The economic profession in the United States can derive satisfaction from the role that it has achieved in the American government, if that role is measured by the importance and the number of the positions occupied by professional economists (rather than by the state of the economy at the present time). Looking at the Cabinet, we see, to be sure, that its senior member, the Secretary of State, is a professor of political science from Harvard. The Secretaries of the Treasury and of Defense, however, are professors of economics from the Universities of Chicago and Virginia, respectively. The Secretary of Agriculture is a former professor of agricultural economics from Purdue University. The Chairmen of the Federal Reserve Board, of the Cost of Living Council, and of the Council of Economic

*--This paper covers topics III and V of the Conference Plan, although I have rearranged some of the topics. The headings reflect these rearrangements. The views expressed are my own and not necessarily those of my colleagues on the Board of Governors of the Federal Reserve System.
Advisers all are or have been or are about to become professors of economics at Columbia, Harvard, and Virginia respectively. In the ranks next to the top, the number of economists becomes far too extensive to trace across the government. In the Treasury, where I once instituted an inquiry, there were at one time six full professors employed in the Office of the Secretary alone, and some 60-70 persons in that Office who at some time of their lives had taught in institutions of higher learning.

The compilation of full-dress statistical data on the employment of economists in the U.S. Government runs into a difficulty not experienced to the same degree in European countries. The American educational process, after 16 years of elementary, secondary, and higher education, and at an approximate age of 22, produces a young man or woman technically known as bachelor of arts. This college graduate may have majored in economics, in which case very roughly one-third to one-half of total study time would have been devoted to economics. This does not make the graduate a professional economist. The graduate's counterpart in Germany and England has focused exclusively on economics for probably three years and in England may have attained a B.A., while in Germany he/she may be within one or two years of his/her Diplom Volkswirt degree. The German and the English student probably should be regarded as professional economists; the American is more nearly a liberally educated person with a concentration in economics, prepared to go to graduate school to receive a professional education proper.
Before World War II, a B.A. with a major in economics very often was sufficient for good part of the not very numerous government slots for economists, although university teaching has always required a Ph.D. Increasingly, however, standards have escalated. Today many economics jobs in government are accessible only to Ph.D.'s. Some are open to M.A.'s, typically Ph.D. candidates who for one reason or another did not complete their dissertations. Very few B.A.'s are hired in positions calling for a professional economist.

There are, nevertheless, numerous older government economists who began their careers at a less demanding time and who today do good and responsible work even though they never completed their Ph.D. or even M.A. degree. Academic classifications, therefore, are not a good guide to professional standing in government. Job classifications, on the other hand, are sufficiently flexible as to academic qualifications so that a count of slots in tables of organization also does not say anything very precise about the number of economists employed. An impressionistic figure can be derived from the membership of the American Economic Association, which for the most part includes persons regarding themselves as professional economists although by no means all of those who do. A survey of the membership shows that, of approximately 14,500 domestic members, 18 per cent give "government" as their principal occupation while 68 per cent list academic and 10 per cent "business" as their affiliation.
Role, Approach, and Function

I shall try to unbundle, under the headings of "role," "approach," and "function," three concepts that appear to me to be implicit in the term "role" as used in the conference title. When I say "role," I shall refer to the activities of economists -- economics is what economists do -- by "approach" the methods that they bring to their activities, and by "functions" the orientation that in their role of economists and by the use of the economic approach they have imparted to government policy.

