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Opening Remarks John J. Balles and Michael W. Keran*

Keran. We would like to welcome you to the Federal Reserve Bank of San Francisco's Economic Series—a lecture series which has been going on for the past seven and one half years. The series has been designed to bring together in one place people from diverse backgrounds—academia, the business community and the financial community—with a common interest in public-policy issues. We hope that, with this joining of minds, we will all learn something useful.

Today's seminar is a special one-partly because we have not one, but two speakers. The only previous occasion of this type was four years ago, when we had a debate on the monetarist controversy by Professor Franco Modigliani, then President of the American Economic Association, and Professor Milton Friedman, who had just been awarded the Nobel Prize in economics. Recently, on rereading the summary of that debate, I found that it had an interesting and current ring to it. Basically, the debate concerned whether monetary policy should be used to stabilize the business cycle, or used to reduce the inflation rate. Four years ago, the Carter Administration clearly chose to use monetary policy to work on the business cycle. Today, we have another, new administration, which has unveiled perhaps some of the most dramatic and far-reaching economic proposals we've had since the New Deal. And we're very fortunate to have two distinguished and knowledgeable speakers to discuss the Administration's program.

Balles. Michael Keran has given me a very easy and pleasurable assignment today—the privilege of introducing our guest speakers. I join Mike in welcoming our friends from the business, banking and academic communities. From my personal standpoint, it's a great relief to be listening to rather than giving a speech,

*Mr. Balles is President, and Mr. Keran is Senior Vice President, Federal Reserve Bank of San Francisco. since in this way I get my intellectual batteries recharged from time to time.

Our principal speaker today, as you know, is Professor James Tobin, Sterling Professor of Economics at Yale University. Professor Tobin hardly needs an introduction to a group like this; still, I'm going to give a few highlights. Throughout his long career - his first published paper appeared 40 years ago this month in the Ouarterly Journal of Economics -Professor Tobin has been interested in the impact of public policy on the macro economy, and especially on the twin problems of inflation and unemployment. (That first paper, for example, concerned the impact of a general wage change on employment and the price level.) Over the years he's made distinguished contributions in economics, always seeking to maintain a balance between theoretical rigor and empirical relevance-trying to avoid both measurement without theory, and theory without empirical implications. This concern with the real world, the political economy in its broadest sense, has also made him a valued advisor to presidents and to seekers of the presidency. And as you well know, he served 20 years ago as a member of the President's Council of Economic Advisers. He's been particularly active in the area of macroeconomics most relevant to the Federal Reserve-the structure of financial markets, and the links between the Fed's policy actions and the real economy via the banking system. The moneymarket models we use today to guide Fed policy owe a great deal to the pioneering work of Tobin and generations of his students, many of whom have found their way into the Federal Reserve System. We're fortunate to have him with us today to discuss the President's economic-policy package. Perhaps he'll also have something to say about the role of the Federal Reserve in dealing with the nation's economic problems. I'm happy to introduce to you Professor James Tobin.

The Reagan Economic Plan

Discussion by Robert Hall

Balles. The discussant for Professor Tobin's presentation, presumably giving the other side of the story, is Professor Robert Hall, Professor of Economics at Stanford and also a Hoover Fellow. He holds a joint appointment at both institutions; he is, as well, a member of the Brookings' Panel on Economic Activity and head of the National Bureau's business cycle dating project. His research projects are many and varied, but he has been particularly interested in the microeconomics of labor markets and in the influence of those markets on the employment and inflation process. I'm informed that he's currently editing a book on inflation for the National Bureau. At various times, he's investigated the impacts of government tax policies, both on the level of business investment and on the supply of labor. Hence, he is very well-qualified to comment on the likely supply-side impact of the President's policy package as well as other matters brought up, or perhaps not brought up, by Professor Tobin. So let's welcome Professor Hall.

Let me start by saying that in no sense am I a spokesman for the President's program. The closest I came to participating in the formulation of the policy was serving as a member of the Task Force on Inflation, which made its report last November. Since then, I have been an academic on the sidelines.

What do economists and the public think is wrong with the American economy today? In the first place, the economy suffers from disappointing real growth. The disappointment dates back to 1973 in its worst form, but actually real growth as we knew it in the 1960s came to an end in 1969. Since then, periods of growth have alternated with severe recessions, and, over the whole period, net growth has been weak. The past few years have been especially bad. And the prospect for the economy today is for continuing disappointments in real incomes and real growth. As I understand it, the administration is very, very concerned with the growth issue.

