

Book Reviews

Inflation and the Theory of Money by Robert James Ball. Aldine Publishing Company, Chicago, 1965.

Ball in his book combines wage push and demand pull by making wages and aggregate expenditures functions of the same variable, expected profit. The expected profit (which is related to profits of the previous period) is a function of the level and the rate of change of unemployment. With a given level of profits of the last period, the expected level of profits is negatively related to the current level of unemployment and the change in unemployment. The expected level of profits stands as an index of the expected rate of inflation, on the assumption that the money profits of enterprises will rise in inflationary conditions. The expected level of profits also affects the decisions of firms in dividing their assets between cash balances and real-capital assets. An increase in expected profits increases aggregate expenditures through an expansion of investment (gross investment measured in money terms) and a reduction of business money holdings, which raises income velocity. An increase in aggregate expenditure and output leads to an upward movement in the expected profits function. But this further increase in expected profit does not continue without an upper limit, especially when all idle-money balances have been activated or interest rate rises fast enough. Therefore, the expansion stops unless the money supply increases. The analysis takes the supply of nominal money as exogenously determined by the decision of the monetary authorities; it is initially assumed to be constant.

Wage (general wage level and wage mean earning) costs are brought into Ball's model on the basis that they determine prices (general price levels). The change in wages is governed by cost-of-living changes, profit expectations and the level of unemployment. The greater the expected change in profits, the greater the change in the general wage level. In the unionized sector, bargaining determines wages. Ball portrays unions as pushing relentlessly for higher and higher money wages, but tempering their demands when unemployment increases. This relates wages to expected profits, since expected profits depend in part on current unemployment. Employers' resistances to union wage demands also depend on expected profits. His model specifies, given certain parameters and a constant money stock, a particular rate of change in prices. Even if profits are not expected to change, wages and prices still rise because of union pressure. Wages and prices rise more easily than they fall. As emphasized by Keynes, while a short-period reduction in real wages through an increase in prices may be

temporarily accepted by the working population, a reduction in money wages is likely to be strongly resisted. This is not to say the prices never fall, but rather to argue that they are likely to be less flexible downwards than upwards in industrial economies with highly organized labour and widespread non-competitive industry.

Once the price level starts to rise as a result of the initial impact given by favourable profit expectations, aggregate demand expands and wage and price increases get progressively larger. This rate of increase is not arbitrary: a higher rate is not possible because expected profits would then rise less rapidly or be reduced, thus restraining the rise in wages. A lower rate is not possible because the expansion in aggregate expenditures would then deplete inventories and raise expected profits, thus allowing wages and prices to rise faster. While an increasing money supply could keep the inflation going for ever, a constant supply eventually stops it. When the rise in velocity tapers off, aggregate demand falls and expected profits decline, increasing unemployment and restraining wages. Expected profits then fall further, despite the slower rise in wages.

In conclusion, the rate of inflation is determined in the short period by the interaction of the income-bargaining structure of the system and the monetary expenditure. They interact through expectations about profits. Changes in expected profits and unemployment operate to bring the pricing and spending forces of the economy into equilibrium.

In the long run, the internal tensions set up by the unequal distribution of increases in productivity and the downward inflexibility of costs may result in a steady rise in prices as the economy grows at full employment. Insofar as the burden of debt generated within the economy may become excessive, steady growth may require some rise in the price level. Very little can be said about the gross relationship between inflation and the rate of growth. The question now can be raised: what policies are designed to stabilize prices?

There is no unique policy that will serve to stabilize the general price level. According to the quantity theory, the price level would be prevented from rising by appropriate regulations of the quantity of money without affecting the level of employment. If prices were rising, this would imply that rate of increase of demand was more than the rate of increase of production. By the use of conventional monetary weapons (such as interest-rate policy and open-market operations) and fiscal tolls, this excess should be reduced until balance between aggregate demand and aggregate supply were restored.

GENERAL REMARKS

Demand-pull theorists tend to emphasize the importance of what may be described as aggregate demand price; cost-push theorists are preoccupied with aggregate supply price. Concentration on one or the other of these aspects of

the problem generates only a partial theory of inflation (inflation is defined as a steady rise in prices). A complete analysis requires that their interaction be made explicit. Ball, in his analysis, makes explicit the interrelationship among the main standards of inflation analysis: the balance between desired and actual stocks of money; the balance between the demand for and the available supply of goods and services; and the autonomous shift in the money-wage level. He integrates them into a general theory of the price level.

Ball's simple model (of short-period inflation) is a dynamic one. The short-period equilibrium of the functional relationships is dependent on the past levels of prices, unemployment and profits. Since the actual changes in these variables will not in general be zero, the factors that have been taken as given in the short-period analysis will vary over time; the short-period equilibrium values of the relevant variables will alter accordingly. One of the interesting things I find in Ball's book is his incorporating the term of *expected profit* in the analysis of inflation. He is the first one to borrow this term from Keynes *The State of Confidence* and build the arguments of the theory of inflation around it.

Falih Al-Shaikhly
University of Massachusetts
Amherst, Massachusetts