GNMA is included under U.S. Government.

Source: *Flow of Funds Accounts, 1945-1968: Annual Total Flows and Year-End Assets and Liabilities, March 1970; and Flow of Funds, Seasonally Adjusted, 2nd Quarter, 1970* (preliminary, August 13, 1970).

operations by substituting the so-called "free-market" system of making commitments to buy mortgages on the basis of weekly auctions for the previous system based primarily on outright purchases at posted prices.

These changes in the structure and operations of FNMA have permitted a substantial increase in the scope and effectiveness of FNMA's operations. The "free-market" system has enabled the organization to focus its support at the important commitment stage where it does the most good in sustaining residential construction. It has also permitted FNMA to determine the volume of the support it will provide while letting the market determine prices. The shift of FNMA to private auspices has taken its operations out of the Federal budget, thereby removing the budget constraint and enabling it to expand the scale of its operations substantially. FNMA's portfolio of mortgages has increased from \$6.5 billion in May, 1968, when the free market system went into operation to \$14.1 billion in July, 1970; and its outstanding commitments have increased from \$0.5 billion to \$4.7 billion over the same period.

GNMA has played an important role in the financing of the various Federal programs for providing housing to low- and moderate-income families, receiving important assistance from FNMA in carrying out this task.² In addition, the 1968 Act authorized GNMA, acting as an agent of the Federal Government, to guarantee principal and interest payments on securities issued by private institutions and backed by pools of FHA-insured or VA-guaranteed mortgages. Operations under this program have already begun and give promise of becoming more important in the years ahead.

² Since GNMA's operations fall within the Federal Budget, its lending activities add to the Federal deficit. In order to minimize the budgetary impact of the financing of Federal housing programs, a cooperative arrangement (referred to as the "Tandem Plan") has been worked out between GNMA and FNMA. The procedure works as follows: In the financing of multi-family projects of nonprofit sponsors which provide either rent supplements or interest subsidies for lower-income families, GNMA issues commitments to buy mortgages at par, while FNMA undertakes to buy them at a special price which is equal to the market price plus an adjustment for the fact that the costs of servicing these mortgages are lower than for single-family home mortgages. When the time comes for the financing to be carried out, if FNMA's special price has reached par, FNMA purchases the mortgages. If, however, FNMA's special price is below par, GNMA buys the mortgages at par and resells them to FNMA at the special price. Thus, GNMA's net cash outlay, which is a charge against the Federal budget, is limited to the difference between par and FNMA's special price.

No doubt as a result in large part of the commitment to a numerical national housing goal contained in the Housing and Urban Development Act of 1968, the Federal Home Loan Bank System has recently come to be much less dominated by its regulatory responsibilities and more concerned about supporting homebuilding through the medium of expanding its advances to member savings and loan associates. During the 10 months from March 1969 through January 1970, when restrictive monetary policy was imposing a severe constraint on net inflows of deposits to savings and loan associations, the Home Loan Bank System increased its outstanding advances by \$4.5 billion. This expansion of advances, together with a reduction of \$2.4 billion in holdings of liquid assets in part permitted by liberalization of FHLB requirements, enabled savings and loan associations to increase their holdings of mortgages by \$7.3 billion despite an increase of only \$0.6 billion in their deposit liabilities. When deposit inflows to associations began to pick up in the spring of 1970, the Federal Home Loan Bank System undertook a new program involving preferentially low interest rates on advances designed to encourage associations to postpone repayment of advances and instead to use the renewed inflows of deposits to expand mortgage loans. This program was undertaken in anticipation of the passage of the Emergency Home Finance Act of 1970, Title I of which authorized the appropriation of funds to subsidize a program of low-cost advances by the Home Loan Bank System. The Act was signed into law by President Nixon on July 24 of this year.

New System of Housing Finance

The Emergency Home Finance Act of 1970 contains two additional provisions, either or both of which may prove to be of major importance in the future development of the mortgage market. First, Title II authorizes FNMA for the first time to conduct secondary market operations in conventional mortgages. Second, Title III establishes a Federal Home Loan Mortgage Corporation (FHLMC), which is, in effect, a subsidiary of the Federal Home Loan Bank System; this new Corporation is also authorized to conduct secondary market operations in conventional mortgages, financing its operations by the sale of its own securities. The Corporation is also empowered to buy and sell FHA-insured and VA-guaranteed mortgages.

The developments I have been describing constitute the building blocks of a new-and, I believe, substantially improved-system of

housing finance in the United States which can be expected to come to maturity in the next decade or so. The essence of the new system lies in the development of a number of bridges connecting the mortgage market with the open securities markets. It is possible to sort out eight links of this kind which already exist or may develop under the new system.

1. The Home Loan Banks may make advances to savings and loan associations, enabling these institutions to expand their holdings of mortgages in excess of their inflows of deposits. These advances are financed by sales of securities in the open market by the Federal Home Loan Bank System. This link has existed and has been used to a limited extent for many years; its use has been expanded substantially in the last two or three years as a result of the aggressive attitude of the Federal Home Loan Bank Board. However, it seems likely that its use in the future as in the past will be largely confined to the offsetting of the effects of declines in inflows of deposits during periods of restrictive monetary policy. Any effort to expand the volume of advances secularly as a means of channeling additional funds into housing is likely to be unsuccessful, because of the traditional tendency of many savings and loan associations to eschew continuous indebtedness to the Home Loan Banks.

2. FNMA has the power to purchase FHA-insured and VA-guaranteed mortgages, financing these purchases by selling its own securities in the open market. As indicated above, it currently chooses to exercise this power largely through the "free-market" system of auctioning mortgage commitments, although it also purchases a much smaller quantity of mortgages to finance federally assisted housing, either directly or through GNMA. This link between the bond and mortgage markets has also existed for many years, but the scale on which it can be used has been vastly expanded since the Housing and Urban Development Act of 1968 changed the status of FNMA to a private corporation, thereby freeing it from a severe Federal budget constraint.

3. Instead of selling its own securities to finance its acquisitions of FHA-insured and VA-guaranteed mortgages, FNMA may issue mortgage-backed securities against pools of these mortgages, obtaining from GNMA guarantees of payment of principal and interest on the securities. This method of financing has already been used by

FNMA, which currently has \$1 billion of such mortgage-backed bonds outstanding. As yet, it is too early to tell whether it will prove to be less expensive for FNMA to finance its operations by issuing its own debt or by issuing mortgage-backed securities. FNMA securities are not guaranteed by the United States but are general obligations of, and are guaranteed only by, FNMA. However, FNMA has a high financial rating and has the power, in emergencies, to borrow directly from the U.S. Treasury to the extent of \$2.25 billion. Thus, it is not clear that the GNMA guarantee is capable of making mortgage-backed securities more attractive to investors than FNMA's own securities. Under some circumstances, however, there may be an advantage in the use of mortgage-backed securities, since these securities do not count against the debt limit of FNMA, which has currently been set by the Secretary of Housing and Urban Development at 20 times the sum of FNMA's capital and surplus.

4. GNMA may acquire mortgages in pursuance of its special assistance function, financing these purchases by selling its own notes to the U.S. Treasury, which obtains the necessary funds by borrowing from the public through the issuance of direct Treasury debt.

5. GNMA is prepared to guarantee mortgage-backed securities of the "pass-through" type--i.e., on which principal and interest are transmitted to the investor as collected--to be issued by mortgage lenders on the basis of pools of FHA-insured and VA-guaranteed mortgages. Indeed, an amount somewhat in excess of \$50 million of these securities has already been issued. The securities are sold on a negotiated basis to private investors in a manner somewhat similar to the private placement of corporate securities. Pass-through securities can be issued by, for example, mortgage companies on the basis of relatively small pools of mortgages (minimum \$2 million) and are intended to tap new sources of mortgage funds, such as private pension and trust funds and state-and-local government pension funds.

6. Under Title II of the Emergency Home Finance Act of 1970, FNMA may purchase conventional mortgages from private holders, financing its purchases by sale of its own securities in the market. The legislation includes safeguards designed to insure the maintenance of the quality of conventional mortgages included in

FNMA's portfolio and to assure that the funds disbursed by FNMA in purchasing conventional mortgages will go to lenders who are currently participating in mortgage lending activities.

7. The FHLMC created under Title III of the Emergency Home Finance Act of 1970 is specifically authorized to purchase, or make commitments to purchase, conventional mortgages from savings and loan associations or from other financial institutions (e.g., commercial banks) whose deposits or accounts are insured by an agency of the United States. It seems clear that the main activity envisaged for the Corporation is the purchase of conventional mortgages from savings and loan associations with these purchases being financed by issues of the Corporation's own debt. The Corporation provides, in effect, an alternative channel, in addition to the traditional advances mechanism, by which the Federal Home Loan Bank System can provide additional funds to savings and loan associations for mortgage lending, tapping the open securities markets to finance the operation. This new channel has an important advantage over advances by the Home Loan Banks as a means of adding permanently to the funds available for mortgage lending, because advances add to the liabilities of the savings and loan associations, which must, in principle at least, ultimately be repaid, whereas sales of mortgages to FHLMC do not increase such liabilities. The distinction here is somewhat akin to that between "owned reserves" and "borrowed reserves" in international finance.

8. FHLMC is also authorized to purchase FHA-insured and VA-guaranteed mortgages and to use these mortgages as a basis for issues of mortgage-backed securities with a GNMA guarantee. This provides an additional channel by which FHLMC can tap the bond market to obtain funds to be injected into the mortgage market, presumably in the main through savings and loan associations.

There are other possible channels through which the bond market might be tapped to obtain funds for mortgage lending. For example, under the provisions of the Housing and Urban Development Act of 1968 which established the mortgage-backed securities program, it would be possible, say, for a group of savings and loan associations to establish a pool of FHA-insured and VA-guaranteed mortgages, against which it would issue mortgage-backed bonds (as distinct from the pass-through type of mortgage-backed securities) with a GNMA

guarantee. However, all issues of mortgage-backed securities must have the approval of the Treasury, and it seems likely that the Treasury will want to avoid a great proliferation of small issues of these securities which would not be conducive to the development of an effective market for them. Thus, for the moment, it appears that the issuance of mortgage-backed bonds is likely to be carried out largely by FNMA as one means of financing its portfolio of mortgages. Whether it will even be important here depends upon whether experience demonstrates that FNMA can raise funds more cheaply by issuing mortgage-backed bonds than by issuing its own securities. FHLMC may also issue mortgage-backed bonds with a GNMA guarantee; indeed, as this is being written the Corporation is in the process of accumulating a pool of FHA-insured and VA-guaranteed mortgages in preparation for its first issue of such bonds. However, it seems likely that the Corporation will ultimately focus mainly on what appears to be its primary function, namely, providing support for the conventional mortgage market, financing itself chiefly by issuing its own securities.

Although thus far its extent has been quite limited, it is possible that the pass-through type of mortgage-backed security with a GNMA guarantee has the greatest promise for attracting new sources of funds, such as pension and trust funds, into the mortgage market on a significant scale. The reason is that it permits securities to be designed individually on a negotiated basis to meet to the maximum possible extent the preferences of these institutions.

Assuming that the secondary market facility for conventional mortgages under the auspices of FHLMC proves workable and develops on a substantial scale, I would expect the use of Federal Home Loan Bank advances to recede to its old function of meeting temporary liquidity needs of savings and loan associations resulting primarily from deposit withdrawals. Indeed, it might be desirable to "fund" a portion of the advances now outstanding through purchases of mortgages by FHLMC with the associations using the proceeds to repay advances. This approach seems preferable to the cumbersome procedure provided for in Title I of the Emergency Home Finance Act of 1970 of giving a Federal subsidy to the Federal Home Loan Bank Board to enable the Home Loan Banks to lower the interest rates on these advances as a means of persuading the savings and loan associations not to repay them.