The second problem, first on the public's list but second on mine, is inflation. People are very tired of struggling with a dollar that loses some 10 percent of its value every year. The public has been clear about its desire to end inflation. There is a very strong political commitment to end inflation. We as economists

shouldn't do about it, and here you will find me in agreement with what Professor Tobin

me in agreement with what Professor Tobin just said. The leading example of what not to do with the economy today is what the British are doing. Let me review the elements of the British macro policy as I see them. In the first

That's my short list of things that are wrong

with the economy. Let me turn now to what we

have an obligation to say, how can we do it?

The third item on my list is excess government control over the use of resources in the economy. There is simply too much intervention in various forms - regulation, taxing, and spending. A particular form of excess government intervention is the heavy taxation of the return to savings. There is virtually a crisis in the taxation of one of the most critical channels of savings and investment, equityfinanced purchases of plant and equipment by corporations. Those transactions are taxed in the U.S. economy today at rates of something like 60 or 70 percent, which is simply excessive. On the other hand, as Professor Tobin points out, we have another problem today, that the tax system subsidizes tax shelters, because of the deductibility of interest. The tax system is completely out of kilter as a result of inflation, and we need to do something about it.

place, the British have brought about a sharp reduction in money growth. And that has brought with it the usual symptoms of a financial crisis, including high interest rates, overvalued currency, and the like. Second, government expenditures are continuing to rise. That, I think, is the central problem they are facing. They simply do not have a handle on the budget in Britain. Part of the budget problem takes the form of direct government purchases of goods and services, including the continuing sad story of deepening government involvement in operating government enterprises, in spite of Margaret Thatcher's commitment to free enterprise. Another important source of budget strain comes from transfers, which have risen because of the reduction in real activity and employment. Finally, under the influence of, I think, a very basically incorrect interpretation of supply side arguments, the British have sharply raised commodity taxes and sharply cut income taxes at the same time. The net effect on the budget from these two moves was not large but it brought about a sharp increase in inflation. There is a large amount of feedback from the cost of living index to wages and transfers in the British economy. And the worsening of inflation has not been offset by any supply side response, either in theory or in fact. A fundamental supply side analysis says that the incentive to work depends on the ratio of take-home wages to prices. That's not affected by a move which increases take-home wages but also increases prices.

Let's not do what the British are doing. I'm happy to see that, by and large, the Reagan Administration is not moving in the British direction. None of the three elements that I've listed in the British example exist in the proposed policy of the Administration. So what should we do? Again, I have a list, and it differs from the Administration's policy only in one of its elements.

In the first place, we need to limit government expenditures. Here, I think, is probably the largest disagreement with what Professor Tobin has said. There are a great many federal spending programs, transfer programs, and regulations which the people don't want, which have an unfavorable effect on the public's spendable real incomes. We should make a list of all the rat holes that the government is pouring money into today, and we should eliminate them. If you go through the budget proposals of the Reagan Administration, you will find that the character of the expenditure reductions is largely, though not exclusively, elimination of rat holes. One can give countless examples. One which has been quite prominent is the Export-Import Bank – a good example of a program which simply does not have a proper role in a well-run economy. It certainly does not benefit the poor, and is something which should be dispensed with. Well, there are many, many things in the budget that should be dispensed with. My personal list would be considerably longer than the one the Administration has come up with. Furthermore, my cuts would be larger in those cases where the Administration has successfully identified a rat hole and then said, our way of dealing with the problem is to cut the budget by twenty percent. Having found a rat hole, I think we should simply stop pouring anything down it. Whole segments of the budget – like the Energy Department – are just collections of rat holes. Together, they consume a non-trivial fraction of real GNP.

Let me be very clear that I do not include in this category the types of expenditure which have virtually eliminated poverty in the United States over the past twenty years. I am very happy to see that anti-poverty programs like AFDC, supplemental security income, and food stamps have not been gutted. Though these programs are not completely satisfactory, they represent a very important step forward in improving the distribution of income in the most important way, by helping those at the very bottom. The President has been very clear on the need to retain anti-poverty expenditures. I think it's very unfortunate that a large number of opponents of the package have described it incorrectly as aimed primarily at eliminating expenditures on behalf of the poor. That's simply not correct. There are, of course, some attempts to improve the performance of transfer programs, but it seems to me that one can correctly characterize most of the expenditure cuts as eliminating rat holes.

