NATIONAL ACCOUNTING SYSTEMS

Dr. Gerhard Colm

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Reviewed by: Colonel Tom W. Sills, USA

Date: 29 September 1959

INDUSTRIAL COLLEGE OF THE ARMED FORCES

WASHINGTON, D. C.

1959-1960

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Reviewed by: Colonel Tom W. Sills, USA, 29 September 1959.

Reporter: Grace R. O'Toole

Publication No. L60-28

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COLONEL SMYSER: General Mundy, General Houseman, Gentlemen: This morning we continue our review of basic economics as we focus our attention on the subject, National Accounting Systems. Now, I have brought up the name of the current course of study, Review of Basic Economics, intentionally, because it is somewhat amusing to note that the subject of the lecture this morning is not review, so it is quite new, and it is not basic because it is quite complicated, quite perplexive.

It is economics, however, and it is an area of economics of greatly increasing importance and significance. The problem of a comprehensive system of national accounts has been receiving much study and much attention in recent years. It has come before the United States Congress, and it is under study by the Joint Economic Committee of the Congress.

Our speaker this morning, Dr. Gerhard Colm, has participated very actively in most of the progress that has been made in developing a comprehensive system of national accounts. So he is very well qualified to talk to us on this subject.

Dr. Colm has had extensive civilian and government experience as an economist. He was associated with the Department of State and with President Truman's Council of Economic Advisers. He is currently with the National Planning Association. Two of his books, "The American Economy in 1960," and "The Economy of the American People," are used here at the Industrial College.

Dr. Colm, it is a pleasure to welcome you back to the Industrial College of the Armed Forces and to present you to this year's class. Dr. Colm.

DR. COLM: General Mundy, General Houseman, Colonel Smyser, Gentlemen: It is a great pleasure for me to be back here and a pleasure to have been here before. Two or three days ago in the paper somebody wanted to close up all military installations, so I am glad to come here before that happens.

The national economic accounting system is a tool. What Colonel Smyser said is quite right. It is not basic economics; it is applied economics. It is a tool without which we think we can't very well work in economics, in analysis, or in economic policy. If you have a business man who wants to look at an enterprise, he hasn't much time and he wants to get a quick look. Well, he asks for the profit and loss account, or the balance sheet, and he wants on a few pages the highlights of information which tells him how the enterprise is working, what the sales have been, what the costs, profits, assets, and liabilities are.

We are absolutely acquainted with that tool of the balance sheet and accounting systems in private business. I would say it is almost a miracle that in economics such a tool has developed so late. Perhaps that isn't quite right. I will in the course of my remarks make a few observations on the history of national economic accounts. About 200 years ago we did have something like that, but then came along chaos through which that was forgotten.

I will present a survey of national economic accounting systems by first briefly speaking about the purposes, second about the origin, third about various types of accounting systems, and fourth about a few further developments which we see on the horizon and which we believe are necessary.

So, first, something about the purpose. I said already that we need accounting systems if we want to look at the economy as if it were a single enterprise. Now, this in a way tells us something about the purpose. You may say, "Well, why do we need to look at the economy as a whole? A business man is interested in his own enterprise. He is interested in the enterprise of his customers, whether they can buy, or his suppliers. But, is he interested in the economy as a whole?" The Government is interested in its own operations, but also in the economy as a whole.

The accounting systems became important when it was realized that each individual enterprise depends on the operations of the economy as a whole. When you are looking at one particular branch in industry, let's say the construction industry, if somebody in the construction industry wants to have an idea of how business might develop during the next year so that he can get ready with his financing and his raw materials and other operational plans, he has to look at the economy as a whole--for instance, how many commercial buildings, industrial plant equipment, or what State or local governments may do in the way of road construction or school construction or hospital construction. He has to have a view of the economy as a whole and the major segments of the economy in order to draw some conclusions for his own enterprise.

