C. DATA NEEDS

A few changes would seem fairly inexpensive and quite useful. These include breaking up the "ordnance, vehicles and related equipment" category into individual categories and publishing expenditures data on a gross basis. The former modification would permit a closer correspondence between employment and budget categories and the latter would provide a better estimate of amounts paid to business. It would also be desirable for other agencies of the government, particularly GSA, NASA, and AEC to release similar information on monthly obligations, with care being taken that these obligations are not also counted in the Department of Defense series when contracts are placed through the latter.

While on the subject of data, it might be noted that a study for the Joint Economic Committee entitled "A Federal Statistics Program for the 1960's" [19] does not include an improved series covering govern-

ment obligations on its list of directions for improvement.

D. FURTHER RESEARCH

Given the present data availability, I do not think that the procedure followed in this paper can be applied to other industries. If appropriate data should become available, such studies would be quite valuable. Another direction for research would be to complete the description of the spending process by constructing models which relate expenditures and government purchases to lagged obligations and other variables.

An important area for research, not touched upon in this paper, is the question of economic impacts on particular regions. It is hoped that the present study has contributed to this research by pointing out the stage at which impacts are likely to occur. Again in the direction of disaggregation, more detail on the occupational mix of employment might be investigated. As noted above, there appear to be differences in the behavior of total employment and production worker employment. As longer series on research and development obligations become available, these differences might be useful for studying the dynamics of the demand for engineers and scientists.

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