President Reagan has also proposed large increases in military spending. I don't feel qualified to judge the desirability of this move, but I think that economists do have one very important thing to say with respect to military expenditures - macro policy is capable of delivering full employment and price stability for virtually any level of expenditures. Here I agree completely with what Professor Tobin said. There are good examples of economies which have much larger public sectors than ours, and have full employment and price stability. If necessary, we could support a much larger military establishment than we have now without automatically creating any significant macro-economic problems. Of course, resources available to the private sector for investment and consumption would necessarily be less in an economy that was devoting a large amount of its output to military or other government purposes. Within that limitation, the total level of output and the behavior of prices are things that policy can control. An increase in government spending is not by itself a threat to the performance of the overall economy. Nor is a decrease in spending. We ought to be able to design macro policies that handle any of these contingencies.

One of the most controversial features of the President's program is substantial reduction in tax rates. I emphasize that what's being proposed are rate reductions, and not necessarily revenue reductions. One does not have to accept the labor supply rationale of the Laffer curve to entertain the proposition that a tax rate reduction could increase revenue. A very good example of that is the reduction in capital gains tax rates that went into effect in 1978. In a recent study, the Treasury concluded that revenue remained about the same as a result of a large reduction in tax rates. Rate reductions can stimulate revenue because people have a good deal of discretion about how they arrange their affairs and how they fill out their tax returns. When tax rates go down, the incentives to shelter income are dramatically reduced; certainly that was the case with the capital gains reduction. And a fairly small fraction of total income actually flows through people's income tax returns. In spite of high apparent marginal rates, it's a curious fact of the U.S. economy that only 11 percent of personal income is paid to the federal government as personal income tax. I agree completely that the evidence that people work harder when they are taxed less is not nearly strong enough to support the notion that revenue would respond favorably to a tax cut. What the reduction in capital gains rates suggests is that people's incentive to avoid taxes would be dramatically reduced by cutting top marginal rates, and that would mean that revenue at least would not fall nearly as much as a simple calculation might suggest.

Although I am skeptical about the strength of the supply response to reduced tax rates, I endorse tax cuts as a way to restore real growth. Perfectly standard macro analysis, in which labor supply is exactly inelastic with respect to real wages, will tell you that tax cuts are expansionary. The idea that was pushed very hard and successfully in 1961 through 1964 is correct today. And it seems to me that it should be pushed today. One doesn't have to believe in an exotic labor supply function to take the view that the time has come for tax cuts.

I also favor tax cuts as by far the best way to keep expenditures under control. It seems to me that the reason that government expenditures haven't swollen worse than they have is Congressional fear of deficits. If we don't have a tax cut, there will be that much more room for pouring money down rat holes, which is not something I'd like to see happen.

The last topic on the fiscal side is investment incentives. As I said at the outset, heavy taxation of some kinds of investment income is one of our worst current problems. The President's proposal for accelerated depreciation the 10-5-3 plan — is very much a stimulus to investment through reduced taxation of its return. I don't think it is the best way to cut taxes on investment, however. I would far rather see the following combination of changes: On the one hand, allow an immediate write-off of all corporate investment - this would be the ultimate extension of accelerated depreciation. On the other hand, we should deny all interest deductions under the corporate income tax. That combination of proposals would provide even more stimulus than 10-5-3, and it would eliminate the inefficient subsidy we now pay to leveraged investment as well. In the long run, such a tax has a zero effective rate on a corporation that has no monopoly earnings. In a sense, it amounts to a proposal to abolish the corporate income tax. which I don't think would be a bad idea. Even with 10-5-3, the corporate income tax would become a very small part of the federal revenue picture. The big engine of revenue in the U.S. economy in the future will be the payroll tax - not the corporate income tax and not the personal income tax.

With respect to monetary discipline, what is needed is the establishment of a long-run framework for monetary policy. We need to be able to promise a move toward monetary stability, and therefore to price stability, over the next half-decade or decade. We need a convincing way to express that policy. It's not a matter of adopting a harsh reduction in money growth over the next 12 months. Rather, we need a way to promise the American public that we will not push the economy too hard at any one time, but we will push it to long-run price stability. So far, the Administration's proposals have not been in the form I would like to see - there has not been a strong announcement of a long-run monetary framework. Partly this is a recognition of the independence of the Federal Reserve System, and a reluctance for the President to appear to be trying to dictate to an independent branch of government what it should be doing.