The Government is not only interested in whatever the responsibility is. Let's say the Corps of Engineers is interested in building dams, and the Department of Agriculture has the responsibilities of prices of basic commodities, and so on. But the Government, formalized in the Employment Act of 1946, has a responsibility for the economy as a whole, not in the same way as a Communist country runs an economy as a whole, but because it has a responsibility which is to be discharged with a minimum of interference with regulation of business transactions, labor conditions, and so on. It has a responsibility which is to be discharged by what we call the strategic weapons, like fiscal policy, monetary policy, import and export policy, and so on. But under the Employment Act the Government has the responsibility to promote conditions which assure us of a satisfactory level of employment, production, and purchasing power; and, in the way this law has been interpreted--even though that is not the language--that includes also promotion of a satisfactory rate of economic growth and a reasonable degree of price stability.

Now in order to look at how things are going in the economy as a whole, and what steps the Government must take, we need this overall view also for the Government. So for business, government, and I could go on, for labor, when they are considering what kind of wage increases are possible without forcing prices up, or whatever other considerations there may be, we have it that both the decision-makers in government and the decision-makers in private business, and other private groups, have the need to look at the economy as a whole in a similar way as the business man wants to look at the conditions of an enterprise through the highlights of the accounting and the balance sheet.

For particular interest I'd like to mention a few examples in which you might be interested. During the recent decade, particularly at the time of the rearmament after the Korean attack in 1950, the question was raised: What kind of armament is compatible with a quasi-peacetime economy? It was recognized that this country probably needed a high level of armament, high in comparison with the immediate postwar period, a very high level of preparedness, and, as distinct from previous periods of mobilization, it had to be in time of peace. That means it had to be compatible with an economy of peacetime growth, a reasonable standard of living, and the performance of non-defense government obligations.

Now, how could one go after such a problem? Well, the only way of going after it was to look at these national accounts and see that if in a period of years there was such an increase at the time before the Korean War. I still remember when statements were made that we would get a wartime threat of inflation and that we needed controls if the national security spending would exceed $15 billion; and when this was questioned it was thought that we probably needed something closer to $50 billion, and then how could that question be analyzed.

It was analyzed for the National Security Council by the Council of Economic Advisers in terms of the national economic accounts. The answer was given that at that time probably a $50 billion national defense budget was compatible with a growing and reasonably satisfactory status of the economy.

Also, more recently, the question has been asked: What would happen if we did get some disarmament? Statements had been made both by leading American business men and also by leading Communists, who agreed on that, strangely enough, that, if we ever would have some disarmament, that would cause a collapse of the American economy and that we just could not afford it. That question, too, has been analyzed in terms of national economic accounts.

Well, these are just a few examples. In the material I distributed on the last page I gave one example of a national account for the Japanese economy which showed for that country a different condition and use made of it, because the Japanese wanted to know what the implications for import and export would be if their economy continued to grow as it has done in recent years, which they think is necessary for the growing population and some increase in the standard of living.

Here again we see a very important policy question is answered by the system of national economic accounts by figuring out in a growing economy what imports would be needed for raw materials and what exports would be necessary in order to make the economy self-supporting.

Now, national accounts used for that purpose first are compiled for the past. We want to know how the economy has performed in the past, and we want to have that as a bird's-eye view with a few significant figures. But in all these purposes which I mentioned, I did not mention any purpose of historical analysis. All the purposes that I mentioned were purposes related to the future. What will a business man do in the future? What finances does he need? What raw materials must he secure in order to utilize opportunities of the market which are likely to be opened up for him? And, for the Government, what kind of policies for the future? Therefore, the big problem is to use the past as a springboard for making national account projections into the future. That is really the purpose.

Now, let me come second to a few words about the past, in order to give an idea about the origins of national accounts which may help us in understanding what this is all about. I think there are three different historical developments. One is the development of double entry bookkeeping for private enterprise. As you know, this is a system developed during the renaissance in Italy, and it developed to an art in the modern world. The double entry in bookkeeping surveys a simple idea, namely, that every transaction in a business has two aspects. If you buy raw material you add to your supply of raw material. You take something in and you incur a liability, either for cash payment or for credit. Every transaction has two aspects.

It is the same in the national economy. (Writing on the blackboard.) This is a double entry bookkeeping example. In the national economy there is the same thing. If the Government spends money, let's say, on the procurement of a bomber, that is expenditure of money--it's expenditure. But it also is income of workers and it becomes profits of a corporation. So here it is again on the expenditure side of government and on the income side of private individuals, exactly the same amount.