Implications of the Emerging System of Mortgage Finance

By exploiting the linkages between the bond market and the mortgage market that are described above, I believe the financing of housing in the United States can be improved in some very important ways. The most far-reaching changes are likely to occur in the response of housing and the mortgage market to changes in credit conditions brought about by monetary policy.

There can be little doubt that restrictive monetary policy has a disproportionate--indeed, discriminatory--effect on homebuilding under the present institutional set-up. In part, the response of residential construction to changes in monetary conditions reflects the fact that the desired stock of housing depends upon mortgage interest rates. To the extent that housing demand responds disproportionately to changes in monetary policy on this account, there is nothing about the result that can be described as "discriminatory" toward housing. But it seems quite clear that during the postwar period, only a part--and at times probably a relatively small part--of the response of homebuilding to restrictive monetary policy can be attributed to the demand-restraining effects of high mortgage interest rates. Two other major sets of forces appear to be involved.

1. When credit tightens and market interest rates rise, commercial banks have an incentive to raise interest rates on savings deposits to attract or hold funds which they need to meet the burgeoning credit demands of their customers. If banks are permitted to raise savings deposit rates, they will pull funds away from savings and loan associations. Even if Regulation Q ceilings are used to hold down rates on bank savings deposits, as has recently been the case, the rise in open-market interest rates may induce savers to channel their savings flows away from savings and loan associations and toward direct investment in securities. Since savings and loan associations are heavily specialized in mortgage financing, such a process of "disintermediation" may drastically reduce the availability of mortgage funds. And since savings and loan associations engage heavily in the practice of "borrowing short and lending long," they often have such a large portfolio of old mortgages made at an earlier time when interest rates were lower, that they are slow to benefit from rising interest rates, making it difficult for them to raise rates on their deposits to keep them in line with market rates, even if the regulatory authorities will permit them to do so.

2. The existence of ceilings on mortgage interest rates under state usury laws--and, on occasion, of unrealistically low ceiling interest rates applicable to FHA-insured and VA-guaranteed mortgages--has at times kept mortgage interest rates from rising fully in pace with yields on competitive investments, such as corporate bonds, thereby causing investors who hold diversified portfolios, such as life insurance companies and mutual savings banks, to shift the direction of their investments away from mortgages and toward the bond market.

It seems clear that as a result of these forces, mortgage interest rates have not served to clear the mortgage market during periods of monetary restraint. Credit rationing has played an important part in matching demand and supply, with the result that some potential home buyers who would have been willing to pay the current interest rate for mortgages have been unable to obtain credit.

A great improvement in the functioning of our financial system would be accomplished if we could find a way to move from the present cumbersome and inefficient system of mortgage finance to a system in which mortgage interest rates moved in such a way as to clear the market. Under such a system all potential mortgage borrowers who were willing to pay the going interest rate would be able to find accommodation, and the elements of arbitrary rationing of mortgage funds that now exist would be eliminated.

A Market Clearing Arrangement for the Mortgage Market

The development of links between the bond market and the mortgage market of the kind described earlier in this paper provides, I believe, a mechanism which will make it possible to move toward a market clearing arrangement in the mortgage market. However, so many new institutional devices have been introduced into the mortgage market that it seems necessary to develop some kind of plan according to which they can be combined into a coherent system. Let me suggest one way of fitting together the pieces of the jigsaw puzzle.

First, every effort should be made to move toward a system in which mortgage interest rates are fully flexible. Title VI of the Emergency Home Finance Act extends through January 1, 1972, the provisions enacted in May 1968, which give the Secretary of Housing and Urban Development the power to set the maximum interest rates

on government-supported mortgages at any level he deems necessary to meet market conditions. As I understand it, the intention is to use the authority provided under this legislation to put into effect on a trial basis the dual market system for FHA and VA mortgages that was recommended by the Commission on Mortgage Interest Rates.³ This system should provide sufficient flexibility to enable the market to work effectively, and hopefully it may prove to be a transitory arrangement in the process of moving toward complete elimination of the rate ceilings. It is also necessary to continue the efforts to achieve liberalization of the usury laws applicable to mortgage interest rates in many states.

Second, I would like to see a vigorous development of secondary market operations in conventional mortgages by the new FHLMC. There are many problems involved in getting such a program under way--problems that arise mainly because conventional mortgages are not homogeneous with respect to risk and other investment properties. Assuming these problems can be solved, I would like to see the operations of the Corporation develop along the following lines. FHLMC would establish a schedule of purchase prices for mortgages having different maturities and bearing different interest rates. The yields corresponding to these purchase prices would bear a stable and consistent relationship to the current borrowing costs of the Corporation. The schedule of purchase prices would be changed frequently--perhaps once a month--as borrowing costs changed. The Corporation would stand ready to buy such mortgages as were offered to it by savings and loan associations at this schedule of prices.

Under such a system, potential mortgage borrowers should always be able to obtain accommodation, provided they were willing to pay the prevailing interest rate. Suppose restrictive monetary policy caused "disintermediation" with the result that inflows of funds to savings and loan associations were curtailed. In such circumstances, savings and loan associations could set interest rates on new mortgage loans which were above the interest rates at which FHLMC would buy existing mortgages by an amount sufficient to cover the costs associated with sales of such mortgages to FHLMC. The associations could then make new loans at these rates, selling mortgages out of

³Report of the Commission on Mortgage Interest Rates to the President of the United States and to the Congress (Washington: U.S. Government Printing Office, August 1969), pp. 63-73.

their existing portfolios to obtain the funds.⁴ If there was excess demand at the existing schedule of rates, FHLMC would experience an increase in its holdings of mortgages which it would have to finance by selling more of its own securities. As the volume of its outstanding debt increased, its cost of borrowing would rise, pushing up interest rates on mortgages until the excess demand for mortgages was eliminated and the market was in equilibrium. The adjustments to a marked increase in the demand for living space and an associated increase in the demand for mortgage credit with no change in the underlying credit situation would bring a similar set of adjustments into operation.

It would be possible to make the operations of the system symmetrical by having FHLMC sell mortgages out of its portfolio when market conditions warranted, using the proceeds to repay a portion of its debt. This could be accomplished by having it post a schedule of selling prices for mortgages that was somewhat higher than its schedule of buying prices. The yields corresponding to the selling prices might be somewhat lower than the current borrowing costs of the Corporation. Under such an arrangement, if housing demand should slacken at a time when inflows of deposits to savings and loan associations were large, instead of mortgage interest rates falling enough to insure that the entire inflow of funds to savings institutions found lodgment in the mortgage market, a different sequence of events would occur. As soon as mortgage interest rates fell enough relative to other capital market rates to be slightly below the yields corresponding to the posted selling prices of the Corporation, savings and loan associations would begin to buy old mortgages from the Corporation rather than new ones in the market. This would put FHLMC in possession of funds which it could use to retire a portion of its debt. This would serve to inject funds into the capital market generally, bringing down the general level of interest rates, rather than concentrating the downward pressure entirely on the mortgage market.

⁴It might appear that a problem could arise due to the reluctance of savings and loan associations to take capital losses on sales of old mortgages. However, this could easily be avoided by selling only recent originated mortgages to FHLMC. Indeed, the Emergency Home Finance Act of 1970 imposes strict limitations on the authority of FHLMC to purchase conventional mortgages which were originated more than one year prior to the date of purchase.

It should be recognized, however, that there are asymmetries in the system that make it less important to have FHLMC sell mortgages when interest rates decline than to buy them when interest rates rise. During periods of relatively low interest rates, the mortgage market clears under the present system. Moreover, if mortgage demand declines and interest rates fall, there is presumably some incentive for savings and loan associations to lower the interest rates on their deposits. Such a decline in deposit rates might divert funds away from savings and loan associations and help to cause a general decline in interest rates throughout the capital market. However, interest rates on deposits are notoriously sticky in a downward direction; consequently, there might be some benefit to housing over a full cycle of rising and falling interest rates if FHLMC operated asymmetrically, buying mortgages during periods of rising interest rates but not selling them during periods of falling rates. Under such a method of operation, the portfolio of FHLMC would (a) grow during periods when the private market experienced excess demand for mortgage funds because housing demand was strong relative to the volume of funds becoming available through private channels, and (b) remain constant under conditions in which the private market would clear without assistance.

Third, I would favor a continuation of the present FNMA system of weekly auctions of commitments to buy FHA and VA mortgages. This program has proved to be helpful not only in providing builders with a dependable basis for forward planning but also as a means of pumping a great deal of money into the mortgage market. I would expect, however, that the FNMA auctions would become a less important source of mortgage funds under a system in which interest rates moved consistently to clear the market. Under the FNMA auctions up to now, a very high proportion of the commitments have actually been taken up before the commitment period expired. To a considerable extent this is undoubtedly related to the fact that in periods when market interest rates are relatively high—as has been the case throughout the period since the auction technique was put into operation—the mortgage market has not cleared. That is, mortgage credit has not been available to many borrowers even if they were willing to pay the going interest rate. Under such conditions, many of the participants have undoubtedly used the auctions as a way of protecting themselves against lack of availability of mortgage funds, and auctions have helped to fill the credit availability gap.

Under a market clearing system in which borrowers could be assured of being able to obtain mortgage credit at a price, I would expect participation in the auctions to decline because borrowers would need to protect themselves only against the possibility of adverse movements of interest rates and not against the prospect of lack of availability of funds. Moreover, I would not expect as high a proportion of the commitments to be taken up as has been the case up to now. In some cases, interest rates would prove to be higher than the borrower anticipated and he would take up the commitment, but quite frequently rates should prove to be lower than he expected and it would be advantageous for him to borrow elsewhere.

I must confess that the FNMA auctions have some rather arbitrary aspects that do not really appeal to me. FNMA must decide each week the quantity of funds it is to make available. This involves an essentially subjective judgment about the amount of funds the market "needs." Second, not infrequently FNMA apparently finds that if it were to allot the full amount of commitments it initially announced as being available, it would be forced to accept offers it judges to involve "unreasonably" high prices. In such cases, the amount of funds actually allotted is cut back below that initially announced as being available. I would be happier if some way of conducting FNMA operations could be devised that was determined to a greater extent by objective market criteria and involved fewer subjective and, to my mind, essentially arbitrary decisions. It may be that in an environment in which interest rates moved to clear the mortgage market a different mode of operation involving less emphasis on quantities of funds supplied and more emphasis on mortgage interest rates as a guide to FNMA operations would be desirable.

Fourth, I believe it would be desirable to try to extend the use of the "pass-through" type of mortgage-backed securities with a GNMA guarantee. This program has not amounted to much yet in terms of volume, but it strikes me as the one element among the new instruments of mortgage finance that might be capable of attracting a significant amount of pension and trust fund money.

I view the arrangements I am suggesting primarily as a means of enabling housing to compete more effectively for its fair share of the funds available for investment in the face of the changing vicissitudes of the capital market. I do not think of these arrangements as a way of contributing--except possibly to a minor extent--to the process of

mobilizing the vast increase in mortgage credit that will be needed over the next decade to meet the housing goals set forth in the Housing and Urban Development Act of 1968. The necessary funds to meet these goals will only be forthcoming if we rearrange our fiscal and monetary policies in such a way as to achieve the necessary flows of funds through the capital market. The establishment of an arrangement under which interest rates would move to clear the mortgage market would merely mean that homebuilding would be able to obtain the share of total credit flows to which it was entitled. To the extent that it might be necessary to use restrictive monetary policy from time to time to curtail aggregate demand, the impact on homebuilding would reflect, as it should, the response of home buyers to high costs of financing. It would no longer be either appropriate or desirable to engage in frantic actions designed to cushion the impact of credit conditions on housing.