What should the Fed be doing? The type of announcement I would like to see would state the target of monetary policy in terms of a path of nominal GNP. Take column 3 in Table 1 of Professor Tobin's handout and say, this is what monetary policy will achieve. We would love to accomplish what is shown in columns 4 and 5. We'd love to get inflation down that rapidly; we'd love to raise real growth to these exceptional rates year after year. We can't promise either. What we can promise through the use of a sensible long-run monetary policy is column 3. We can promise to use monetary instruments to keep nominal GNP growth at a reasonably high level, that is, not undergo sharp recession, and yet, reduce this growth gradually to a non-inflationary level. What I don't want to see, and what I am afraid I am hearing more and more from the Administration, is that money growth will stick, come hell or high water, to the predetermined target of column 1. We can see from the table that column 1 does not mesh with column 3. I couldn't agree more strongly with Professor Tobin's comments on this contradiction. There's simply nothing in the economy that's going to give velocity growth as high as is suggested by column 2. Furthermore, to the extent that a policy is successful in bringing inflation to an end, it will also gradually reduce interest rates. Lower interest rates should cause velocity to fall, so the problem is even compounded relative to Professor Tobin's discussion.

One of the things I like most about the new Administration is its commitment to strong real growth. To the extent that policy is successful in bringing growth, the economy will need more money. We shouldn't be afraid of money growth, if the reason we need it is growth in real GNP. The strict target of low money growth of column one just doesn't make sense in a rapidly growing economy. We can get out of the box by announcing a nominal GNP target instead of a money growth target. So far, the Administration's position has been incomplete in this area.

Taken together, the policy of reduced federal command over resources, lower tax rates, and investment stimulus adopted by the Administration promises progress in solving economic problems. If coupled with a good long-run framework for monetary and price stability, it would be a very large step forward in economic policy making.

Comments by Speakers

Professor Tobin:

I knew that Bob Hall was a good macro economist, so I'm not surprised that he tried to shift the debate-or shall we say, the discussion-to the micro side of the budget program. Just a couple of comments: First, I don't think it's fair to say that the Administration has not committed itself to column one of Table 1. The President's message in the budget-revision document states that the growth of money stock must be cut in half over a period of time. Although Hall interprets the inconsistency as delicate respect for the independence of the Federal Reserve, another interpretation is that the Administration is setting up the Federal Reserve to receive the blame for the inconsistencies of the program. In case the inflation rate doesn't go down as advertised, the failing would be the Fed's because it had been assigned the responsibility. In case the recovery falls short, failure to finance it could be the Fed's failing too.

Second, I want to stress the need for a con*certed* policy directed to an agreed path of nominal income, or money spending on GNP (column 3). I was glad that Bob Hall endorsed nominal income targeting. But it should be the policy of the Federal Government as a whole, fiscal and monetary together, consistent as between the two. Similarly, in Congress, we need a concerted approach to macroeconomic strategy as between the various committees those on the one hand that oversee monetary policy, and those on the other that oversee budget policy. We've had too much compartmentalization both in Congress and in the Administration, as if the two areas of macro policy weren't connected with each other. Desirable as an MV target policy may be compared to concentrating on M1B (column 1), I am skeptical that it will succeed without considerable pain and damage to the economy, and without the help of an incomes policy to bring about a reduction in wage and cost inflation consistent with the scheduled monetary disinflation. It is interesting, by the way, to see the distance conservatives take pains to put between themselves and British conservative policy, now that it appears that Thatcherism isn't succeeding too well.

Third, the claim that taxes take as much as 60 or 70 percent of net income generated by non-financial corporations seems a considerable exaggeration. Summers and Feldstein have cited figures of that magnitude as estimates of *marginal* rates. But they seem to be well above any estimates of average tax rates, and I suspect dubious as marginal rates as well. And they're really not consistent with what Bob Hall said himself, when he observed how little income appears on income-tax returns. That's certainly true of interest income, dividend income, and pension and annuity income — those kinds that reflect corporate-income payments.

Fourth, I think it's a great mistake, both in the Reagan tax program and in previous tax legislation, to correct inflation-generated distortions in the tax system by introducing other kinds of distortions. Why not meet head-on the non-neutrality of the tax system with respect to inflation? The problem may be historical cost depreciation, but we're going to be stuck with 10-5-3 for the rest of time no matter what the inflation rate after Bob Hall gets inflation down. The 10-5-3 plan, at that time, will no longer be justified as compensating roughly for inflation's exaggeration of taxable income. It would be better to have something like the Auerbach-Jorgenson plan, which would give the full present value of depreciation on a new investment right now, computed at a real interest rate of 4 percent or some arbitrary reasonable number. This plan is automatically neutral with respect to inflation. I also agree with Hall on eliminating the tax deductibility of interest costs.