So in national economic accounting we are using this system of double entry bookkeeping. That is the basic idea. As a matter of fact, very often the same transaction may appear four times--not just two times--depending on how the books are kept. We could not have national economic accounting if it had not been for the development of double entry business accounting in the private economy.

Second, there was necessary a certain development of economic theory. (Writing on blackboard.) It is what we call the micro economic theory. I mentioned before that in the period before the classical economics we had a development which was called cameralism, where the economy was to a large extent sort of an extension of the household of the monarch—to use an oversimplified analogy--and, well, the economic advisers of the princes in Europe had to think in terms of the economy as a whole. This wasn't called economic national accounting, but there we had a very similar development. This was then taken over by the physiocrats, and perhaps the first highly developed system was the tableau economique by Canais in France, who wrote a little earlier or at about the same time as Adam Smith in England.

Then came the break with the classical economics, the philosophy that nobody needed to be concerned with the economy as a whole. The only concern was with micro economics, with the individual enterprises, with understanding how the individual enterprise incurred costs and thereby determined prices, and how those payments were made to labor, and so on, who then bought. If you thought only in terms of the millions of units of the economy, then the whole would take care of itself. If everybody pursued his own self-interest in that system, nobody needed to be concerned with the whole. An individual business man just looked at the signals of the market, the prices and costs, the interest rate, and so on, and then he had his guidance and didn't need to consider what the economy as a whole would do. He looked only at the signals of the market and at his own enterprise. Government did not need to be concerned about the economy as a whole. If the Government kept out of the business, the economy would take care of itself.

This was what you called the classical system. Everything I am saying in 45 minutes is a little oversimplified. Always, in talking about national accounts I think of the statement made by ~~Santayana;~~ Whitehead, "Always seek simplicity, and distrust it." But I have to simplify.

So, as I said, during the 19th century the art of national accounting got lost. It is, by the way, very interesting that also the socialist literature did not continue that traditional thinking, even though perhaps one would think it was perhaps closer to their ideology. Marxism, the dominant brand of socialism during that time, was not really regarded as Utopian, in thinking how an economy could be managed. They were concerned with only the development of a system which would weaken and undermine capitalism, so then, by the art of midwifery, capitalism could be pushed to the final collapse and then they would take over. But it was in disrepute to think in detail how such a new economy then could be organized that was regarded as Utopianism.

This was one of the reasons that when the Soviets took over in Russia they had really no theory to guide them how to operate, and it took them pretty much 40 years to get their own system, fully developed, through a series of five-year plans, and so on.

So we didn't really have anything until the experience of the great depression of the thirties, when particular Swedish economists and Keynes in England developed what we call now the modern theory of micro economics, which explained why, under certain conditions, the mechanism of the market does not give us the desired result of full employment, why we can have depressions, not only, as it was previously said, as a friction in the operation of the market, but as a much more serious affair. Gradually a theory developed which thought in these terms: total national income, wage bills, markets, total sales, and so on, these terms which then became quantified in the national accounts.

Now the third development (writing on blackboard) was the national income statistics. All through this period when theory didn't think in these terms, and statistics continued to be concerned with certain aggregates, to a large extent, whenever there was a 25th anniversary of a monarch in Europe, or any such occasion, there was a universal publication which showed the progress and the welfare of the nation, and there national income statistics were used, used always for the past, usually five years back, because that was the time needed, as statistics were not up to date. But, anyway, all through that period national income statistics did continue, not in a very active way, but there were statistical conferences about what were the proper ways of compiling national income.

Now, I would say that it was a confluence of these three developments which gave us the national economic accounting systems--the technique of double entry bookkeeping; the change in economic theory concerned with the totals in the economy and not only with the individual agents; and the statistical technique of national income estimates.

Now, we distinguish here those for the past, which of course are always the basis for whatever we do. Then we have those for the future, which we call projections (writing on blackboard) and we have certain efforts dealing particularly in mathematical terms with the national account in a timeless manner, which are more or less theoretical models, where we consider what are the factors, for instance, that determine the price, and what is the effect of a change in taxes. These problems are approached without direct reference either to the past or to the future, with the effort of learning certain general rules.