Role of economists. The activity of economists in the American government runs the gamut from humble data collection to top level policy making. In my own limited experience, the most interesting dichotomy in this area has been that between research and operations. The young Ph.D. entering government typically is concerned both with preserving his professional qualifications and with making an immediate impact on policy. As he discovers that the second is difficult, he is apt to value particularly an opportunity to accomplish the first, preferably by means of turning out publishable research. Government staffers have learned that they must respect this desire if they are to have access to top talent coming out of the universities. This gives rise, from time to time, to "special projects divisions," "research groups," and whatever other descriptions administrators employ to push this kind of candidate through the budget-making process.
Then the pressures of government go to work. In some emergency or other, the head of the agency or division looks for a bright young man who can deliver what is needed. In one agency, in fact, the able members of the staff used to rate the incumbent Secretary by how long it would take him to "discover" them. From then on, the researcher is increasingly drawn into operations, until some years later he discovers that he has lost the capacity, or the taste, for research. The move from (relatively) pure economics to operations is a crucial one in the evolving role of the economist at the staff (civil service) level.

At the level of Presidential appointees, almost all economists find themselves involved immediately in operations. The range of these appointees, who usually arrive with an incoming Administration and usually, although by no means always, depart when the party in control of the Executive branch changes, appears to be wider than it is in many other countries. Typically, it embraces four echelons -- Secretary, Under (or Deputy) Secretary, Assistant Secretary, and Deputy Assistant Secretary.

It is this group that principally deals with the politicians, if that term is employed to denote the members of the Congress. In the American system, heads of departments are not members of the legislature and hence often, perhaps usually, are not professional politicians even though they are political appointees.
The problem of economists dealing with "administrators" has, in my limited experience, largely disappeared. Twenty years ago it would indeed have required effort for an economist to achieve an adequate hearing and even more to put across some of the technical concepts of his discipline. I know of an agency staff that invented the slide show performance for economics data, since widely popularized, in order to focus the attention of the Secretary on such esoterica. Today, the use of GNP and balance-of-payments jargon, multipliers, full employment budgets, and the Phillips Curve has become routine within Executive departments and with many members of the Congress. Now it is the businessman in government who feels out of his depth if he has not received some grounding in fundamentals from his own staff or in groups like the Committee for Economic Development, the National Planning Association, or the Council on Foreign Relations.

**Approach.** Economists, equipped with the "hardest" of the "soft" disciplines, have been interdisciplinary empire builders. Economics, both through its rigorous analytical techniques and through its use of econometric methods, has been able to make contributions in fields such as political science and sociology. At the same time, economists have turned to new areas, such as urban and medical economics. Currently, the applicability of economics analysis to legal problems is increasingly being explored.
These methodological approaches are particularly fruitful in government. A great deal of decision making in government takes the form of "yes or no" decisions. The same is true, of course, of legal decisions. The nature of economics is marginalism. A little more of this is traded off against a little less of that. A closer approach to welfare maximization will be achieved if the inevitable "yes or no" decisions of the politician and of the lawyer can be filled with a quantitative content and with a marginalist approach. By plying their incrementalist method, economists are injecting an approach into government decision making that is helpful.

Function. The "function," as here defined, of economists in government has been to institute and help attain a variety of economic objectives. In the United States, these have been made explicit by the Employment Act of 1946, which calls for maximum employment, production, and purchasing power, commonly interpreted as full employment, rapid growth, and price stability. Economists have been highly successful in impregnating the consciousness of administrators, politicians, the press, and the general public with at least two of these objectives -- full employment and growth. Without benefit of an Employment Act mandate, they have also done much to alert their listeners to the importance of social objectives, such as a fair distribution of income, elimination of poverty, and general improvement of social conditions.
An observer of the contemporary scene nevertheless is bound to ask himself whether the goals for which economists stand have not in good part been bypassed by events. The overriding importance of economic growth has been effectively questioned by the environmentalists. The desire for price stability, or at least for freedom from severe inflation, which economists have never taken very seriously, now threatens to trigger popular reactions that may be damaging both to the market system and to democracy. The economist's emphasis on maximizing short-run output has reinforced the politician's necessarily short time horizon. It thus has led to a neglect of long-run considerations that would stress the conservation of the economic machinery at some sacrifice possibly of immediate output.