Fifth, we cannot be sure as economic theorists that shifting taxation from capital income to wage income is a useful method of increasing saving and investment. The lifecycle model tells us that the aggregate supply of saving is scaled to after-tax wage income. Whether a shift in taxation from capital income to wage income will actually increase the amount of saving depends on the interest elasticity.

Finally, about ratholes: It's not really true that all the items in the Stockman hit list are ratholes, that none touch the truly needy or those that should be protected by "safety nets". A lot of them have to do with welfare, with food stamps, with Medicaid. One consequence of the cuts is to turn these people over to the tender mercies of the states, not all of which are as benign as California, Connecticut, and Massachusetts. Also, inconsistent with the spirit of the program as a whole, the marginal tax rates of the poor and near-poor and working-poor are going to be increased by the emphasis on keeping all but the truly needy off the rolls. The sacrifice of benefits involved in earning additional income is going to be much larger than under present programs. Things like aid to "federally impacted" school districts and export-import loans are examples of ratholes, where we would all agree-both on efficiency and equity grounds-that cuts are justifiable. But by no means all Stockman's cuts are of this nature. Moreover, we could compile a list of items that deserve to be cut but have been spared. Consider tax expenditures, which are basically open-ended appropriations by the Federal Government to use resources at the discretion of tax-payers, often for doubtful purposes that would get the axe if they were on the other side of the budget ledger. We can't debate budgets this afternoon, but I don't think an inspection of the program would justify what Bob said about it.

Professor Hall:

Let me just discuss one topic, the taxation of savings and investment. As Jim said, the average rate of taxation of investment income is not as high as the example I gave of tax rates of 60 or 70 percent. It may help if I elaborate upon the example where rates are at that confiscatory level. A corporation issues new stock bought by individuals who are in the 40-percent marginal tax bracket, which is typical for the owners of common stock. All of the proceeds are then invested in a plant. There's no investment credit involved. There is no leverage, no borrowing in the debt market, so there is no deduction for interest. The combination of the 46-percent statutory corporate income-tax rate, 40-percent marginal personal income-tax rate, and historical cost depreciation at 10-percent inflation gives a total effective rate of 60 to 70 percent, which is excessive.

The big problem with the tax system is the coexistence of these high rates with negative rates on other types of investment, notably those with high leverage and large interest deductions. That's why, when you add everything together, the average tax rates on all types of investment turn out not to look very high. So the evidence Jim referred to does not contradict my point that some critical types of investment are highly taxed. The problem with the tax system-entirely attributable to inflation-is that it deals very harshly with equityfinanced investment and very, very generously with leveraged investment. You find individuals going out and leveraging themselves like crazy, borrowing everything they can to create tax shelters-and corporations, who are reluctant to leverage, incurring very heavy tax rates and therefore finding that the current environment is not very favorable for investment. The problem needs to be solved by eliminating the subsidy to leveraged investments and reducing the taxation of equityfinanced investments. The two together don't have large revenue implications, because we could get the revenue by eliminating subsidies of leveraged investments and applying the revenue to reduced tax rates on equityfinanced investments.

Unfortunantely, 10-5-3 is not the best way to make this kind of a change. I understand the Administration is at least considering some more fundamental tax reforms to be proposed after Kemp-Roth and 10-5-3 go through. There are some very badly needed structural reforms that would improve the incentive for plant and equipment investment by corporations.

General Discussion

Q. The first-quarter GNP estimates didn't look anything like the OMB estimates, what with the reduced rate of inflation and sharply higher real rate of growth. Perhaps the Administration's decontrol of oil prices had some thing to do with this, since petroleum is such a major factor in economic activity. I'd like to ask both gentlemen to comment on the extent to which supply-side economics may bail the Reagan Administration out of the quandary that they seem to feel exists on the tightmoney side.

Tobin: I think it's a good idea to decontrol oil prices. But I don't know how much that had to do with the first-quarter surprise in real output and prices. I doubt it was the major factor. But whatever truth may be there, it's not something that you can do every month and every quarter from now until 1986. It can't be counted on to produce miracles all the time. I just don't believe there's any overall productivity miracle or supply miracle capable of bringing about any substantial reduction in the rate of inflation over the next few years.

