

payments have been concentrated in heavy procurement where production time and hence the lag between obligations and deliveries is the longest.

THE LAGS IN THE PROCESS

As a result of the number of steps involved in the Federal spending process and because of the length of time often required by suppliers to produce the goods ordered by the Government, there is, in aggregate, a substantial lag between the time expenditures are authorized and the time they are made.

The lags in the early stages of the process are primarily administrative. It takes time for the agencies to prepare and obtain approval of their apportionment requests, for specifications to be drawn up for individual orders, and for contracts to be awarded. The length of this period has been attributed to "the time-consuming nature of planning."²¹

The lag may depend in part on the newness of the program and the necessity for establishing new procedures. The average lag of about a year between granting of new obligational authority and the placement of contracts in the 1933 Public Works Administration program was reduced to 100 days for the 1938 program.²²

A later and more important lag is technological, the lag between the letting of contracts and the beginning of quantity production. This is a period of "make ready," which may range from a few weeks to more than a year. In the typical case of a complex new military item, hundreds of additional engineers are hired and trained; hundreds and sometimes thousands of detail drawings are made; production lines are laid out; material requirements are computed; schedules are prepared for deliveries of material and components to be procured; and subcontracts are negotiated.²³

Table 2 shows an estimate of the numbers of years which may elapse between contract negotiation and quantity production for typical military items. This stage varies from approximately one-half year in the case of military uniforms to over two years for bombers and jet fighters. Following quantity production, there is the delay between delivery to the Government and payment for the goods delivered. This includes the time needed for inspection, processing vouchers, and making disbursements.

TABLE 2.—*The lag between ordering and producing typical military items*

Illustrative items:	Number of years ¹
Military uniform.....	1/2
Medium tank.....	1 1/4
Recoilless 57 mm. rifle.....	2
Destroyer DD 692.....	2
Transport plane.....	2
Bomber.....	2 1/4
Jet fighter.....	2 3/4

¹ The time shown for each item represents the span from the end of contract negotiation until the first unit comes off the production line set to deliver at the scheduled rate.

Source: Based on materials contained in *Defense Production Record*, May 15, 1952, p. 1.

²¹ Federal Reserve Bank of New York, *Selected Economic Indicators*, 1954, p. 73.

²² John Kenneth Galbraith, assisted by G. G. Johnson, Jr., *The Economic Effects of the Federal Public Works Expenditures, 1933-1938*, National Resources Planning Board, Washington, Government Printing Office, 1940, p. 28.

²³ Drawn from materials in U.S. Director of Defense Mobilization, *Second Quarterly Report to the President*, Washington, Government Printing Office, July 1, 1951, pp. 7-8.