But we are not at this moment going into this. Let's look at these projections. As far as projections are concerned, we have two different kinds--again in some oversimplification—one of which we call forecasting models and the other which we call decision models. Now I have to explain that a little bit. A business man who wants to know whether he should increase his stock of inventory or get ready financing for expansion, wants to have an answer from somebody as to the likelihood that the market will increase by 5, 10, or 20 percent over a 5-year period. We are very often asked that question, and we always start, "Well, considering that the cold war intensifies and we have this or that, or considering that there may be no increase in military expenditures, and considering that Congress will do this or that," and by that time these men get impatient. They say, "No, we don't want to consider this or that. What do you think will happen to the market?" Now, if you come up with an answer because you are pressed to give an answer--Schopater once defined two kinds of problems as those which can be measured and those which cannot be answered by measurment. You clearly recognize and state the problems which you cannot answer by measurement, and after you have stated them, you go ahead and measure them. So, even with all the ifs, and buts, and so on, the business people need to get the best possible judgment on what is likely to happen.

Therefore, the economic profession has developed national accounting projections which use certain probabilities which are derived from the past and then go ahead and make the best possible forecast. Also that is sometimes necessary for government, when we have, let's say, the Bureau of Reclamation considering an irrigation project. They come to the Department of Agriculture and say, "We think we will be growing more potatoes in that area. What do you think will be the market for potatoes ten years from now when this whole area will be in production?" Then they are told that there will be no market for potatoes then, no additional market for potatoes. Then they say, "We can't use these experts," and they go ahead and build the irrigation system anyway.

That's what I call the forecasting model. Now we come to the decision model. The decision model is more of the type where we have a goal. For instance, in the cold war we have to do certain things. We know that the rate of growth of the American economy during the last few years was unsatisfactory. We want a growth rate, let's say, of 4 or 5 percent. Then we ask: What policies are needed in order to obtain such a rate of economic expansion? What kind of tax policy is needed? What kind of monetary policy is needed? What have we to do about prices? And so on. That is the kind of question which we answer through the decision model.

The difference is this: In the forecasting model the unknown is what we try to answer. The X is our equation. It is the total; it is the result. And what we assume is policy. If we make a forecast, we always must have in our minds some idea--in mathematics we call it the parameter--what the tax policy will be. We take that for granted, perhaps as a continuation of present policies. If those policies continue, what will be the result? That means, the total economic growth of what we have, the future market, is unknown, and we put in as known, the policy. In the decision model it is just the opposite. We set a goal, a target. Then we ask: What kind of policy variables are the policy measures? We ask: What policies are needed in order to obtain that goal?

The most important kind of national economic accounting is a combination of the forecasting and the decision models. Let me say it this way: In a fully regulated economy, in a wartime economy, we have to come to decisions. In a democracy, with free enterprise, what we are operating with is a mixture. There are certain things for which we are setting goals. For instance, in recent years our growth rate was 2 percent and the Russian growth rate was 6 to 7 percent, and there is a definite feeling that this is unsatisfactory and that we should have a higher rate of growth. But we are not setting goals for each individual branch, such as exactly how many toys should be produced for Christmas. We are introducing into our goal and merging with it certain forecasts. We say, "If the whole economy grows, let's estimate what it is that people want. If their income is rising, how much do they want of new cars, or refrigerators, or higher quality food, and so on." So the model we are building for democratic planning in a free enterprise system is a mixture of these tools. Certain strategic items are determined as a goal, and all the rest is determined by hypothetical forecasts. That means, if the policy is geared toward these goals, then we think individuals will behave, consumers and business will behave, in some manner.

There is a difference with the five-year plan. When we find out that our forecasts, which are built in, are not right, then we correct our estimates. In the Soviet five-year plan, the whole plan is a legal decree, and, if it doesn't develop as planned, then somebody has violated a law, with all the consequences.

Well, this is what I wanted to present to you as a kind of pedigree of the national economic accounts. Now I want to say briefly that we have a number of different systems of national accounts. As we have in business, we have the major system of profit and loss statements and balance sheets accounts, two different systems which are inter-related; but they are different systems. So in the national economic accounts we have the national income. In Table I I have given an example. I give you only one figure--the total of the production of goods and services, which we call GNP, gross national product. I gave you that as a sort of boast. This shows that these projections are not entirely without some probability of realization.