It would seem that the economist could and should extend his sphere of interest to these broader and longer run concerns. If it should turn out that his professional predilections prevent him from doing so, one must fear that the public will regard his function in government as having been insufficiently responsive to needs. The economist may then find his role encroached upon, perhaps superseded, in the same manner in which he encroached upon the role of the lawyer, by who knows what new breed of more broad gauged technician -- social scientist, environmentalist, technocrat, or representatives of more esoteric disciplines waiting in the wings.
Professional Identity and Esprit de Corps
Among Government Economists

One does not become a banker by running an elevator in a bank. Many, but probably by no means all, economists feel the same way about working for the government. They think of themselves as professional economists first and as civil servants second. For political appointees from the universities and elsewhere this applies of course even more.

Various processes may erode this identification and may turn the economist into a professional civil servant. Inability to maintain academic qualifications, through lack of publication and lack of time to keep up with the literature, the sense of doing a worthwhile job, of being close to important decisions, may produce these effects. Identification with an agency may be enhanced by intra-agency rivalry. But there is enough job shifting among departments to prevent identification from becoming universal.

A Society of Government Economists exists. It certainly is not now a union in the collective bargaining sense. In a time of rapidly advancing public service unionism, a growing sense of professional identity and esprit de corps can be expected. Its present significance I find difficult to evaluate.

A very different kind of political grouping is that which brings together professional economists in and out of government. All technicians and specialists have their groups and associations,
with meetings as part of the annual convention of the Allied Social Science Associations, or sponsored by research organizations and universities, or organized by academic entrepreneurs with foundation support.

Among these numerous groups there is an unstructured nucleus, not very well defined, consisting of leading economists who may now be playing significant roles in government or have done so in the past. Some of these could be described as "fashionable economists" who are in demand for popular lectures, articles in newspapers or popular magazines, or talks to businessmen. They meet haphazardly but frequently in consulting groups of different agencies, the Ins mingling with the Outs on terms of professional equality. They all know each other's views, watch each other's work, and enjoy the human warmth created by long association that often goes back to student days. The American political system does not produce a "shadow Cabinet" or its equivalent at the economic level. Nor is there much sense in referring to this group, which continually co-opts new blood mainly from the universities, as a "power elite." But there is among this group a sense of community that blunts the sharp edges of political or professional disagreement.

Effects of Changes in Government on the Demand for and Uses of Economists

When control of the Executive branch changes from one party to another, many of the members of the group just described find
themselves exchanging places. The previous Ins return to their universities, research institutes, or business offices; the Outs, with some admixture of newcomers, take over. Quantitatively the demand for economists does not change, but its orientation does change.

The public service is protected, of course, against political changes. Replacements are limited, in general, to the Presidential appointees, covering something like the top four echelons, as mentioned earlier. Usually there are holdovers, especially in the international area, where some degree of bipartisanship is preserved. Many changes occur with a lag of years and are indistinguishable from normal turnover.

**Professional Ethics**

The code of professional ethics that binds government economists imposes different constraints on different groups. Civil service economists are expected to act in a nonpartisan manner, as are all other civil servants. The Hatch Act prevents all civil servants from undertaking political activity. Naturally most economists have convictions, and naturally many of them, and among them probably the best, may find it difficult to live with a regime whose policies they detest. It is my impression that top administrators, where they encounter such attitudes, have regarded them as a problem of cooperation rather than of ethics.
Reasonably severe ethical standards are imposed on political appointees. Government agencies typically require "conflict of interest statements" involving data, among other things, on income and assets of a qualitative although usually not quantitative kind. Senate committees examining the President's appointees with a view to their confirmation by the full Senate also want to be satisfied concerning the absence of conflicts of interest. Remunerated outside activities, including directorships, or fees for writing and speaking, are ruled out.