It should be noted, however, that it would be quite proper for the Federal Government to act to offset the effects of restrictive credit conditions on subsidized housing programs designed to assist low- and moderate-income families. The way to accomplish this would be to increase the subsidy payments to the extent necessary to offset the higher interest costs involved in financing such programs.

Finally, it should be recognized that the establishment of an arrangement under which interest rates moved to clear the mortgage market would almost certainly reduce the potency of monetary policy as an instrument of economic stabilization. Under the present system, the largest and fastest impact of monetary policy is on residential construction, and this impact is to a considerable extent attributable to changes in mortgage credit availability. If the availability effects on housing were eliminated, monetary policy would, I am convinced, be significantly weakened. It would take larger monetary policy actions and larger swings in interest rates to produce a given effect, and the lags of response would become longer.

DISCUSSION

HENRY KAUFMAN

I have read the drafts of Professor Smith's and Mr. Schwartz' papers with great interest. Federal agency financing deserves wide attention not only because of its increasing role in the capital market to date but also because it is time to ask whether or not this form of financing is the wave of the future and, if so, what are its implications for economic participants ranging from official policymakers to businessmen. Both papers are well-prepared statements, befitting the reputations of their authors. They argue their viewpoints exceptionally well. I find myself in accord with some of their views and I differ with others. However, it is perhaps largely the omissions in these papers which should be pondered seriously by those assessing the merits of this method of financing. I therefore want to cast in perspective the growth of Federal agency financing and thereafter call to your attention several basic issues which are definitely involved here.

The Growth in Agency Financing

Both Messrs. Smith and Schwartz emphasized the growth of the agencies involved in housing financing. This is understandable because FNMA, the Federal Home Loan Banks, and the newly organized GNMA account for a large part of the total volume of agency financing. There are, however, other agencies, some with aggressive expansionary objectives for the future. In addition to the housing agencies, there are the Banks for Cooperatives, the Federal Land Banks, the Federal Intermediate Credit Banks, the Export-Import Bank, the Farm Home Administration and TVA. These agencies have all issued their own obligations and most are "privatized" or "de-budgeted." In addition, other agencies have been proposed, including environmental authorities. I also want to mention the many guarantees which have been granted by the U.S. Government on various loan programs which I will omit from my calculations to avoid the problem of double counting.

Mr. Kaufman is Partner and Economist, Salomon Brothers, New York, New York.

DISCUSSION

KAUFMAN

103

The net volume of new Federal agency financing has increased spectacularly in the past ten years. Their net new market demands averaged \$1.5 billion from 1961 through 1965 or 3.7 percent of the total net credit demands. They totalled \$4.8 billion or 8.6 percent in 1966, \$3.7 billion or 5.2 percent in 1967, \$5.4 billion or 6.3 percent in 1968, \$8.1 billion or 9.6 percent in 1969 and an estimated \$9 billion or 11 percent this year.

How does the net volume of new agency financing compare with other credit demanders? In 1969, it was nearly 60 percent of the net new corporate bond offerings, and it matched the net new offerings of municipals. Moreover, the net demands of the agencies have exceeded the new market demands of the U.S. Treasury in five of the last six years. Therefore, agency financing can hardly be considered a marginal participant in our credit markets.

At this juncture, let me turn to the issues which you should also consider in appraising agency financing. I shall name five. No doubt there are others worth evaluating.

The Problem of Enlarging Credit Demands

The Federal agencies transfer a regional or local demander of credit into a national demander of credit with efficient financing alternatives in the money market and national capital market. There is nothing wrong with this objective by itself. However, our problems in the credit markets during the past five years and perhaps in the 1970's is not really how to make demands more effective. Isn't the heart of the problem how to generate a larger supply of genuine savings in order to finance future requirements in a non-inflationary way?

Federal agency financing does not do anything directly to enlarge the supply of savings. Its main thrust is on the demand side. In contrast, as agency financing bids for the limited supply of savings with other credit demanders it helps to bid up the price of money. I suspect this is a rather costly way to redistribute savings flows. It causes considerable distortions and hampers monetary policy implementation as I shall explain later.

Who Will Be Rationed Out?

With the continued proliferation in Federal agency financing, there should be no doubt that agency demands will be large in absolute and relative terms. This is so even now, as I indicated earlier. Therefore, if the agencies will be accommodated in the credit market, you must ask, "Who will do without funds?" Who will be rationed out? Who will be the new disadvantaged in the credit market? How will they fare in their individual sectors as they are denied funds? It is unlikely to be the large well-known corporations or the U.S. Government. It is likely to be some state and local governments, medium-sized and smaller businesses, some private mortgage borrowers not under the Federalized umbrella, and some consumer sectors.

Impact of Federal Agency Programs on Economic and Financial Concentration

With the increase in agency financing, I feel that business will increasingly recognize that Government is harnessing financial resources to finance governmental objectives without adopting encompassing and meaningful national budgets. The failure to adopt meaningful national budgets will surely trigger another credit clash. This next clash, perhaps a few years off, will be a ferocious battle between the demands of Government and its powerful agencies on the one hand and those of private credit demanders on the other. In this confrontation, the credit demands of consumers, small business and lower-rated corporations, privately financed mortgages and local governments will be quick casualties. There will be no room for them in the capital markets as the Government and large well-rated businesses struggle for the limited volume of available funds. This is bound to contribute to additional economic and financial concentration in the United States.

The Problems for Monetary Policy

Professor Smith briefly touched on the impact of changing the procedure of housing financing on monetary policy. He stated in his concluding remarks:

Finally, it should be recognized that the establishment of an arrangement under which interest rates move to clear the mortgage market would almost certainly reduce the potency of monetary policy as an instrument of economic stabilization.

tion. Under the present system, the largest and fastest impact of monetary policy is on residential construction, and this impact is to considerable extent attributable to changes in mortgage credit availability. If the availability effects on housing were eliminated, monetary policy would, I am convinced, be significantly weakened. It would take larger monetary policy actions and larger swings in interest rates to produce a given effect, and the lags of response would become longer.

This problem should not be dismissed quickly. It deserves some additional elaboration. There are two conflicting objectives as the monetary authorities move to restraint under their current techniques. The seemingly laudable objective of the agency financing is to sustain the housing market and other programs. The objective of both fiscal and monetary restraint is to slow down or decrease overall economic activity. The result is a very costly delay in the economy's response to monetary restraint. Indeed, the credit demands of the agencies contribute importantly to a sharp escalation in interest rates and to the rising costs of housing.

This is quite evident by looking at the sequence of events as restraint unfolds. In the early stages of restraint, thrift institutions are encouraged to continue making a large volume of mortgage commitments by the Federal agencies even though the net inflow of savings is starting to slow down. At this stage, the net result is to intensify the competition for scarce real resources, to lift costs, to sustain inflationary expectations and to temporarily immobilize monetary restraint. Indeed, the high level of construction encourages additional business spending, thus complicating the task of the authorities. As monetary restraint persists, liquidity standards are lowered by the private sector. The decline in savings flows to thrift institutions accelerates. As the agencies provide funds to offset the savings outflow the situation is further aggravated by the attractive market rates on the issues of the Federal agencies, which further disintermediates the deposit institutions. In essence, the Federal agencies do not increase the total supply of funds in our financial system. They do, however, inflate the demand.

The Problems for Federal Budgeting

The de-budgeting or privatizing of Federal agencies brings these operations outside of the discipline of the Federal budget. To date, our leaders take credit in a political sense for the operations of these agencies. They disclaim them, however, in terms of the high interest

rates created by their credit demands. They fail to integrate them in official fiscal plans or in budgeting the wide-ranging demands of Government on economic and financial resources.

It would be highly beneficial if the Government adopted encompassing budgets including the Federally sponsored programs which are now excluded but still make demands on the economy and the credit markets. This is not to say that the programs outside the budget are not deserving, but by including them the priorities of the Federal Government will be well defined and ranked. It will also improve the alignment of the limited supply of new savings with the demand for funds, and thereby avoid much of the tension created by the current approach.

The current de-budgeting trend is surely decreasing the importance of the Federal budget as both an economic and financial document. "Privatizing" is a convenient political expediency for dressing up a faltering budget picture. As you know, it has continued even after the unified budget concept was officially adopted. Indeed, some time in the future, we may even de-budget the Defense Department. What a glorious moment--the achievement of a surplus in our Federal budget, even as defense expenditures are heading sharply higher and actually making greater demands on our resources. And then as you see displayed the new supersonic bomber of our Air Force you will be gratified to read on a highly polished equipment trust plate affixed to the flight deck, "Property of the First National-Chase-Hanover Chem Bank," and in smaller print, "Guaranteed by the Full Faith and Credit of the U.S. Government."

DISCUSSION

SAMUEL B. CHASE

I am always somewhat surprised when people argue, as Harry Schwartz does, that Federal credit programs aimed at reducing the impact of tight money on the mortgage market and the housing industry did a reasonably good job in 1969. Viewed from Missoula, Montana--a lumber mill town--things haven't looked that good.

Part of the problem is that although the aggregate figures for 1969 which both Harry and Warren Smith cite make these policies look quite effective, quarterly figures tell a somewhat different story. Between the first quarter of 1969 and the final quarter, home mortgage lending fell from a seasonally adjusted annual rate of \$17 billion to only \$13.5 billion; it dropped further, to only \$10.1 billion in the first quarter of 1970. Spending on one- to four-family houses dropped from an annual rate of \$23.6 billion in the second quarter of 1969 to only \$17.3 billion in the third quarter of 1970.

Nonetheless, I agree that these credit programs transferred real resources into housing--resources that would have been used in other industries in their absence. Harry contends that this reallocation was socially desirable--that "business overspending on capital in boom periods is endemic. At the same time, restriction on housing in such periods often leads to shortages." Thus, government intermediation, by pulling money from what would have been other uses and putting it into the mortgage market, prevented some or all of the misallocation. I don't doubt (and this gets to Warren Smith's paper too) that there are imperfections in the mortgage market, nor that there is excess demand that somehow gets arbitrarily rationed out during periods of tight money; I am sure that this happens any time a market is put through a severe wrench. But I'm not convinced that *arbitrary* rationing of mortgage credit is terribly pervasive on the basis of evidence that I have seen. Simply pointing to what most people would agree is a fact--that there was some credit rationing in the housing market during years like 1966 or 1969--does not reveal the significance of this rationing, nor the degree to which it is necessary to take steps to overcome it.

Another question that bothers me more than it does Harry is: to what extent did the government-sponsored intermediaries (FNMA and FHLBB) actually divert funds from other uses into the mortgage market, and to what extent did they simply capture funds that would have gone into the mortgage market anyway? The answer is not easily found. The fact that households acquired only \$5.3 billion of the agency issues in 1969 while they were acquiring \$8.5 billion of direct Treasury debt is not, by itself, evidence that the entire \$8 billion of Fannie Mae and FHLBB borrowing was not diverted from, say, savings deposits.

I do not seriously question that there was *some* rechanneling of money into the mortgage market, but I do question our ability to say much more than that. We simply aren't equipped to say anything definitive. Since we don't know how great a "gap" there was to fill, perhaps we ought not be upset by not knowing how much effect the programs had.

From Warren Smith's paper I learned a great deal about the numerous links between Federal programs, the mortgage market, and the securities markets. One of the things that interested me most was his discussion of the potential role of GNMA-guaranteed, mortgage-backed, pass-through securities, which may turn out to play a very important role in the portfolios of pensions and trust funds. The new programs, along with some other reforms that Warren has in mind would, as he sees it, provide a means of enabling housing to compete more effectively for its "fair share" of funds, especially in periods of tight money.

