

O_{t-3} and O_{t-4} is inversely related to P_t , while that for O_{t-5} , O_{t-6} , O_{t-7} , O_{t-8} varies with the value of P_t . A change in product mix over the sample period indicates a shift from conventional defense products which have relatively lower technology content to missiles and electronic equipment which have relatively higher technology content. The time required for the production of conventional defense products is shorter than that required for the production of missiles and electronic equipment. As the proportion of defense procurement going to missiles and electronic equipment increases, the proportion of new orders that is filled within three or four quarters decreases while the proportion that is filled between five and eight quarters increases.

The nature of structural lags between new orders and shipments varies with the change in product mix. This also implies that the duration of defense procurement impact on economic activity increases as the proportion of expenditure going to products with high technology content, such as missiles and electronic equipment, increases.

4. CONCLUDING REMARKS

The statistical estimates of the structural lags between new orders and shipments implied that the impacts of defense procurement on economic activity are spread over a period of approximately a year and a half. The duration of these impacts, however, is dependent on product mix. The larger the proportion of defense procurement going to products with high technological content, the longer the duration will be. In considering the implications for fiscal and monetary policies to meet any change in defense procurement, the duration of such impacts needs to be taken into account.

It is beyond doubt that the appropriate stage of defense procurement should be introduced as an instrumental variable in the government sector of econometric models. The study presented here does not directly investigate the impacts of defense procurement on such activities as production, employment, and income. Nor does this study investigate orders that are generated by subcontracting. These need to be investigated directly.

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