There's an illusion in some of the rhetoric about this—a fallacy of composition. Murray Weidenbaum (Chairman of the Council of Economic Advisers) was quoted as saying that inflation is too much money chasing too few goods-so we're just going to get more goods in the market, and with the same amount of money chasing those goods, the price will go down. And Mr. Laffer says that in an apple market, if you get a lot more apples offered for sale, the price goes down and that's all we're talking about for the real economy. I think Jean Baptiste Say had something to say about this a long time ago. Additional supply also creates additional demand, maybe not one for one, but 0.9 for one or something like that. You don't get a big reduction in excess demand, you don't get much excess saving or net excess supply from aggregate supply increases, desirable as they may be for their own sakes. There is no solution there to the inflation problem. Even if we were to have a considerable increase in the investment share

of national product, it would take some time before that shows up in additional productivity. Even then, the additional productivity growth will be small compared with the rate of inflation that we have to cope with. So there's no supply-side miracle that will make those predictions come true in the scenario.

Hall. One of the things we were careful to do in writing the inflation task force report was to warn the President that although these policies were good in the long run, there was going to be a very soft economy in 1981. That was a group of a dozen knowledgeable macroeconomists trying to make a forecast. Like many forecasts, this one has turned out so far to be quite wrong, and now there is the danger that people are going to say that the new policy has been miraculous. There is no reason to link the surprisingly strong performance in the first quarter to the new policiesoil decontrol is the only one put into effect during that quarter. A very important lesson of macro-economic experience is that you must not argue from the quarter-to-quarter changes in any variable. It would be a very serious mistake to make exaggerated claims for supply-side policies just on the basis of one quarter. We could have a very bad second or third quarter this year, and I wouldn't want to say that signalled the failure of supply-side policies any more than I would want to say the first quarter shows the success of the policies.

Q. Professor Tobin said that there were a lot of ratholes that the Reagan budget cuts don't touch, and he referred to tax expenditures. Now I don't regard those as ratholes, because all they do is let me keep my money, in the sense that the government has a tax expenditure by letting me keep 70 percent of the income I earn. But in terms of actual budget cuts, what would he like to see that President Reagan is not talking about?

Tobin: Examples that I might think of offhand are elimination of subsidies for ship building and ship operation under American flags, and a much more thorough-going attack on agricultural price supports than the minor compromise on dairy price supports that has received so much attention and praise. I think we eventually have to tackle the over-indexing of social-security payments and develop a more sensible index for that purpose. That's the middle class' favorite program, and one not touched by the Reagan Administration up to now. I could also think of some things that I might like the Federal Government to spend more money on. I don't agree, by the way, about tax expenditures. Deductible expenditures at the initiative of the taxpayer should be regarded as having something to do with the allocation of resources by government fiscal policy. Stockman and Reagan say that government should not subsidize humanities, noncommercial broadcasting, the arts, and socialscience research because the private sector can do so out of tax-deductible contributions. But that's open-ended, and leaves the whole decision process up to the taxpayer. In a pluralistic society, I would like to have some of each.

Q. Professor Hall mentioned that there's a difference in opinion in the Reagan Administration—one group that wants to reduce the money supply year after year (who favor column one), and another group that wants to see a less dramatically declining rate of nominal income growth (who favor column three). It seems to me that most of the public statements have come from the people backing column one. What people are backing column three, and what are their prospects for success?

Hall. The work I did in the fall brought me into contact with supply-siders in a way that university life had not, and I found that the following general line of thought prevailed: Anti-inflation policy in general and monetary policy in particular needn't be the major thrust of policy. Rather, budget policy in its various forms should be the major thrust, and problems of inflation and money creation will take care of themselves if the budget can be brought under control. The monetarists, on the other hand, wanted to put most of the emphasis on controlling money growth. The supply-side forces in the Administration, which are quite powerful, have not been very clear on what they think should be done with the money supply; only the monetarists have spoken up in any very detailed way on this issue. I don't think it would be fair to say that monetarism has completely taken over the Administration. The disagreement which resulted in the clear inconsistency between the real-growth and inflation targets on the one hand, and the money-growth targets on the other hand, represents a very important continuing split in the Administration. I don't see any immediate sign that that's going to be resolved.