But Warren seems to discount the possibility that these government programs will add substantially to the stock of housing in the long run. While that may be correct, I am doubtful. A key question that neither paper addresses is the extent to which interposing Federally-sponsored credit agencies or Federal guarantees between lenders and borrowers provides a subsidy to housing. I suspect that the subsidy could be very substantial. For example, pension fund investment in GNMA-backed pools of mortgages might in part represent simply a breakthrough in the techniques of intermediation. But it may also represent the effect of a direct Federal guarantee or an implied or expected Federal guarantee, which goes beyond perfecting the mortgage markets. Such Federal support may be consistent with national priorities, but I suspect that if it works we will observe an enormous proliferation of Federal credit programs in other areas by the time we reach our housing goal. As more and

more programs are set up, still more will be needed to help borrowers whose potential sources of funds are being diverted into Federally-backed securities. Perhaps someday we'll all be borrowing from, or through, Uncle Sam.

Finally, I would like to raise a point that neither Harry nor Warren deals with, but that should not be ignored. That is the relation between the Federal housing finance programs and interest rate restrictions on time and savings accounts.

Without deposit rate ceilings the need for government credit programs to protect the housing industry in periods of tight money would be greatly diminished. The Federal credit programs mobilize funds to be invested in mortgages. Savings and loan associations, mutual savings banks, and commercial banks are also in the business of mobilizing funds. We restrict the ability of these private intermediaries to compete for funds in order to protect the "soundness" of the savings and loan industry. This causes disintermediation and a severe decline in the supply of mortgage credit. The greater is the resulting private disintermediation, the greater is the need for government intermediation. That is, the government programs are designed largely to raise money that could otherwise be raised by intermediaries. Under this system, as Bob Lindsay pointed out earlier, sophisticated investors are able to get out from under the ceiling deposit rates, although not without cost. So along come the government-sponsored agencies to recapture these funds and funnel them back into the mortgage market.

This procedure meets a lot of the political criticism of interest rate ceilings that would otherwise come from the housing interests. The small saver, who doesn't have an effective lobby in Washington to speak for him, takes the major beating. In effect, the savings deposit market gets segregated into two markets—one for big money and one for small money. Interest rate ceilings enforce monopoly pricing in the market for small money; the resulting profits enhance the net earnings of intermediaries, which is the object of the ceiling rates.

Given the rate ceilings, the Federal credit programs make a lot of sense. It is the rate ceilings that don't make sense. We should not, in our admiration for the way these programs helped housing in 1969, lose sight of the fact that what gave rise to most or all of the need for increased government intermediation was enforced disintermediation in the private sector. I fear that those who lose most from these rate controls are the ones who are least able to communicate with those who make the decisions.

Changing the Asset and Liability Structure

IRWIN FRIEND

The justification for specialized savings institutions which receive Government financial assistance for restricting their asset and liability structure rests largely on a balancing of public policy and economic considerations. This balancing requires first an appraisal of the importance of the public policy objectives involved—which economists have relatively little to say about; second, a cost-benefits analysis which can rarely be precise but should at least consider roughly what the direct and indirect costs are and what is being achieved; and third, an examination and assessment of the alternative approaches to attaining the same policy goals. A *Study of the Savings and Loan Industry* which was recently published considers at some length the costs and benefits of the savings and loan industry with its present asset-liability structure, the desirability of changing that structure, and the comparative advantages of these changes to alternative approaches to achieving the same objectives.¹ The present paper summarizes those parts of the *Study* which deal with these issues.

Savings and loan associations have the most specialized asset structure of all the major groups of savings intermediaries and the greatest imbalance between the maturity structure of assets and liabilities. They have been by far the single most important supplier of mortgage credit for residential housing, especially for owned homes. Their role in the economy has been to accumulate funds from individual savers and to make these funds available for financing housing. Like all financial intermediaries, savings and loan associations mediate between savers and investors, between the

¹ *Study of the Savings and Loan Industry*, Vols. I-IV, Washington, D.C., G.P.O., 1970; see especially Irwin Friend, "Summary and Recommendations," and "Changes in the Asset and Liability Structure of the Savings and Loan Industry."

Mr. Friend is Richard K. Mellon Professor of Finance, University of Pennsylvania, Philadelphia, Pennsylvania.

ultimate suppliers of funds in our economy and those requiring funds for a specific investment purpose. As a consequence of various types of economies of scale (at least as one goes from a small individual saver to a large financial intermediary) and the much greater potential for diversification of risk, the intermediary role played by savings and loan associations, as well as by other financial institutions, would be expected to lower the cost of and increase the effective demand for investment in housing and other forms of durable goods. The basic economic incentive to individual savers in these associations is higher return for given risk (including short-term liquidity as well as long-term insolvency risk) or lower risk for given return.

The most important reason for providing Government assistance to savings and loan associations has been to encourage adequate housing and home ownership and, to a lesser extent, thrift among the lower and middle income groups. It is generally agreed by commercial banking authorities that the fact these needs were not being met by the commercial banks was largely responsible for the creation, favorable regulatory treatment, and growth of both savings and loan associations and mutual savings banks. Savings and loan associations have received special help from the Government but they have had to pay the price of a loss in flexibility, especially in their investments but also in their liabilities.

It is not the purpose of this paper to assess either the wisdom of expending public resources to aid housing and home ownership, or the desirability of continuing this subsidy to the present array of beneficiaries, instead of limiting it to disadvantaged groups only.² The paper is concerned primarily with maximizing the usefulness of savings and loan associations and of related financial institutional arrangements for advancing the social objectives that they are designed to serve. The level of Government assistance to the associations, which is only a small part of the total subsidy to housing, is mainly taken as given, though the relative benefits of this type of assistance to housing are compared with other alternatives. While the performance of the associations in the housing markets receives particular attention, consideration is also given to the industry's performance in the savings markets.

² Most of the benefits of current forms of direct and indirect housing subsidies flow to the lower middle, middle, and upper income classes rather than to the poor. For an analysis of tax benefits, see Richard Netzer, *Housing Taxation and Housing Policy*, The Brookings Institution, 1967.

Consequences of Monetary Stringency

The 1966 crunch and subsequent developments highlighted the vulnerability of the savings and loan associations and of the housing markets to protracted periods of tight money. The problem is particularly acute in view of the vast, growing need for new housing. A number of different approaches to reducing this vulnerability are possible.

One obvious approach is to institute broad changes in the fiscal-monetary mix, placing more emphasis on fiscal restraint in periods of excessive overall demand. The available evidence strongly suggests that general monetary or credit policy, which has traditionally been considered to affect the economy in a reasonably evenhanded fashion, is to a substantial extent a selective means of credit control impinging in particular on housing.

While the available data are not adequate for assessing the costs of the disruption in the housing and mortgage markets induced by reliance on monetary stringency to curb general inflationary pressures, it is clear that these costs to home purchasers and sellers, to the building industry, and to mortgage lending institutions, are not negligible. The costs to young families and to disadvantaged groups looking for homes may be particularly large. In addition to very real inconveniences to prospective purchasers and sellers, the shift of idle resources obviously is not complete or instantaneous, and the operational efficiency of the construction industry may be reduced significantly as a result of major unplanned fluctuations in output. Moreover, the profit requirements of the savings and loan associations as well as of the construction industries may be inflated by these fluctuations in the volume of their business. For the savings and loan industry, a prolonged period of inflationary pressure contained mainly by monetary policy and rising interest rates could be disastrous.

Thus, in spite of the unsatisfactory nature of the available data for appraising these costs of monetary policy, it seems reasonable to assume that greater reliance should be placed on fiscal policy for counteracting cyclical excesses than has been the case in recent years. This should make possible a more efficient allocation of resources and a more equitable distribution of the effects of restraint among different groups in the population, as well as provide what could be (apart from policy decision lags) a more certain and speedier overall impact. Income taxation can be evenhanded in a way that monetary policy cannot.

Restrictive monetary policy, as presently conducted, is not really a general, across-the-board deterrent to investment and consumption demand. Moreover, it is selective in an arbitrary fashion since it is not designed to dampen a type of demand which for some reason is considered excessive or unhealthy. In fact, activity in the housing industry may very well be curtailed by monetary stringency at a time when that industry, unlike the economy as a whole, has substantial excess capacity as well as large unfilled demands. The greater impact of monetary stringency on housing than on the rest of the economy apparently is due mainly to a capital rationing effect, resulting from deficiencies in current institutional arrangements for providing mortgage credit; and probably also to an interest rate effect, reflecting a greater interest elasticity of housing demand than of demand generally.

The most effective use of fiscal policy to avoid cyclical excesses would require that the executive branch of the Government be provided with the power to modify tax rates within limits and under circumstances previously prescribed by Congress, so that differences in opinion on the nature of changes in tax rates and the conditions under which they are to be made effective can be resolved when the passage of time is not critical. Even if this power is given--and there is no reason to expect it will be in the near future--it might still be necessary and would in any case be desirable to correct the deficiencies in the current institutional arrangements for providing mortgage credit. Similarly, if the interest rate spiral is arrested for any other reasons, and interest rates stabilize or decline, causing the position of the savings and loan industry and of the housing markets to improve even without changes in institutional arrangements, such changes would further improve industry performance and overall economic efficiency.

Correction of Institutional Deficiencies

The different possible approaches for correcting these institutional deficiencies include (1) the introduction of greater flexibility into association asset-liability structures (and those of other specialized savings intermediaries), and the provision of more adequate credit facilities, so that the specialized intermediaries can compete effectively for funds with the commercial banks; (2) improvement in the structure of mortgage markets to make home mortgages more adequate capital market instruments, permitting them to compete more effectively with open market securities, without either the

payment of excessive interest differentials or the curtailment of residential construction; and (3) modification of the current interest rate ceilings on savings accounts and mortgages. The desirability of these changes is discussed in detail in various parts of the *Study of the Savings and Loan Industry* and, to the extent they are relevant to this paper, are summarized below.

An analysis of economic efficiency and public policy considerations points to the need for introducing greater flexibility into the asset-liability structure of savings and loan associations (and other specialized savings intermediaries) to the extent that this can be done without undermining housing policy objectives. However, a complete integration of specialized and diversified deposit intermediaries, which would maximize flexibility of what are now the specialized savings institutions, is probably not desirable at this time. This conclusion is based on the advantages of having a specialized group of lenders to implement housing policy, the economies of scale in mortgage lending, the diffusion of economic power, the costs of rapid change, and the absence of significant evidence that overall efficiency in the financial system has been impaired by the dual system. A more promising approach seems to be a judicious modification of the present asset-liability structure of specialized intermediaries to alleviate the problems associated with specialization; but this does not preclude further measures towards integration of specialized and diversified deposit intermediaries at some later time.

The savings and loan associations, at least until the mid-1960's, were quite competitive in providing savings deposits as well as mortgage credit for small- and medium-income groups and added significantly to the mobility of savings and mortgage funds among different regional markets. The encouragement of housing via incentives to the savings and loan industry does not seem to have resulted in generally excessive investment in housing even from an economic (totally apart from a public policy) viewpoint. A comparison of both gross and net mortgage and other interest yields over the postwar period as a whole does not indicate that the channelling of funds into housing by specialized savings intermediaries had lowered mortgage rates below rates on most other loans of comparable risk (even after allowance for differences in transactions costs). Apparently the special assistance given housing simply helped to offset the imperfections of the mortgage markets as compared with the markets for securities or for business loans.

*Changes to Improve the Economic Performance
of Savings and Loan Associations*

From the viewpoint of significantly improving the industry's overall economic performance without risking a serious impact on the housing market, the modification of the asset-liability structure of savings and loan associations which seems most promising includes additional flexibility in the areas of consumer credit, mortgages on multifamily residences (including limited use of equity participations), longer term savings accounts, capital notes or debentures, and a limited form of checking accounts.³ If the level of consumer (or other non-real estate) loans is limited to the 10 percent of assets now permitted under Federal tax laws, but not by most of the supervisory authorities, no further tax concessions would be involved. (This 10 percent limitation applies to corporate but not to U.S. Government and agency or municipal issues.)