These matters pertaining to all political appointees are simple compared to the issues posed for professional economists with Presidential appointments. The problem presents itself with particular severity for members of the President's Council of Economic Advisers. A summary of a recent discussion of this old and much argued problem, at the 1973 Convention of the American Economic Association, has been distributed to this Conference. It is noteworthy that, despite the very different operating styles employed by various Council Chairmen and Members of the past and the present, no strong disagreements as to principles emerged at that meeting. The general conclusion was that the Members of the Council of Economic Advisers, as professional economists, are subject to considerable constraints in trying to develop political support for the President's programs before Congressional committees and before the public, without
being altogether precluded from such activities. The common denominator for professional conduct was found to be "honesty." This, however, begs the question whether honesty is enough if the adviser's views are highly subjective.

In the United States, and perhaps not only there, the problem of professional ethics and political involvement is complicated by the difference between the distribution of political views among academic economists and among the population in general. A precise assessment of this difference is, of course, impossible. The appearance of a massive predominance of liberal (left) orientation among the entire universe of economists -- academic, business, government -- may even be misleading. It could be the result of a selection process that causes economists of less liberal persuasions to become business economists or even civil servants, leaving the more liberal in the universities. Nevertheless, the minority status of economists broadly sympathetic to a Republic Administration creates problems of staffing, of nonpolitical conduct, and of relations with the profession. These may cause a code of conduct equal in principle for both sides to work out rather differently in practice.

**Freedom of Publication**

Every government agency can offer one attraction to potential employees that gains in strength with the quality of the candidate: opportunity to publish. Every government agency employs this
bargaining instrument at a double risk. The candidate, once employed, may embarrass the agency by what he writes. He may also waste the agency's time and money by working on problems that are publishable rather than useful to the agency. In my experience, the second problem is more frequent than the first. Against publications that are critical of the agency's policy there is a built-in restraint. The writer knows that he endangers not only his own career with the agency, but also the publication prospects of all his colleagues. An agency with a sufficiently large staff, moreover, may be able to encourage publication of different and perhaps conflicting orientations, thus gaining a reputation for fairmindedness while diffusing criticism.

Ability to produce a piece acceptable to a professional journal is an essential test of an economist's professional caliber, although certainly not of his usefulness to the agency. An agency will be able to attract better people, and to hold them longer, if it is liberal in its publication policy. The issue, in my view, is far more one of personnel policy than of freedom of speech or other professional ethics.

Recruitment

Given the student population and within it the annual supply of Ph.D.'s (in 1971, 32,000), the government's ability to recruit professional economists is a function of several variables. Among these are the interest of students in economics some 5-7 years ago,
the current willingness of those who then decided to become professional economists to enter government service, the demand for economists from alternative employers, principally universities and business, and the pay scales of these three competing groups.

Over the years the competitive situation of government has fluctuated. As a very broad generalization, however, it can probably be said that the ability of government to attract the cream of the academic crop has diminished over the years. Among today's leading economists, in the universities and in research institutions, an impressive number are graduates of government agencies, in my personal experience particularly of the Treasury and of the Federal Reserve System. Some first-rate people are still going from government to universities or research institutions. My impression is, however, that either their period of service typically has been shorter or their integration with the work of the agency less close. Quite probably the government is handicapped by its pay scale, which tends to be generous at the lower end and less so at the upper. While at almost all levels government pay compares favorably with university pay, the outside opportunities open to most economists weight the scale sometimes very heavily in favor of academic employment.

Recruitment of recent graduates should, of course, be, and to the best of my knowledge is, independent of political orientation. There may be a built-in selection process working in favor of a
nonradical but certainly not conservative orientation where public service employment is concerned.

The selection of economists for Presidential appointments presents a greater difficulty. Here, too, there are opportunities for nonpartisan selection, especially in the international area. Opinions differ as to how far a nonpartisan selection process can be pushed in the areas of domestic micro and macro economics. Policy choices in both areas may have political implications. Micro economics often implies income redistribution among sectors of the economy. Macro economics may involve redistribution via its effect on inflation and unemployment, respectively. The selection process is further complicated by correlations between factors such as political orientation, market versus control preferences, monetarist versus Keynesian leanings, and members of one set of university departments and their students versus another set.

