EMPLOYMENT IMPACTS OF DEFENSE EXPENDITURES AND **OBLIGATIONS**

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I. Introduction

The importance of specifying accurately the impacts of military procurement in models of the economy is apparent. One of the potentially most important applications of such models is to generate the responses of the economy to changes in procurement activity and to evaluate the effects of alternative courses of government action designed to reduce the economic hardships associated with large and rapid changes in military procurement. An inaccurate specification of equations describing the impacts of government actions may seriously mislead planners who are devising appropriate offsetting policies. For example, if the major changes in defense employment occur at the order-letting stage, rather than the expenditure or final delivery stage, as several models suggest, necessary modifications in fiscal and monetary policy may be delayed by about a year.

From another point of view the empirical work contained in this paper is an attempt to include instrumental variables, variables which can be directly controlled by policy makers, in models designed to describe the behavior of the economy, as stressed by Orcutt, [15]. It will be pointed out that several of the existing models of the economy do not include the appropriate instrumental variables, making it difficult to consider alternative courses of action. In fact, the whole area of effects of government spending has not been studied exten-

sively.1 For the purpose of analyzing the employment impacts of military expenditures and obligations, the paper proceeds as follows: (1) A brief review of the process by which a procurement action moves from the budget stage to the delivery and final payments stage is presented. Based on this process, implications are drawn about the appropriate variables to be entered into equations describing the impacts on employment of procurement actions. (2) Several existing models of the economy-those with fairly well-developed government sectors—are examined in the light of (1) to see if they reflect the process accurately. (3) Empirical work is presented which attempts

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¹ The following comments makes the point well:

"When we began our work we expected that our main job would be to study very closely the detailed timing relations implict in already established quantitative measures of the effectiveness of monetary and fiscal policy. We soon realized that no such foundation of established quantitative knowledge existed about (1) the working of the money and credit mechanism or (2) a large portion of the mechanism through which fiscal policy works. We found ourselves in the trying position of searching for a needle in a haystack, when no evidence had ever been produced that the haystack contained a needle in the first place" [1, p. 1].