The gains to the savings and loan industry in profitability, in liquidity, and in the ability to service and attract customers are believed to compensate for the possibility of some diversion of resources from residential mortgages over the cycle-- even apart from competitive improvements in consumer credit markets. Additional flexibility in mortgages on multifamily residences is justified on the grounds that, apart from allowances for differences in risk, it is difficult to rationalize any discrimination in favor of single-family houses at the expense of the typically lower income inhabitants of multifamily residences.⁴ Still other types of flexibility that may be desirable include the minimization of geographic restrictions on mortgage lending. A more drastic change in the asset structure--more extensive use of variable rate mortgages-- might be required if inflationary conditions worsen, but the serious problems associated with this change suggest that it be reserved for use mainly as a last resort against irresponsible fiscal and monetary policies.

On the liabilities side, more flexible powers to issue longer term savings accounts and capital notes or debentures also seem to have some potential for improving the industry's profitability and liquidity, without any diversion of resources from residential

³Steps to implement some of these proposals have already been taken.

⁴Though the average income of inhabitants of multifamily residences is clearly lower than for single-family homes, a significant portion of new multifamily housing has been directed at the middle and upper income brackets.

mortgages, but this potential seems more limited than earlier studies have suggested. More important, the grant to the associations (and other specialized savings intermediaries) of limited powers to issue demand deposits or checking accounts should, without perceptible social cost, greatly reduce a substantial comparative disadvantage from which these institutions now suffer. Such powers would significantly increase competition for deposits, to the benefit of the specialized savings intermediaries, the housing markets, and depositors generally. The issuance of demand deposits by savings and loan associations would, of course, be limited by their asset composition and would require a new set of reserve requirements.

Two related objections that might be raised to some of these proposed changes in the associations' asset-liability structure are, first, that they would raise total costs to the Government (in view of the favorable tax treatment of income received by specialized savings intermediaries) which have been estimated to be already somewhat over \$100 million a year;⁵ and, second, from the viewpoint of equity among competing institutions, these changes would alter the relative benefits provided by the Government to the associations and commercial banks. However, no additional tax or other subsidies are implied by the proposed changes in the associations' asset-liability structure, though higher profitability of the industry would involve larger tax benefits as well as higher taxes.

Moreover, it is likely that commercial banks have been a greater beneficiary of Government policy than savings and loan associations as a result of their ability to provide checking accounts for their customers, the proscription of interest payments on such accounts, the significantly lower cost of time and savings deposits to them than to the associations (perhaps on the order of one-half of one percent) as a result of the convenience of one-stop banking, and the limitations placed on the entry of competitors. Commercial banks also receive other benefits from the Government, including a more favorable tax treatment than is accorded to nonfinancial corporations, though not so favorable as the tax treatment extended

⁵The U.S. Treasury Department arrives at a substantially larger estimate of revenue loss on the assumption that only actual rather than potential estimated bad debts should be allowed as deductions from income. (U.S. Treasury Department, *Tax Reform Studies and Proposals*, Part 3, pp. 458ff., 91st Congress, 1st Session, U.S. Government Printing Office, Washington, D.C., 1969.) The tax advantage to the savings and loan industry has been sharply reduced in the past year, but other forms of Government assistance have been increased.

to the associations. Finally, if the proposed asset-liability changes are put into effect and substantially increase the profitability and hence the tax benefits to the savings and loan industry, their tax treatment might well be reconsidered if at any time the costs to the Government of the tax incentives given these institutions seems excessive from the viewpoint of benefits received.

Most Efficient Method of Stimulating Housing: Availability of Credit

A more fundamental objection that might be raised to these changes in the asset-liability structure of savings and loan associations is that perhaps their most basic objective—the stimulation of housing—might be achieved more efficiently by other means. This is more an objection to any support of savings and loan financing of housing than to the specific changes proposed. The essential question here is what is gained by continuing to give incentives to specialized institutions which must devote the bulk of their resources to providing home financing credit as against other policy alternatives.

In view of the high sensitivity of housing to the terms and, especially, to the availability of external credit, providing borrowers with mortgage money on favorable (or restrictive) terms is likely to be a particularly efficient way of stimulating (or depressing) residential construction. Both the 1966 experience and econometric analysis for the postwar period point to the importance of the availability of credit as distinguished from the terms of credit, on the effective demand for housing, with a major impact on housing of any substantial shift of savings from the specialized savings intermediaries to the commercial banks. However, it is at least theoretically possible that greater availability of housing credit might be provided more expeditiously either by extending favorable tax treatment or other direct Government assistance to any holder of a mortgage and not only to a specialized intermediary, or by changing the mortgage instrument itself so that it is a more effective substitute for securities traded in the capital markets.⁶

The main justification for directing any subsidy to a specific intermediary rather than to all mortgage lenders is the belief that this provides greater control over the successful implementation of housing policy than leaving the investment decision in the hands of a diversified lender (though, even with specialized intermediaries, the

⁶As noted earlier, a more rational monetary-fiscal mix would also help, but this mix will be determined in large part by considerations outside the field of housing.

past effectiveness of housing policy leaves much to be desired). Another argument that might be adduced in favor of concentrating on a particular intermediary would be the economic advantages of specialization and economies of scale. A final argument against extending tax or other direct subsidies to all mortgage lenders is that we are not starting from scratch, and with the uncertain benefits of this change it is probably undesirable to extend further the area of housing subsidies, except for specialized programs confined to low income families.

Changes in the Mortgage Market

Changes in the mortgage instrument and related changes in the mortgage market appear to offer more promise as a mechanism for improving the availability of housing credit. To the extent that transactions costs on mortgages, including the costs of risk appraisal, can be reduced and marketability increased, pension funds, insurance companies and commercial banks would be more willing to deal in residential mortgages without requiring excessive interest rate differentials, and the need for special treatment of savings and loan associations (or other specialized savings intermediaries) would be lessened. However, while methods for improving the mortgage market are examined in the *Study of the Savings and Loan Industry* and several promising proposals are discussed there, it appears that, at least for the foreseeable future, the specialized savings intermediaries will continue to perform a useful function in implementing housing policy.

The existence of such intermediaries may provide better control over the implementation of housing policy than leaving the investment decision in the hands of diversified lenders even with improved mortgage markets. Moreover, it would probably require a 100 percent guarantee by the Government of mortgage payments as they become due to eliminate a large part of the advantage specialized savings intermediaries now have in their ability to appraise mortgage risk economically; and it is doubtful that such a guarantee would or should be extended to all groups in the population regardless of risk and cost.⁷ Finally, the viability of the

⁷ However, the plan for a 100 percent guarantee of mortgage payments developed by Jack M. Guttentag in one of the papers in the *Study of the Savings and Loan Industry* seems like a relatively attractive form of Government subsidy to housing, especially for disadvantaged groups in the population.

specialized savings intermediaries is important not only in view of their potential for facilitating housing policy but also to make optimum use of available facilities for providing desired services to depositors. Thus, it appears that the proposed additional flexibility in the asset-liability mix of savings and loan associations is desirable totally apart from any other likely changes in mortgage markets.

Some Further Observations

It may be helpful to make three further comments on the subjects covered by this paper. First, many economists would consider that the simplest solution to the financing problems of the savings and loan and housing industries--and of specialized intermediaries generally--would be to eliminate interest rate ceilings both on savings accounts and on mortgages and to make mortgages more marketable. Eliminating the ceilings on savings accounts would allow the associations to compete for funds at all times at the market rates, while eliminating ceilings on mortgage rates would permit the associations to obtain sufficient income from mortgages to use profitably the funds they raise. Making mortgages more marketable would protect the associations against liquidity crises.

While these arguments have merit, it is easy to overstate the extent to which this prescription of eliminating ceilings and improving mortgage markets would help the savings and loan and housing industries. Thus, higher interest rates on savings accounts have to be paid on many of the old accounts as well as on the new accounts so that under the present structure of assets and liabilities it may be unprofitable for the associations to raise interest rates significantly in periods of great money tightness. Moreover, making mortgages substantially more marketable seems to be extremely difficult without the use of (and problems associated with) Government guarantees. Changes in interest rate restrictions and in mortgage market arrangements are desirable and are recommended in the *Study of the Savings and Loan Industry*, but they do not seem to affect seriously the desirability of changes in the asset-liability mix.

Second, it might be noted that mutual savings banks have much more in common with savings and loan associations than either have with commercial banks. Therefore the arguments against the integration of all deposit intermediaries into a single system do not necessarily apply to the integration of savings and loan associations and mutual savings banks. The bill to establish a new system of Federal mutual savings associations, proposed by the last

Administration, is a step toward such integration, at least in the long run. But the bill also represents an attempt to enhance competition among savings intermediaries by extending the present network of mutual savings banks countrywide, and to enhance the flexibility of savings intermediaries by expanding their lending powers.

Ultimately, it may be desirable to have an integrated system of deposit intermediaries under a single regulatory authority, with the asset-liability structure of the member associations determined within broad regulatory limits by the individual association but with the details of regulation and any Government assistance dependent on the asset-liability structure adopted. However, that time seems far off.

Finally, it should be stressed that while the *Study of the Savings and Loan Industry* does consider the cost-benefit issues which are basic to any evaluation of the desirability of different changes in our financial structure, the analysis is limited by the state of arts. Neither the analysis carried out by the Study nor other available work provides definitive answers to a number of important questions relating to the effects of various institutional and market arrangements on economic efficiency or of different Government subsidies on housing and other demands. Much more work is required and should be carried out in these areas.

Structural Reform with the Variable Rate Mortgage

PAUL S. ANDERSON and ROBERT W. EISENMENGER

The disadvantages of interest rate ceilings on savings and small time deposits have already been outlined at this conference. In this paper we discuss a long-run plan and several shorter-run plans for eliminating these ceilings.

We conclude that the shorter-run plans are either unworkable or politically impossible. Even our longer-run plan, introducing variability in mortgage rates, entails many practical problems. These are so difficult that it is unlikely that rate variability will be widely adopted unless it is supported and actively promoted by financial institutions, their trade associations, and the Federal Government. We favor such support. Variable-rate mortgages would help low-income savers, bolster thrift institutions, and permit the elimination of Regulation Q as it applies to savings and small time deposits.

The Present Situation

The current problem of thrift institutions is often blamed on "borrowing short and lending long." However, if these institutions were using predominantly variable-rate mortgages, they would not need to match the maturity of their assets with the maturity of their liabilities.¹ The principal current problem of thrift institutions is their low yield on assets and consequently their inability to compete with commercial banks in free and open competition. In our

Mr Anderson is Assistant Vice President and Financial Economist, Federal Reserve Bank of Boston, Boston, Massachusetts.

Mr. Eisenmenger is Senior Vice President and Director of Research, Federal Reserve Bank of Boston, Boston, Massachusetts.

judgment, thrift institutions are only able to survive because they are shored up by Regulation Q ceilings on savings and time deposits, by subsidized advances by the Federal Home Loan Bank System, and by mortgage purchase operations of the Federal National Mortgage Association.

Many economists have criticized this "jerry-built" protective system, particularly Regulation Q, because it discriminates against the low-income saver and it misallocates resources. However, those who criticize should also recommend an alternative system because no government can afford to permit large numbers of financial institutions to go into bankruptcy in any one year. If competitive forces had been given free rein in 1966, many thrift institutions would have gone under. And many which would have survived that year, would not have made it through 1969.

The Tobin Solution

In a recent article,² Prof. James Tobin suggests that ceilings on savings and small time deposits should have been raised 1 percentage point in 1966. He claims this would have brought a substantially increased volume of deposits to savings and loan associations and presumably to mutuals. We believe this is highly unlikely. From 1966 on commercial banks had a much faster rise in asset yields than did thrift institutions. Furthermore, as roughly half their funds come from interest-free demand deposits, almost the full benefit of their increased yields on assets could have been applied to interest on time deposits. Thus in 1966 commercial banks rather than thrift institutions could and would have taken the most aggressive advantage of higher ceiling rates. In this situation some depositors at thrift institutions would have shifted to commercial banks, and it is quite likely that deposit flows of thrift institutions would have deteriorated rather than improved.