The Use of Part-timers and Consultants

Many top-notch economists are available to government as consultants who would not come on a permanent and even temporary basis. The difficulty lies in making optimal use of them. In a continuous operation, the consultant rarely is of great value. He misses critical meetings, does not get the papers on time, and becomes an outsider and ineffectual. The same applies when the
development of a government initiative, such as a piece of legis-
lation, has moved from the stage of broad planning to the working
out of details. Economic expertise in this regard differs from
legal expertise, which can indeed be useful down to the final
drafting stage.

Consultants are most effective on a special job, particularly
if it can be carried out at the consultant's home base. Consultants
can also be highly useful in the "brain-storming" stage of a project,
when new ideas are welcome. Periodic meetings with consultants can
serve as a valuable check on the progress of some continuing
operations. Finally, periodic contact with consultants who are
experts and innovators in their own field keeps the government
administrator and economist abreast of current thinking. In this
age of slow publication and rapid changes of opinion, he could not
even do this by reading the journals, assuming he had the time.
Discussions with experts convey the comforting and not altogether
wrong feeling to the government administrator or economist that he
knows what is going on on the frontier of knowledge.

Maintenance of Value

Expertise obsolesces rapidly. The government economist who
does not keep up with his discipline by reading the journals and
preferably even participating in discussion and circulation of
drafts is falling behind. Economists with a strong interest in the
development of their discipline will sense the danger and will tend to stay in government only for short periods. Those who stay longer are natural candidates for the process of obsolescence. Daily chores make systematic reading difficult. The urgent always comes before the important. The quality of staff memoranda, usually done on request and under deadline, naturally cannot match that of journal articles. The government economist falls into the habit of accepting lower standards in what he reads and writes. The need to explain complex matters to administrators and politicians, though it has values of its own, contributes to lowering the level of discourse. Contact with practical men and with the realities of life induces skepticism of theorizing which may widen the gap between the government economist and the top-notch professional.

The nature of the process is obvious to all, and many first-rate government economists struggle desperately to keep it from affecting them. Both government and economist have a strong interest in obviating the process of obsolescence. But while employers, public and private, frequently have programs for rotating employees within the organization, they seem far less inclined to rotate them outside. Thus, there is only a limited amount of retooling of technicians by rotating them through the universities. Perhaps the reason is that when a man is temporarily sent outside the organization, a body is missing somewhere, which is not the case with an in-house rotation
method. A strong case can be made, therefore, for sabbatical leaves from government.

The U.S. Government has been fairly generous, in my limited experience, as regards leaves without pay for economists. A man of sufficient standing to be able to persuade a university or research institution to finance him for a year can thus retool. By definition, unfortunately, he is the man who least needs it. For the less high-powered economist who does indeed need it, the difficulties are immense -- financing, moving the family, finding a replacement in the organization.

There is also the problem of a conflict of interest between the economist and the sponsoring government agency as regards the kind of activity to be pursued in the infrequent event that the government helps the economist to spend a term or a year at a university. Typically, the economist will feel tempted to do some writing, which is a natural urge under the circumstances and it immediately enhances his professional status. The sponsoring government agency is more interested in retooling, often of a rather pedestrian kind, such as acquiring some econometrics.

It should be realized that for a senior government economist, the acquisition of technical capabilities may not be an optimal use of retooling time. Even if he should become as proficient as his subordinates, his comparative advantage will almost certainly continue to
be in areas requiring experience and judgment rather than technical expertise. A broad gauged approach to retooling programs would therefore be desirable.

There can be no doubt, however, as to the importance of periodic retooling as a general practice. So long as taking a government job means, to an ambitious graduate student, a kind of surrender to an intellectually undemanding career, however erroneous this view may be, the government lacks access to the great majority of able students. Only by offering an opportunity to the bright young person to maintain his/her professional quality can broad access to the best products of the universities be assured for government.