I give you in one line a projection which was published in the fall of 1952, for 1960, but with the intermediate years, and I contrasted it with the actuals in the next column. There are, of course, variations, because these are projections of a reasonably full employment level. At times we had booms, where the actuals exceeded the projections, and at times we had recessions, where the actuals remained below. But in general the picture comes out quite all right.

On Table II I give you the same gross national product, but broken down by the main sectors of the economy—consumers, business, international, and government. This is a projection for the year 1970. That is also broken down by receipts and expenditures. That is a kind of double entry bookkeeping system which I mentioned, and that's the kind of thing we are using, for instance, for considering what would be the effect of, let's say, an increase in the national security expenditures by $20 billion, or a reduction by $20 billion, on the other sectors of the economy, and what policies are needed in order to accommodate such changes in policy in a manner that either depressions or inflations, if not avoided, are minimized.

A second system of national accounts which has been used is the so-called inter-industry study, which concentrates on the relationship of industries, on the purchase and sale of industries. That is of particular importance when you want to draw conclusions from the general economic development to one particular industry--how much steel will be needed, how much aluminum will be needed--and you assume a certain policy which you want to explore.

That means, you assume we have an increase in national security by $20 billion. So much of it goes for air procurement. You translate that into aluminum and all the other materials that go into that procurement. Then you can, through the input-output technique, or inter-industry studies, find out what the effect of that will be on the various branches of industry and what increase in capacity will be needed.

The third, for which I have no example here, is the flow of fund study which is done by the Federal Reserve Board, particularly for monetary policy. That gives us the flow of income expenditures in a similar way to the national income accounts. But in the national income certain transactions wash out. For instance, if we have somewhere an increase in liquidity in another part of the economy and a strain on financial resources, our totals there are in magnitude of production of goods and services--not in the details of the monetary transactions. Now the Federal Reserve happens to be interested in these monetary transactions, so they have developed a kind of national accounting system which gives them this information.

Finally, we have here the national balance sheet, which gives us the assets and liabilities. Some of these are highly developed, others less. The national income and product account is most highly developed. It is published for the past by the Department of Commerce. Projections for the future are not published by any of the executive departments. Those estimates are made for internal use.

The Joint Economic Committee of Congress has been using projections into the future over the last decade, and they are still publishing such projections. Basically these projections into the future are left to private research organizations.

The input-output or the inter-industry study was discontinued as one of the economy measures in 1953. Just this year it was resumed by the Department of Commerce on a much smaller scale than it was previously done.

The flow of fund analysis is done in a rather extensive manner by the Federal Reserve Board.

The balance sheet approach is actually not used by the Government. We have some work done by the National Bureau of Economic Research, pioneering work by Raymond Goldsmith; also one Congressional committee has also looked into that. But it is not an officially developed system.

On this whole matter, in closing, let me say that we are in a way at the beginning of a development. National accounting, in the way I have demonstrated it to you, is a matter of the last 25 years. Much progress has been made both in the art of preparing such accounts and the art of using them. This, too, is an art. Much more progress needs to be made. The Budget Bureau two years ago appointed us, the National Bureau, to organize a committee for looking into needed improvements. That committee has presented a report to the Budget Bureau, to the Executive Branch, and also to Congress, and in this year's budget certain steps were proposed and adopted by Congress which go a pretty good way toward realizing the improvements recommended by that committee.

One of the recommendations was that these various accounting systems should not be free-floating—one in Commerce, one in the Labor Department, one in the Federal Reserve--but that there should be an integration; they should remain where they are, decentralized, because various agencies focus on different aspects, but there should be some spot in the Government where they are pulled together so that at least one can explain to the user why certain data come out differently in the different systems.

Also it was felt that we need much more use of these data in the Executive Office of the President in the formulation of a consistent government program. We have too much lose talk. Sometimes somebody--not just somebody but sometimes a body of high authority like the National Security Council—determines the need for a certain policy that involves an increase in certain expenditures. That is determined and then, somehow, comes budget time, and they say, "Well that is well and good, but we cannot afford it." Now, there is an absolute necessity of testing government programs which are in process of formulation with the aid of these systems, in order to be, from the beginning, aware of the economic implications and the fiscal implications; and not have somebody whisper into somebody's ear, "That's very nice, but you really can't go for that; that exceeds what we can afford."