¹If a thrift institution has a temporary deposit run-off, a Federal Home Loan Bank, the Savings Bank Trust Company (for mutual savings banks in New York State), and the Savings Bank Trust Company Northwest (now being set up for mutuals in Oregon and Washington) can provide emergency credit. Unfortunately, the current solvency problems of thrift institutions cannot be remedied with doses of emergency credit; such credit, of course, is useful for liquidity problems.

²"Deposit Interest Ceilings as a Monetary Control," *Journal of Money, Credit, and Banking*, February 1970, pp. 4-14.

If thrift institutions had attempted to raise their interest rates by a full percentage point, many, if not most, would have paid out more than they earned, thereby reducing their book reserves. Prof. Tobin admits this but argues that the regulatory authorities should not be concerned about the "cosmetics" of balance sheets and income statements. He points out that the published figures for reserves and surplus of savings and loan associations increased steadily from 1966 to 1969. And he asks: Why wasn't the surplus used in this emergency to help depositors?

This reasoning overlooks the fact that published figures on reserves and surplus of thrift institutions mean little because the market value of their mortgage portfolios is around 8 to 10 percent, or about \$16 to \$20 billion, below book value. Thus their real reserves are already minimal. Losses on current operations would force them to sell off assets and, over a period of years, their real reserves could be pushed far below zero.

Thus, substantially higher interest rate ceilings and the resulting losses on current operations would have the following impact:

1. It would reduce the ratio of earning assets to deposits, thereby impairing the ability of these institutions to pay competitive interest rates.³
2. By prolonging the period of earnings weakness, it would postpone the time when Regulation Q ceilings can be lifted. In other words, excessive interest payments today are made at the expense of future payments.

³Some economists have suggested that thrift institutions might speculate on declines in mortgage rates in the future. If they could acquire additional savings deposits now, even at the expense of operating deficits, they could "lock in" a block of high-yielding mortgage loans. In addition to the current yield which is substantially above the cost of deposits, these loans would provide a large capital gain if mortgage yields decline. These two gains would, they claim, more than offset the operating deficit that results from the higher savings rates. What is overlooked, however, is that the higher rates on savings apply to 100 percent of deposits while only an additional, say, 10 percent of assets can be acquired with the new deposits. With this 10 to 1 adverse ratio, this type of speculation cannot possibly be profitable, with any conceivable interest elasticity of deposits (on an industry-wide basis) and any probable capital gains on only 10 percent of assets. In addition, there is the obvious point that current high yields on mortgages cannot be "locked in" since borrowers always have the option of refinancing with little or no penalty.

3. If the earnings position of a thrift institution were weakened sufficiently, deposit rates would have to be reduced, raising the threat of massive deposit withdrawals. Then the Federal Government would be forced to provide enough financial aid to induce a stronger institution to absorb the weakened one. An example of such a development is the recently well-publicized savings and loan case in California; this occurred even with present rate ceilings.

An Equitable Short-Run Remedy

Although there are clear dangers in raising depository rate ceilings under present conditions, such raising is certainly desirable. Rather than raising the ceiling and then providing the necessary Federal emergency aid on an *ad hoc* basis, it would be much wiser to devise a plan that would solve problems before the ceilings were raised. One such plan would be to have the Federal Government provide an annual subsidy which would enable thrift institutions to pay depositors, say, one-half of the interest income they forego because of interest rate ceilings.⁴

The cost of this plan would total around \$10 billion over a 10-year transition period assuming that interest rates remain at present levels and that commercial banks would not require any aid. The first year's subsidy would amount to about \$2 billion and would enable thrift institutions to pay 1¼ percentage points more on deposits. The required aid would decline each year with the increase in average yields on mortgage portfolios as the low-yielding mortgage loans gradually mature and are replaced with loans at current market rates. This rise in average mortgage yields would probably eliminate the need for any subsidy within 10 years if we make the assumption that interest rates do not change. If interest rates decline, the required amount and duration of the subsidy would be much less.

How could we justify this massive payment by Federal taxpayers? As will be shown later, the cost of subsidizing competitively weak thrift institutions is now borne by middle- and low-income savers. These people cannot invest in most U.S. Government and other similar securities and are forced by Regulation Q to earn a much

⁴Professor Edward J. Kane proposed a similar plan in an article, "Short-Changing the Small Saver: Federal Government Discrimination Against Small Savers During the Vietnam War" in the November 1970 issue of the *Journal of Money, Credit, and Banking*.

lower return on savings and time deposits. Thus Regulation Q imposes a substantial regressive tax on middle- and low-income people. It would be much more equitable if the tax were distributed among all taxpayers. The competitive weakness of thrift institutions results from past ineffective economic policies which generated inflation. Why should persons of modest means be forced to pay the entire tax?

Although our proposal makes economic sense, we realize that such an expensive and radical recommendation is probably not politically feasible. The plan also has difficult allocation problems. For example, should commercial banks be excluded? Should profitable thrift institutions be penalized for their good management by receiving a smaller subsidy than weak institutions?

A more feasible but longer-run solution would be to have a change in policy mix—a tighter fiscal policy and an easier monetary policy. The new mix should bring lower short-term rates and, with a given ceiling rate, a much larger flow of deposits to thrift institutions. At the same time the average yield on the assets of the thrift institutions would rise (as old mortgages were repaid) and the average yield on assets of commercial banks would fall as the prime rate declined. Within a few years this policy mix would create an entirely new competitive environment for thrift institutions.

What none of these policies would do, however, would be to prevent a recurrence of the serious competitive problem of thrift institutions in another period of escalating interest rates in coming years. Thus, we recommend the variable mortgage rate as a device which will permit the average asset yield of thrift institutions to move up and down with the market yield on long-term mortgages. Such a fluctuating yield should enable thrift institutions to survive in free competition during future periods of inflation and escalating interest rates.

Transfer of Income

A surprisingly widely held opinion even among bankers and economists is that variable rates are unfair to mortgage loan borrowers. This attitude implies that it is better for mortgage lending institutions to suffer a squeeze in their operating margins during periods of rising rates than for home mortgage loan borrowers to

have to pay higher rates on existing loans. The higher interest cost burden on a borrower is readily appreciated but the financial squeeze on a thrift institution seems to affect an impersonal organization, arousing no sympathy. As our previous analysis of ceiling rates has indicated, however, thrift institutions with their present level of real reserves do not have the capacity to absorb massive losses. As a result, Regulation Q ceilings have been imposed which keep thrift institutions viable but force depositors to bear the costs.

Under a regime of variable rates, these costs would not be borne by depositors but would be shifted to existing mortgage borrowers. The opposite income transfer would occur during periods of falling rates but the magnitude of this opposite transfer is likely to be much smaller because rates are, in effect, already variable on the downside since borrowers have the right to refinance when they wish. Thus, under fixed rates mortgage borrowers are in the pleasant situation of "Heads I win, tails you lose."

If most mortgage loans were on a variable basis today, the average yield on thrift institution assets would be around 8 percent rather than the actual 6 percent. Accordingly, thrift institutions could pay 7 percent rather than 5 percent on regular savings. Since total savings at depository savings institutions amount to about \$350 billion, a rise of 2 percentage points in savings rates would transfer \$7 billion annually from existing mortgage borrowers to savings depositors. This is a substantial amount and would help savers considerably more, for example, than the elimination this year of the 10 percent Federal surtax.

How would this affect various income groups? The following table shows a percentage breakdown by income group of savings deposits owned by households and of mortgage loans owed by households. The interesting feature of this table is that families with below median incomes in 1962 held 28.8 percent of all savings deposits and owed only 11.1 percent of total mortgage debt of households. If variable rates had transferred \$7 billion of income from mortgage borrowers to savers, families below the median would have received about \$2 billion a year in additional savings interest but paid out only \$0.8 billion in higher mortgage rates. Unfortunately the data in the table are for 1962. It is probable that in recent years many high-income households have pulled their savings out of thrift institutions. Consequently more recent data would undoubtedly show low-income families holding a substantially larger share of

1962 INCOME	SAVINGS DEPOSITS	MORTGAGE DEBT
(Percentages of Household Totals Accounted for by Income Class)		
0 - \$2,999	15.8	3.4
\$3,000 - 4,999	13.0	7.7
5,000 - 7,499	15.2	21.6
7,500 - 9,999	16.0	26.0
10,000 - 14,999	18.6	22.0
15,000 - 24,999	10.9	11.2
25,000 - 49,999	6.0	5.6
50,000 - 99,999	3.7	1.7
100,000 and over	.8	.7

Source: Projector and Weiss, *Survey of Financial Characteristics of Consumers*, Board of Governors of the Federal Reserve System, Washington, D.C., 1966.

*Median Income in 1962 was \$5,200.

savings deposits but owing a somewhat smaller share of mortgage debt.

Help for Home Building and Other Impacts

What would be the impact of variable rates on home mortgage funds and residential construction? First, let us compare a variable-rate regime with one of fixed rates. And let us assume no ceiling rates, no FNMA purchases, and no subsidized advances by the Home Loan Bank System. In such a free market, commercial banks would attract most of the savings of thrift institutions in periods of escalating interest rates. This would be disastrous for thrift institutions, the flow of mortgage funds, and home building. In this comparison, therefore, variable rates show up very well.

Second, let us compare a variable-rate regime with the existing fixed-rate system which includes massive governmental intervention to sustain thrift institutions during periods of restraint. As we pointed out in an article in our Bank publication last spring,⁵ Regulation Q and other protective devices have kept mortgage rates (in comparison to corporate bond rates) at very low levels in 1969 and 1970. Any further relative reduction in the level of mortgage rates would cause mortgage lenders other than thrift institutions to desert that market even more than they did in 1969-1970. Thus the introduction of variable rates in our existing institutional framework would not provide much additional insulation for the mortgage market and the home building industry from the effects of monetary restraint.

The variable-rate mortgage, however, would permit thrift institutions to weather periods of restraint and provide a more equitable rate to small savers. It would also accomplish these ends without our present jerry-built system of controls and subsidies. Thus, variable-rate mortgages would permit thrift institutions to create their own "free enterprise" mechanism for stabilizing home building.

Variable rates might have other beneficial social effects during periods of restraint. Most of the \$7 billion transfer would be channeled to a population group with a high savings propensity. Therefore, it might serve to increase national savings. Also, the higher rates paid on savings and time deposits could conceivably encourage some people to increase their savings rate.

Encouraging Use of Variable Rates

In view of the advantages of rate variability on mortgages, particularly for the lenders, why has it not been used more extensively? Late last year, the Federal Reserve Bank of Boston surveyed mortgage lending institutions in New England. We found that about half of the lenders did make some loans with provisions for varying rates, but most banks included these provisions only in a minority of their loans. Furthermore, even in these cases, the right to raise rates was exercised only half the time. Inertia and fear of bad publicity were the chief reasons for lender reluctance to vary rates. In several cases where lenders began to exercise their rights to raise

⁵"Variable Rates on Mortgages: Their Impact and Use," *New England Economic Review*, March/April 1970.

rates across the board, a public outcry ensued. The most drastic repercussion was in Vermont where laws were passed which have virtually eliminated the use of variability. In Massachusetts a bill was introduced (although not passed) in the legislature which would limit increases in variable-rate mortgages to 50 basis points over 5 years.

All this New England experience shows that rate variability is unlikely to be adopted unless financial institutions, their trade associations, and the Federal Government provide strong leadership and encouragement.

