The Effects of Inflation

Future inflation can either be *unanticipated* or *anticipated* by economic agents.

**The effects of unanticipated inflation**

*Effects in the labor market*

1. Redistribution of income: Labor wage contracts are usually fixed for a certain period of time. This means that if the rate of inflation is higher than what was anticipated, then the money wage rate would have been set at a rate lower than what would be warranted by the higher inflation rate. This would mean that the profit share of the total produce of the economy would increase at the expense of the wage share. On the other hand, if the inflation rate were lower than what was anticipated when labor contracts were written, the reverse would happen.

2. Departures from full employment: As was seen during our analysis of demand-pull and cost-push inflation, unanticipated inflation would cause changes in demand and supply that could lead either to unemployment (in case of cost-push inflation), or labor turnover in the economy (in the case of demand-pull inflation). Notice, that in the second case, since adjustments in the economy is not instantaneous, even though the economy eventually settles back into full employment equilibrium, there is an intervening period when the rise in money wages would make firms lay off workers. (Parkin’s explanation in this case, seen on page 338, does not seem exactly precise to me).

*(See diagram drawn in class for over-employment turnover case)*

*Effects in the capital market*

1. Redistribution of income: The terms and conditions of a loan are set out when a loan is contracted. Suppose a lender loans money to a borrower at a nominal interest rate of 10%, anticipating that the inflation rate over the duration of the loan will be 2% and expecting to make a real return on his loan worth $10-2 = 8\%$. However, if the inflation rate really turns out to be 5%, instead of 2%, then his real return will be $10 - 5 = 5\%$, and not what he expected. So, he will lose and the borrower will gain in this case. On the other hand, if the anticipated inflation rate
is lower than what is expected at the time of contract, then the reverse will happen.

2. Too much lending or borrowing: If the inflation rate turns out to be either higher or lower than expected, the interest rate does not incorporate a correct allowance for the falling value of money and the real interest rate is either lower or higher then it otherwise would be. When the real interest rate turns out to be too low (inflation rate is higher than expected), borrowers wish they had borrowed more and lenders wish they had lent less. So the outcome in the finance market would have been different if the forecasts had been correct. Of course, the exact outcome (compared to the outcome in case of unanticipated inflation) would have varied according to what the comparative demand & supply responses in the financial market would be, if expectations changed. (Basically we can think of the demand & supply curves in the loans’ market shifting for a change in expectations, and we would need to know the exact magnitude of these changes to calculate & compare different equilibrium outcomes).

The reverse scenario to the above would occur when inflation is lower than expectations.

(See diagram drawn in class)

Rational Expectations

We say that economic agents have rational expectations when they forecast future inflation by making the best possible use of all relevant information about the past current and future states of the world that they currently possess, or can optimally gather.

Rational expectations do not necessarily lead to perfectly correct forecasts all the time, but it is the best forecast possible, taking into account information about current economic variables, as well as expectations about future economic variables.

Anticipated inflation & its effects

In the demand-pull & cost-push inflations we looked at in the last class, the money wage rate is sticky, so adjustment in the money wage rate is not instantaneous, after an inflation process starts off. When inflation is unanticipated we would similar situations, where the inflationary process causes departures from potential output level. However, suppose
people could forecast inflation perfectly and write out wage contracts for every stage of the inflationary process. In this case, the inflationary process would occur with the economy remaining at the potential level of RGDP, and full-employment in the labor market. Remember though, that even in this case we could classify the inflationary process as demand-pull or cost push depending on how the inflationary process initially starts off.

(See Fig. 14.7, Parkin, page 340)

Note: Unanticipated inflations arise from demand-pull & cost-push factors in the framework seen above due to unanticipated changes in the level of demand (either higher or lower than what is anticipated), which make supply responses that were calculated on the basis of incorrect expectations (due to sticky money wages that were negotiated on the basis of incorrect expectations) go off-mark (making the economy deviate from the potential output level).

(Read the sections on anticipated & unanticipated inflation in Parkin, pages 339-340)

(See diagram drawn in class)

The costs of anticipated inflation

1. Transaction costs: These are costs that arise from the rapidly falling value of money. As money is falling in value, people indulge in transactions very frequently, as it is pointless to hold on to money that will be diminishing in value. The too, huge amounts of money are needed for simple everyday transactions, and sometimes in such cases governments issue new currency, an unit of which is a multiple of the old currency.

2. Tax effects: A higher inflation rate means that agents in the economy are paying a higher effective tax rate. The issue here is that taxes are paid on nominal earnings, and not real earnings. Suppose the nominal interest rate in the economy is 4%, and there is no inflation. So real interest rate is 4%. If the tax rate in the economy is 50%, then the net earning of a saver in the economy is 2% on his savings. However, now let nominal interest rate be 8%, and inflation rate 4% in this economy (so the real interest rate is still 4%), and tax is still 50% (on nominal return). Then the savers get taxed 4% of the 8% return, leaving him with 4% nominal interest. But now their real earning is 0%, once the inflation rate is
considered. So effectively, they have paid higher taxes due to the higher inflation rate.

3. Increased uncertainty: In high inflation economies, there is a lot of uncertainty regarding long-term inflation and fears that correct anticipation of the future inflation rate may not be possible. Hence, investment & savings decisions of economic agents get distorted, since the returns to such activities become uncertain. This, in turn, affects the growth of the economy.