We think we need to have this system of examination as a formal procedure, established in the Executive Office of the President, parallel to the financial examination which we have in the Budget Bureau.

This is my own private, personal idea. I hope I get a little support for it.

Thank you.

COLONEL SMYSER: Dr. Colm is ready for your questions.

QUESTION: Doctor, since the Russian economic policy is established for successive five-year periods and ours is adjusted as needed, what must we subtract from or add to the Russian reports of the economy in order to arrive at some intelligent comparison of growth?

DR. COLM: The most recent Russian plan is a seven-year plan. The Russians use different concepts of national accounting. They are excluding a large part of the services which we include. This goes back to the concept of classical economics, where Adam Smith and Karl Marx both excluded services, saying they are derived from income and should not be included. That's one reason why the figures are not comparable.

There are also other reasons. Very careful studies have been made of Russian statistics, recently with more success than previously. This is one effect of the change from the Stalin era, that much more and, according to experts, more reliable information has come out of the Soviet Union.

The official figures for the seven-year plan, put in terms comparable to our concepts--but the official figures adopted--provide for a little slow-down in the future seven years in contrast with the previous five years. But the rate of increase and the gross national product would be something like 9 percent per year. The studies of the American experts believe that this is an exaggeration, and some of the consensus among the experts is that one must expect in realistic terms a rate of growth in the Soviet Union of between 6 and 7 percent gross national product per year. That is in a way, I think, pretty much the consensus.

Now that contrasts with an American performance over the whole postwar period of a little better than 3 percent. In recent years it was between 2 and 3 percent. Of course we don't have any official figure for the future. We have no such goal which has jelled. We have statements from a variety of bodies who have looked into that. For instance, the Rockefeller Brothers Fund, under the leadership of Nelson Rockefeller, made a study of the problem. They came out with 5 percent as something which is (a) desirable and (b) feasible. Other groups have made statements--the CED, for instance, of 3 percent. We have made estimates of that and we came out with 4.4 percent. By the way, this 4.4 percent is not just a figure we like; this is the result of hundreds of individual figures that the computing machine gave us and came out with 4.4 percent.

But that rate of growth does require some adjustments in our policy. It will not come out entirely by itself. But we think this could be achieved with policies which we think are entirely feasible and realistic.

I'd like to emphasise that I would not be too concerned if the Russians have 6 or 7 percent and we have 4 or 5 percent. There is a difference between a somewhat more mature industrial system and a system which is still building up. I think of the automobile industry in the Soviet Union as virtually starting from close to zero. Take our agricultural staple products. For Soviet Russia it is a matter of almost life and death to increase production of staple products. For us it is a matter not of life and death but of political survival to reduce the advancing abundance in certain things.

What I am saying is that we shouldn't too much just look at these two figures. We should look at what we want to achieve. I think we have a lot to do in national security, in resource development, in economic and social programs, and so on, and in order to do these things within a reasonable time we need more growth than we have had in the past. But my criterion would be what is it we have to do, rather than engaging in a GNP statistical race.

I don't know if I have answered your question.

QUESTION: Dr. Colm, since we have been here we have had two opposed schools of economists talking to us--deflationists and inflationists. You propose that we have some economists advise the National Security Council. In view of the two different schools, could we have consistent economic policy from the National Security Council advice?

DR. COLM: I don't know who is giving advice to the National Security Council, because their reports are classified. But, if there are two schools, one inflationists and one, let's say, on the side of stabilization, we have some examples. We have Sumner Schlicter, who says, "It's bad having inflation, but it is worse having inadequate growth. So let's have growth and accept as the cost some degree of inflation." Then you have another school, for instance, represented by Chairman Martin and Secretary Anderson, Secretary of the Treasury, who say, "The first job is to keep the dollar stable." They were impressed by their trip around the world. In New Delhi and so on bankers said, "We are beginning to distrust the dollar." So they say, "Whatever we do, this is the most important thing. This may impair economic growth for a while, but in the end this gives us a sounder economy."