Financial institutions and their trade associations could make variable-rate mortgages more attractive in several ways. First, they could promote tied-rate mortgages which move automatically down as well as up with national mortgage rates.⁶ Too often in the past the power to change rates has rested solely with the lenders. A new state law in California requires all variable-rate mortgages to be of the tied-rate type. Second, lenders could offer an initial rate, say, $\frac{1}{4}$ to $\frac{1}{2}$ percentage point lower than on fixed-rate mortgages to the borrower who chooses a variable-rate mortgage. A third inducement would be to incorporate a schedule of small reductions in the tie between the rate on each mortgage and the basic national mortgage rate. For example, if the initial rate were set equal to the national rate, the schedule could specify that in 5 years or so the rate would be reduced one-quarter of a point below the national rate with a similar reduction at the end of 10 years, and so forth. The procedure would serve to emphasize the concept of variability and should prove to be quite attractive.

The Federal Government could, of course, be most influential in promoting rate variability. Obviously, the VA and FHA should allow variable-rate mortgages to be included in their loan guarantee programs. Furthermore, the Federal Government could absorb the losses on these variable FHA and VA mortgages without requiring premium payments.⁷ Regulatory agencies could also allow lower liquidity and capital reserve ratios if the mortgage portfolio of a

⁶We believe it would be best to have a tied-rate mortgage linked to a basic national series such as that of the Federal Home Loan Bank Board on conventional home mortgages. We agree with Mr. Puckett that use of a thrift institution's cost of funds or the bill rate would not be desirable. Nevertheless, it should be noted that some savings and loan associations are presently using their own cost of funds as the basic rate and they apparently have encountered no difficulty.

⁷This is the current practice on VA fixed-rate mortgages.

thrift institution consists entirely or largely of variable-rate loans. Such actions follow the spirit of the Federal Reserve System's capital adequacy formula which allows lower capital requirements against assets with less potential of decline in capital value.

If most thrift institutions offer variable-rate mortgages in the future, rate ceilings would be unnecessary. Without rate ceilings during periods of rising interest rates, thrift institutions with predominantly variable-rate loans, and, therefore, rapidly rising earnings, would be able to attract practically all the deposits away from thrift institutions with mostly fixed-rate loans. Thus, if a significant number of lenders began to use variable rates, others would be forced to follow suit in self protection.

Of course, many borrowers may continue to insist on fixed-rate mortgages. We believe they should be required to pay a higher rate for the right to escape the risk of higher interest rates in the future. Under our plan lenders who extend fixed-rate mortgages would be required to transfer this yield premium to reserves rather than paying it out to depositors. In this way higher reserves for fixed-rate mortgages would substitute for the protection provided by variable rates.

DISCUSSION

ELI SHAPIRO

The role of a discussant is, under the best of circumstances, an awkward one. This is also too apparent to me since there is much in the papers that I agree with; under the circumstances it is difficult for me to nit-pick. My earlier remarks are not intended to be criticisms of the Friend or Anderson-Eisenmenger papers. As proper authors they have addressed themselves to the topics assigned to them. I merely wish to make some general comments about housing, monetary policy and financial regulation before going on to comment specifically on both papers.

I thought I would start my comments by taking up Irwin Friend on the statement made in the first page of his paper. He talks about the justification for specialized savings institutions which get government assistance, and suggested that the restrictions on their asset and liability structures rest largely on a balancing of public policy and economic consideration. This balancing, says Irwin, requires first an appraisal of the importance of the public policy objectives involved on which, says he, economists have relatively little to comment. It is not clear to me in the context of the use of English whether he meant to convey that economists do not know very much about public policy objectives or they are concerned with means for any given ends and therefore do not talk very much about these policies. I, however, shall disabuse him on both counts very briefly.

Public Policies

In the first place we have a large number of public policies. We have a public policy in the sense that we have inflation which presumably was induced by the Congress of the United States and the Executive branch of the Government. We have a set of housing goals which were also enunciated by the government, both federal and state and local governments. We also have a series of public policies which deals with regulation of financial institutions. And so the issue really turns on how does this mixed bag of policies affect

the outcome of one or the other of the ends that are desired. It seems reasonably clear from what I have heard transpired yesterday and certainly what has transpired today, that one of the major problems adversely affecting the housing field has been, in fact, the inflation that we have had since 1965. Very few people discussed difficulties in the savings and loan industry in the period prior to 1965, as Irwin remarked earlier. And it would seem to me that one of the major problems that we ought to address ourselves to, is that maybe it would be unnecessary to talk, as the two papers did yesterday, about the problems of housing, if we could achieve a public policy which provides a stable price level. I suspect it is not a silly hypothesis to suggest that in an environment characterized by a stable price level, housing would be supplied in quantities sufficient to meet the needs of the public.

I find it difficult to discuss the topic of changes in financial institutional structure because I am convinced that if we had gone further than Irwin did, as had the Commission on Money and Credit in 1961, and say in effect "eliminate all portfolio regulations and presumably also all ceilings on interest rates," and provide a stable level of economic activity, that the credit markets would have supplied a better end product relative to social aims. I happen to believe that, and I am concerned that somewhere in this conference a paper was not addressed to that subject. Had such a paper been discussed at this conference it might have made a lot of the other bits and pieces fit together in a better way.

Another topic I think should be discussed is the whole character of regulation of the housing industry in the United States. This regulation obtains not only with respect to the behavior of financial institutions but it is also a consequence of the variety of regulations that exist on the state and local government level. One such regulation is legislation designed to do great things for man, namely the usury statutes. Whatever their stated objective is, they have had the effect of impairing the ability of financial institutions to make mortgage funds available on terms competitive with other alternatives open to them. In effect, ceilings on interest rates on mortgages create serious problems to prospective home purchasers by rationing them out of the market for finance. The presence of usury statutes would create a serious if not fatal impediment to introducing variable mortgage rates as proposed in the Eisenmenger-Anderson paper.

The third thing that I would like to comment on before I talk specifically about the two papers is the rationale behind the widespread talk on the quantity of housing which is desired, i.e., 26 million housing units in the decade ending in 1978. I really do not know how much housing the American economy ought to have, and the fact that the Congress of the United States says in its wisdom that we ought to have 26 million housing starts in ten years is not really very specific from the point of view of any cost-benefit analysis in terms of what other expenditures have to be foregone if this level of housing starts is to be attained.

I, like most of us, can see a problem in connection with the desire to provide housing for the poor. You may on equity grounds desire to do something in this direction. It may take the form of rent subsidies; it may take the form of interest subsidies. I suspect it would be better handled by a guaranteed income, then let the consumer decide how much of his money he wants to spend for housing as opposed to other things. And I think that throughout the discussion of housing needs and goals there is a lack of clarity on whether you want to be concerned about housing for the middle income and the rich. My own particular view is that you may make a case for subsidizing the poor, but I see absolutely no reason why the middle income should have low cost or subsidized housing in order to retain four cars or any other combination of choices that they wish to make.

Allocating Real Resources

There is another sort of problem which I regard as really very important, which is not covered in the papers--and I do not wish to be interpreted by these remarks as criticizing the authors. We ought to worry about the whole question not only of allocational efficiency of financial resources, but also of the allocational efficiency of real resources. Let me state my proposition to you in the form of a hypothesis. In the long run it may be that the Congress of the United States and the public of the United States will really get adequate housing. And the reason they will get adequate housing is a consequence of the credit crunch, as a consequence of the growth of profitability of housing due to the fact that not much of it is being built by traditional builders and financed by the traditional mortgage lending institutions, i.e. savings and loan associations and mutual savings banks. There has arisen a disequilibrium in returns in housing, and this disequilibrium has led many corporations to go into

the housing field directly. Now, they have a great capacity to tap the capital market, and the presumption is that they also have a great capacity to expend money on research and development to develop optimum sized units for the production of housing in the United States. And I should not be surprised if when we look back at the so-called credit crunch period, it may be a turning point in the introduction of a much more modern technology in housing, a much more efficient stock of housing in the United States; it may also turn out that substantially fewer intermediaries are needed for the provision of this housing.

For a financial intermediary serves a particular purpose under certain sets of circumstances. It may be that we just have too many savings and loan associations, and too many mutual savings banks, or will have them in the latter part of the decade of the 70's as a consequence of what appears to be a very substantial interest on the part of corporations to go into the housing business directly. With their access to funds in the capital market they can avoid the regulatory restrictions that are imposed on housing finance through the regulation of financial institutions. Thus we may get more, better and cheaper housing in the United States in the future by reducing the scope of activity of the small builder-contractor and his dependence on traditional sources of mortgage finance.

The Need for Price Stabilization

Let me turn briefly to the Eisenmenger-Anderson paper which is really divided into two parts, as I think Irwin Friend's paper is also. One is a general discussion about monetary and fiscal policy, the presumption being that we want a combination of monetary and fiscal policy which in the first instance produces no inflation. Then there are some other elements to the advocacy of fiscal policy, in a combination of fiscal and monetary policy such that our stabilization policy mix will not affect the housing market unduly. I propose really not to discuss those parts of the paper for I am sure they have been discussed at earlier sessions of this conference. I would only say in passing, Irwin, that your comments on monetary and fiscal policy read as though they were written in 1960 or 1961 and that there had not been anything else written, about both monetary and fiscal policy, since that particular period which introduced a reasonable measure of uncertainty about our earlier beliefs in the relative importance of monetary and fiscal policy respectively. His preference

is for heavy dependence on fiscal policy as the principal stabilization tool and his arguments read as though it were a proven instrument, and very evenhanded. I remind you of the evenhandedness of fiscal policy. In the last speech before the Congress of the United States by Joe Barr, then the Secretary of the Treasury, he pointed out the discrimination against middle income taxpayers by the revenue acts that we had passed. Thus I am not as sure as Friend about the evenhandedness of fiscal policy. Moreover, I never thought that advocates of monetary policy denied that monetary policy might not have some sectoral effects. The sectoral effects were the consequence of the sectoral effects of the market mechanism. That was the argument which was used to show the virtue of general controls rather than specific or direct controls.

Variable Interest Rates

I share the Anderson-Eisenmenger view with respect to the use of the variable rates on mortgages. I would simply repeat my earlier comment that one problem which arises is the effect of statutory limitations on interest rates which may impair the effectiveness of their proposals. I would say that if lenders have a reluctance to use variable mortgage rates then I do not see why they (the lenders) ought to be protected in their own best interests. If in fact they want to make fixed-rate mortgages and suffer portfolio imbalances and fail, then they deserve their fate. I would not protect them at all; if they wish to underprice their product, grand. The consequence is that they will probably not stay in business very long.

Now, on a purely technical level, it has been argued that a household has a certain amount of money which it allocates for housing. And in effect you would put them into a variable budget position by varying the rate, since they do not know whether they are going to have to pay ten bucks or forty bucks, depending upon the public policy which gives or does not give inflation. Well, I would say one way to get around that problem, which was not mentioned in the paper, is conceivably to lengthen the maturity of the mortgage so that, in effect, the households really have a constant out-payment. All you are doing in effect is to relax the terms to maturity to achieve that particular objective.

There are a number of alternatives, it seems to me, to the variable interest rate which I think might also be mentioned. First of all, there is the statutory requirement that lenders be able to prepay

their mortgages. Note what this does in effect. It is a one-way option which says that the borrower can always take advantage of falling rates. It seems to me, the simplest thing to do is to have the risk shared equally by lender and borrower, which is another thing which could be done in connection with a variable mortgage rate. And public policy, it seems to me, ought to move in that direction, but thus far it has not.

