It should be noted that the amounts attributed to the Federal Government in this table are larger than the budget expenditures for conduct of medical research shown in table 8 for the fiscal years 1965 and 1966. Table 11 is based on an annual survey of Federal agencies conducted by the National Institutes of Health; amounts reported for both these years in this table are preliminary estimates.

Quoted earlier in this section is the NIH reservation concerning the applicability of economic reasoning to health programs. The response suggests that there may have been a misconception of the purpose of the inquiry. In any case, the general NIH comment on the economic effects of human resources programs points out that the direct effects of research and construction programs are not particularly different from those of other Federal programs for which there is a similar combination of personal services, equipment, and construction. The answer seeks, however, to distinguish the direct economic effects of research programs of the NIH from those of other Federal agencies, by implying that the larger programs of other agencies which focus on the introduction of new products or hardware may involve the direct employment of more workers and the use of larger volumes of other resources, or the employment of different categories of workers and resources. This is not, however, a qualitative distinction between programs.

The committee questionnaire, incidentally, did not propose or seek a distinction between "direct" and "indirect" effects. Nor did the questionnaire suggest that the economic effects of a Government program are more important than its noneconomic effects, though it did single out the economic effects as the subject of this inquiry. The questionnaire sought information about "Federal programs that involve investment in people"—information that would enable the committee to indicate "the effects of the programs on the functioning of the

As to indirect economic effects, the reasons there have been little intensive investigation are summarized in the NIH response as follows:

Inherent conceptual and statistical difficulties, lack of general interest on the part of economists, and (perhaps of greater significance) deep-seated convictions on the part of many competent observers and dedicated administrators of programs in the health seigness that the achievement of bottom health is in itself a complete in the health sciences that the achievement of better health is in itself a complete rationale for the Nation's health effort.

As already noted, the NIH reported that, notwithstanding the expressed reservations about the usefulness of economic reasoning in matters of health research, it was, in fact, awaiting a conference report on the feasibility of initiating a research program to measure the economic consequences of medical research and that it expected to have "a system of research priorities and recommendations for mechanisms of support."

Reference has been made to a study of the NIH which included an examination of economic and other criteria for determining levels of Federal support of health research. This memorandum made the point that research, as a venture into the unknown, is necessarily a risky enterprise, in which the most likely outcome is that a new fact-

will turn out to be like a musician, adding a good deal of interest to the world

but contributing no great wealth.

However, some medical researches have paid off spectacularly in past years and on the average our Nation has enjoyed a very high economic return on medical