Now, I think both are wrong. I think there is a third school, to which I happen to adhere, that believes that basically the two objectives can be reconciled; we can have both. If we increase productivity, and remove obstacles to productivity, and sit down to do some work utilizing technological advances, and so on, then I think we promote growth, and, by increasing the supply of goods, we also create the best basis from which we can fight inflation. I think basically the two objectives are reconcilable.

Now, in the short run there is conflict. We have conflict in the short run. For instance: Should we have now a restrictive credit policy in order to curtail demand, or an easier money policy in order to promote growth? One thing you have to remember is, a high interest rate also increases prices. It goes into the consumer credit. When you buy a refrigerator, you don't know what you buy. You do not only buy the refrigerator; you also pay for the interest. And the public utilities, one branch of industry which is really going on a large scale for an expansion program, as soon as it pays a higher rate of interest, it turns around, goes to the State Commission for utility regulation, and, without any question, that is a legitimate cost factor that goes into our price system.

So it isn't so easy to answer that the high interest rate is the best weapon under all circumstances to lower prices. This is a very very complicated problem, where much has to be said on both sides. But I do not accept the two theses: First, in order to have growth we have to sacrifice stability; second, in order to have stability we have to sacrifice growth. I think we've got to do both, and, fundamentally, in the longer run, the same policies which help us with growth also help us on curbing inflation. In the shorter run we have to muddle through--sometimes make some concessions on the one or the other policy.

QUESTION: Doctor, I recognize that in terms of micro economics we in this room can probably not afford a disarmament program. I am curious as to whether you know what conclusions the Council of Economic Advisers came to when they analyzed this question of disarmament on a national basis.

DR. COLM: First let me say that I am not aware that the Council of Economic Advisers has studied that problem. I have asked the

Administrative Assistant, a short time ago, because I heard a rumor that they had analyzed it, and they said they had not. It might be that there is some classified work done. I am not aware of it. I have personally, in testimony before the Humphrey Committee, discussed that question, and I think it is very important to analyze it--not that I think we will jump at the four-year plan. If I haven't spoiled my chances, you may see me here again--but I think it is terribly important to analyze the question, because that is the only way of fighting the argument that we need the armament production only in order to keep our economy going. We should prove to us and to the world that we don't need it for that purpose; we do it because we have to.

I think that if you consider the possibility of, let's say, a $20 billion reduction, first, you wouldn't do it overnight. If you did it overnight I think there would be a severe repercussion and some severe adjustment would follow. But it could be prepared. We have many urgent programs. I think if we reduce military expenditures by $20 billion a great part of it could be made up by other programs of great urgency.

We have a water development program of $50 billion, a program of the Department of Commerce in connection with other agencies. That, I think, is intended to be a 15-year program, or something like that, but only because it is felt we cannot afford going faster doing things which need to be done. Well, you could step up such a program.

We know that we need schools. We know that we are contaminating the air. We know that we should step up peacetime research and utilization of some of the defense research for peacetime purposes. So I think a part of the shock would be absorbed by doing things that we now can do only very slowly and do them a little faster.

Second, I think that such a disarmament would make considerable tax reduction possible, and thereby give the individuals more, switch from procurement to individual purchases. I don't think we have quite reached the stage of--what is it?--the affluent society. I think if you ask, we have still 15 or 20 percent of our families who have an income in our cities of less than $2,000 and in our rural communities of less than $1,500. We call this substandard. If you ask those people I don't think they will say that they suffer by affluency.

I think something can still be done. I like to stress that I feel that there is need for a real study, a government study, of this question. The Senate Foreign Relations Committee, under Senator Humphrey, has done a lot, but I do think that this is something the Executive Branch should pick up, not because I think this is something that will be realized within a short time, but I think it is part of our military posture to know that we have these huge expenditures--and possibly larger ones than we are having now--not in order to keep our economy going but in order to say we can also manage otherwise.

So, to come back to your question, I don't know of any study of this problem in the Executive Branch of the Government. There is some study of it in Congress, and there may be classified work of which I am unaware, but I think this is something that should be done.

COLONEL SMYSER: Dr. Colm, speaking for all of us here, I want to tell you how much we appreciate your visit here this morning in the midst of your busy schedule. It was a very interesting lecture and a very interesting discussion period. Thank you.