Another thing that I would suggest to deal with the problem of portfolio imbalance is that we are creatures of habit. We think of an amortized mortgage as being absolutely the greatest thing in the world, and it probably was a great innovation when it came in the 1930's. And it supplanted, as you know, the short-term mortgage with a balloon out at the end of a year, two years or five years. The fact of the matter is that I do not think that the amortized mortgage ought to be the sole mechanism for borrowing against real property. For the notion behind the amortized mortgage was that the lender's risk would be reduced by the amortization, and the borrower would be required to repay serially on the mortgage that he had taken.

I believe there is a lot of attractiveness to a non-amortized short-term mortgage. In the first place we seem to be generally convinced that major depressions are a thing of the past, and I think it was the fear of major depressions that led to interest in amortized mortgages. In the second place, when interest rates were low, and the typical maturity on a mortgage was 12 or 15 years, I think that it probably was true that the borrower repay a fair amount of his principal over a relatively early period of time. For example, a borrower under a 5 percent, 15-year mortgage would, under the terms specified, reduce his indebtedness by 25 percent during the first 5 years, and by 58 percent during the first 10 years. But today with interest rates at 8 percent and maturity terms of 30 years, the required reduction of principal during the first 5 years is only 5 percent and during the first 10 years only 12 percent. So that in fact, the amortized mortgage is not really reducing the principal amount by very much, and there ought to be some innovative lenders to say in effect, "You want mortgage money? Fine. We'll give it to you on an old-fashioned kind of instrument, namely a relatively short-term mortgage." And I suspect they are able to protect themselves against changes in interest rates, and therefore preserve their opportunity to remain in business in a world where they are in portfolio imbalance. These and related proposals seem to have more to offer than talk of the cosmetic effects of income and balance sheet statements of Jim Tobin. I find it sort of strange for a man who spends most of his

professional life working in portfolio theory and dealing with such variables as risks, returns, and liquidity, talking about the "cosmetic effect" of an unrealized capital loss.

Need to Improve the Mortgage Instrument

Irwin Friend enumerates the whole list of proposals which is very directly responsive to the title of his paper, and I must confess I have absolutely no objections to any of them. I think they are all desirable. They do not go as far as I would go, since I am a free portfolio man, and my only objection is, why not go a little bit further, Irwin? And I think also his comments about the necessity for the improvement of the nature of a mortgage as an instrument are extremely well taken, and here I think you are again subject to state regulation which really makes these mortgages infirm in the sense that foreclosure procedures and various other procedures differ from state to state. And here, too, we observe a case of government regulation impairing the quality of a mortgage in competing with other capital market instruments in tapping the savings of the public.

Now, whether we have ceilings on interest rates or not, the fact of the matter is that the Federal Government has in many ways protected the thrift institutions in the sense that they will not issue competing instruments in sizes that will drag money out of financial intermediaries. But what the government will not do, I assure you, A&T will; for one day they will offer 8 percent one hundred dollar bonds, easily available at every office of the telephone company. You are still going to have problems in the mortgage field, unless you permit the traditional mortgage lending institutions both to bid for funds, and to be able to earn rates of return on their assets that will be competitive with the alternatives that will be open to even small savers.

Impediments to Housing Construction

At one point Irwin goes through an attempt at a cost-benefit analysis, which being an honest man, he admits is very imprecise. The fact is I do not know whether you can talk about the cost-benefit analysis with respect to asset changes and liability changes in financial institutions alone, or whether you really have to talk about alternative ways of achieving the same purpose. Needless to say opening the choices gets to be even more imprecise. For I would submit to you, as an assertion not as a fact, that we would do

substantially more in the way of improvement of housing production in the United States, not by alterations in the credit machinery, but by alterations in the amount and extent of regulation on the federal level, state and local government level, including the labor union level, building codes, etc. These are really impediments, it seems to me, to the construction of an efficient housing industry in the United States. And while I do not mean to imply that either of the papers ignored this or would differ with me, I simply think we would get more mileage from my suggestions than would be the case if we only unbundled the asset and liability sides of financial intermediaries.

Equity Among Financial Institutions

There is one concern I have with Irwin's paper--he hinted at it, I would prefer to see it made very much more explicit. The argument about changing the domain in which savings and loan associations can operate would be, as I said earlier, a movement in the right direction in my estimation. The problem becomes one of interinstitutional equity, for I would hope that he would argue that the same sorts of treatment would be given to other financial institutions that have to compete with the savings and loan associations for the savers' dollars. I think this is a rather important problem in the implementation of any of these proposals for, ultimately I suppose, it boils down to which of the two groups of the financial institutions has the largest power bloc in the Congress of the United States, which is not always necessarily in the public's best interest. I suppose we would want to argue that if you are going to eliminate rate ceilings on S & Ls, you really ought to permit commercial banks to compete more effectively for demand deposits as well as for time deposits.

Now, again I do not personally have any major concern about giving checking rights to the thrift institutions, and Irwin's argument is that there is an advantage that you have in competing for savings if you have a full line of financial services which may be offered to the public. My only concern about the granting of that power to the savings and loan associations is that they should then be subject to all of the restraints of competing institutions on which Irwin was, I think, quite explicit. The problem, however, is if you are talking about the optimum number of checkeries in the United States, it is not clear to me that by giving all these institutions checkery rights that we will have the appropriate scale and number of check issuing

firms in the economy. Though I can raise the question, I certainly cannot answer it.

In conclusion most of my remarks are not directed at the papers, but are directed at issues that really should be raised in this conference for I think they are at least as critical as the issues which are being addressed to the financial machinery. I might say in closing that if it is true that our housing needs for the 70's are very largely conditioned by the need for multiple-family housing for the young and as I expect also for the poor, I am not at all sure that the savings and loan industry in its historic operations is really the one to worry about. Somehow or other there is a vast body of lenders that has historically done a great deal in the multiple-family business, and I suspect that what we ought to do is to give access to savings pools to all those institutions that are efficient in the financing of multiple-family housing--which I believe to be the major housing requirement in the decade ahead.

MONETARY CONFERENCE

Melvin Village, New Hampshire

October 14-16, 1970

GARDNER ACKLEY, Henry Carter Adams University Professor of Political Economy,
The University of Michigan
PAUL S. ANDERSON, Assistant Vice President and Financial Economist,
Federal Reserve Bank of Boston
H. JAMES BROWN, Department of City and Regional Planning,
Graduate School of Design, Harvard University
PHILLIP D. CAGAN, Professor of Economics, Columbia University
ELLIOTT G. CARR, Director of Research, Savings Banks Association of Massachusetts
JAMES R. CARTER, Chairman of the Board, Nashua Corporation
Director, Federal Reserve Bank of Boston
JOHN J. CASSON, Associate Economist, Brown Brothers Harriman & Co.
SAMUEL B. CHASE, Professor of Economics, University of Montana
DAVID L. CURRIER, Senior Vice President, The National Shawmut Bank of Boston
J. DEWEY DAANE, Member, Board of Governors of the Federal Reserve System
TUCKER H. DAVID, Executive Vice President, The Deep River National Bank
Director, Federal Reserve Bank of Boston
ARNOLD H. DIAMOND, Office of Economic and Market Analysis,
Department of Housing and Urban Development
JAMES S. DUESENBERY, Professor of Economics, Harvard University
Director, Federal Reserve Bank of Boston
ROBERT W. EISENMENGER, Senior Vice President and Director of Research,
Federal Reserve Bank of Boston
GORDON E. EMERSON, Senior Vice President, Cabot, Cabot and Forbes Co.
JAMES F. ENGLISH, JR., President, The Connecticut Bank and Trust Company
ROBERT M. FISHER, Senior Economist, Division of Research and Statistics,
Board of Governors of the Federal Reserve System
HAROLD S. FLIGHT, Vice President, The First National Bank of Boston
CHARLES E. FORSBERG, Vice President, First National City Bank of New York
HENRY M. FOWLER, Partner, Goldman Sachs & Company
BERNARD N. FREEDMAN, Economist, Division of Research and Statistics,
Board of Governors of the Federal Reserve System
BENJAMIN M. FRIEDMAN, Junior Fellow of the Society of Fellows, Harvard University
HARRIS C. FRIEDMAN, Office of Economic Research, Federal Home Loan Bank Board
IRWIN FRIEND, Richard K. Mellon Professor of Finance, University of Pennsylvania
EDWARD J. GENG, Special Assistant to the Secretary of the Treasury
RALPH T. GREEN, Vice President, Federal Reserve Bank of Dallas
CAROL S. GREENWALD, Economist, Federal Reserve Bank of Boston
JOHN H. GULUZIAN, President, Home Savings Bank
GEORGE HANC, Director of Research, National Association of Mutual Savings Banks
ARNOLD C. HARBERGER, Professor of Economics, University of Chicago
H. ERICH HEINEMANN, The New York Times
ROBERT J. HILL, President, New Hampshire Savings Bank
PAUL M. HORVITZ, Director of Research, Federal Deposit Insurance Corporation
DONALD P. JACOBS, Professor of Finance, Northwestern University
VERLE B. JOHNSTON, Senior Economist, Federal Reserve Bank of San Francisco
HOMER JONES, Senior Vice President, Federal Reserve Bank of St. Louis
OLIVER H. JONES, Executive Vice President, Mortgage Bankers Association of America
ROBERT C. JORDAN, Financial Vice President,
New England Mutual Life Insurance Company

GEORGE K. KARDOUCHE, Associate Economist, The Royal Bank of Canada
 HENRY KAUFMAN, Partner and Economist, Salomon Brothers
 RAYMOND H. LAPIN, President, R. H. Lapin & Co., Inc.
 MICHAEL E. LEVY, Director, Economic Policy Research,
 The National Industrial Conference Board
 ROBERT LINDSAY, Professor of Finance, New York University
 C. E. McCARTHY, Vice President, Bank of America
 ALLAN H. MELTZER, Maurice Falk Professor of Economics and Social Science,
 Carnegie-Mellon University
 FRANK E. MORRIS, President, Federal Reserve Bank of Boston
 KENNETH H. MYERS, President, Federal Home Loan Bank of Boston
 RICHARD A. NENNEMAN, The Christian Science Monitor
 FREDERICK C. OBER, President, Newton Savings Bank
 DAVID J. OTT, Professor of Economics, Clark University
 JAMES L. PIERCE, Assistant Adviser, Board of Governors of the Federal Reserve System
 A. MARSHALL PUCKETT, Manager, Domestic Research Department,
 Federal Reserve Bank of New York
 DONALD B. RIEFLER, Senior Vice President, Morgan Guaranty Trust Company
 HARRY S. SCHWARTZ, Vice President and Economist,
 Federal National Mortgage Association
 ELI SHAPIRO, Sylvan C. Coleman Professor of Financial Management, Harvard University
 JOHN SIMMEN, Chairman of the Board, Industrial National Bank of Rhode Island
 Director, Federal Reserve Bank of Boston
 LAWRENCE B. SMITH, Professor of Economics, University of Toronto
 WARREN L. SMITH, Professor of Economics, The University of Michigan
 GORDON R. SPARKS, Associate Professor of Economics, Queen's University
 ROBERT J. SPILLER, Executive Vice President, Boston Five Cents Savings Bank
 NORMAN STRUNK, Executive Vice President, United States Savings and Loan League
 ANTHONY STUKEL, Director of Research, Central Mortgage and Housing Corporation,
 Ottawa, Canada
 WALTER T. SULLIVAN, Assistant Vice President, Federal Reserve Bank of Boston
 MICHAEL SUMICHRIST, Director of Economics, National Association of Home Builders
 PAUL A. VOLCKER, Undersecretary of the Treasury for Monetary Affairs
 HERBERT F. WASS, Economist, Federal Reserve Bank of Boston
 PARKER B. WILLIS, Vice President and Economic Adviser, Federal Reserve Bank of Boston

Copies of this Publication
 are available, upon request, from the
 PUBLIC INFORMATION CENTER
 FEDERAL RESERVE BANK OF BOSTON
 BOSTON, MASSACHUSETTS 02106