expectations, and so on. The longer banks delay in making adjustments, the

longer the outside lags of monetary policy.

Proponents of interest-rate theories acknowledge that interest costs are often only a small fraction of the cost of a good or service, so a change in the rate may exert little influence on many spending decisions. Even in those cases where interest costs do matter, it may take time for them to affect aggregate spending. Some projects may already be under way. The cost of curtailing them may be greater than the cost of continuing under more expensive financing conditions. On the other side, it takes time to plan and carry out investment and other projects. A decline in interest costs may lead to increased spending, but only after a long start-up period.

Changes in the quantity of money also may affect spending totals only after a lag. Alterations in spending may be more closely associated with long-run than short-run changes in the money supply. In the short run, individuals and businesses may try to use their existing money balances more or less intensively.

thereby avoiding the need to make significant spending adjustments.

## HOW LONG ARE THE LAGS?

On the basis of what economists know about how the economy works, they

have attempted to get some idea of how long these lags are.

Inside lags. The Federal Reserve generally has been able to recognize cyclical changes in economic activity within three months of their occurrence [8]. Since there is no reason to believe that analysts in the executive and legislative branches of the Government are not equally good in recognizing shifts in the economy, this suggests that the recognition lag for monetary and fiscal policy is probably about three months.

In the postwar period, the action lag of monetary policy as measured in relation to cyclical turning points usually has been zero. At times, however, it has been negative as the monetary authorities responded to factors that preceded

cyclical declines in the economy [8].

In monetary policy, the decisionmaking group is relatively small and homogeneous. It can and does act quickly. In contrast, fiscal policy decisions are made by Congress and the President. The larger number of people involved increases the likelihood of diversity of opinion and objectives, slowing down the decisionmaking process. In addition, the administrative machinery is complex. As a result, while fiscal policy decisions have at times been made in less than a month, on some occasions many months have passed before agreement has been reached on a course of action. The fate of the 1966 tax increase proposal is a case in point. More than a year has passed since the President first suggested the increase, and it has been over seven months since the 10 percent surcharge proposal went before Congress. Lags in planning and appropriations have also meant delays in making changes in Government expenditures.

Consequently, while it is difficult to make precise statements about the action lags of fiscal policy, it is clear that many months can pass before a policy change is made. This compares with the zero or negative action lags of monetary policy and goes far to explain the preference of many for the use of monetary

rather than fiscal policy for stabilizing the economy in the short run.

Outside lags.<sup>2</sup> Outside lags of fiscal policy are often relatively short. Changes in personal income taxes generally produce significant changes in disposable income and consumption spending within a month or two [1]. Changes in corporate tax rates take longer to have an effect. One study has suggested three or four months [1]. Similarly, if action is taken directly on Government expenditures, income can be affected within a few months. A broad range of expenditure and income tax policies, therefore, can have a significant effect on national income within a period of one to three months. This is one estimate of the range of outside lags of fiscal policy.

For monetary policy the situation is more complicated. As noted earlier, estimates of outside lags depend partly on what is viewed as the most important short-run link between monetary policy and the real sectors of the economy.

¹ Numbers in brackets refer to references listed at the end of this article.
² The discussion might seem to imply that the outside lag is some discrete time period. Action is taken, and the impacts are registered on the economy at some single point in the future. Actually, it is more likely that the effects of a given policy change will be distributed over a period of time. A significant proportion of these effects may be clustered within a short interval, but then perhaps not. Generally the term "outside lag" is used to denote the time it takes for a policy change to have a "significant" effect (often difficult to define) on the economy, or the time it takes for a policy change to have its peak effect.