Q. Some of the big "Keynesian" model builders, such as Data Resources Inc. (DRI), show 6-percent velocity growth over the next several years. They forecast money growth along the lines of what the Fed is targeting, yet they see 10-percent inflation continuing along with 3-percent growth. So they still get 13-percent nominal GNP and then 6-percent velocity.

Tobin: They say the Supreme Court reads the election returns, and I've observed that to be true also of econometric model builders.

O. Almost everyone agrees that the Administration's program has nothing to do with inflation, yet it's sold to the public with the promise that it will take care of inflation. Actually, what the program will do, in effect, is to change the budget composition-the nature of the role of government expenditures and the role of taxes. With regard to tax policy, I would emphasize that the problem is really both one of tax structure and one of level. Now, Mr. Hall at times refers to the need for revising the tax structure, and at other times to the need for cutting taxes. Should we not be careful about mixing up these statements? To restate the point, is capital-gains tax reduction an appropriate analogy for income-tax reduction?

Hall. I was only giving an example, in which taxpayers under the existing tax law have great discretion about how to conduct their affairs. Capital-gains taxation is an

extreme case because taxpayers can choose when to realize their gains. I don't want to say that the negative relation between tax rates and tax revenues automatically applies to the case of labor supply, but again the fact that an awful lot of wage-type income manages to escape taxation one way or the other is an important fact. It suggests that there are discretionary tax shelters and the like which could respond in a sharp way to tax rates. But that's only a guess. We really don't know the answer to the question.

Tobin: I want to comment briefly on this shift of the supply-side view about tax revenues from economic effects to pure taxevasion effects. There is a certain danger in the idea that we must reduce taxes because they're being evaded, and keep reducing them until we diminish the incentive to evade to the point where more will be actually paid. If you thought of the process as a game, considering the precedents set in that sequence of events, we would end up having no distortion by having no taxes. But maybe we should consider a trade-off between rate cuts on the one hand, and appropriating more money to the Internal Revenue Service on the other. And maybe we should fix up the tax system so that we don't have so many of these shelters built into it.

Balles. Professor Hall made a statement that he would warn against the adoption of column one in Professor Tobin's table; that is, a mechanical year-by-year half-point reduction in money growth until you got to a point, at the end of that period, where it was cut in half. He also said he thought that we needed a strong announcement as to what monetary-policy aims would be. Since this is a central bank, and since I am involved in monetary policy, perhaps we could conclude with his advice to us about what those strong announcements of monetary-policy aims should be.

Hall. I presented a proposal to the Board of Governors of the Federal Reserve last fall to make nominal GNP rather than the money stock the central focus of monetary policy. Although I agree with Jim Tobin's comment that all policy, not just monetary policy, should

be used to stabilize the growth of nominal GNP, I am prepared to defend the use of the monetary instrument alone for this purpose. We should adopt a specific target path for nominal GNP and stick to it. Every time nominal GNP gets a little higher than the path, we should push it down using the appropriate monetary contraction; and if we get a little bit below, as we might during a recession, then we should push it up through monetary expansion. According to my research, manipulation of monetary instruments could stabilize nominal GNP quite well. The policy could work in a number of ways, and might even involve the use of an interest-rate rule. Let me give you an example—I am not saying that this is the best of all policies, but here is an example of a policy that I think would have a reasonable chance for success. The Treasurybill rate is to be pegged one percentage point above the rate of inflation for each percentage point that nominal GNP is above the target path, and correspondingly below inflation when nominal GNP is below target. So if nominal GNP is, say, five percentage points above target, then the Treasury-bill rate should be five percentage points above the rate of inflation. History has shown that it's a contractionary move for the Fed to set the Treasury-bill rate or other short-term interest rates well above the rate of inflation. Similarly, it's a very expansionary move, as we learned in the late 1960s, to hold the Treasury bill rate below the rate of inflation. This interest-rate policy would be very easy for the Fed to carry out; it doesn't get into any of the difficulties that pegging monetary aggregates does. And it's based on a nominal GNP goal. It's a feedback rule whose effect is to keep nominal GNP, plus or minus a percent or two, on a prescribed track. And it does what the Fed likes best, namely stabilizing short-term interest rates. It gives the Open Market Committee a formula to determine the target interest rate. It would accomplish exactly what I have advocated as the general principle of monetary policy, keeping nominal GNP on a predetermined growth path, instead of keeping a monetary aggregate on a predetermined path.