**DORNBUSCH’S OVERSHOOTING MODEL**

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German Economist Rudiger Dornbusch put forward the Dornbusch Overshooting of Exchange Rate Model in the research paper- ‘Expectations and Exchange Rate Dynamics in 1976’. It attempts to explain short-run movements in exchange rates, particularly in response to changes in monetary policy. The key insight of Dornbusch's Model is the concept of "overshooting (overdepriciates).In response to an economic shock or a change in monetary policy, exchange rates do not immediately adjust to their long-term equilibrium levels. Instead, they "overshoot" or move further away from the equilibrium before gradually returning to it. Dornbusch's model is based on the idea that exchange rates can exhibit short-term volatility and overshoot their long-term equilibrium values before eventually returning to that equilibrium. When a central bank changes its nominal interest rate, the exchange rate initially moves by more than is required to maintain purchasing power parity. This overshooting occurs because prices are sticky in the short run, and it takes time for them to adjust. Over time, as prices gradually adjust, the exchange rate moves back toward its long-run equilibrium. This means that in the long run, changes in monetary policy primarily affect inflation rates rather than the nominal exchange rate. The model is based on the following assumptions-

1. The economy is small as well as open.
2. The exchange rate is flexible.
3. There is perfect mobility of capital in the economy.
4. The [demand](https://www.wallstreetmojo.com/demand/) for money entirely depends on the production output and the [interest rate](https://www.wallstreetmojo.com/interest-rate/).
5. Goods prices remain fixed (sticky) in the [short run](https://www.wallstreetmojo.com/short-run/).
6. The economy is at full employment in the long run.

On the basis of above assumptions the model can be explained as follows-

Let us assume that the central bank of the country adopts cheap monetary policy for which rate of interest falls. The fall in the rate of interest will increase money supply in the economy. The increase in money supply will increase the aggregate demand and aggregate demand will be higher than the aggregate supply (since according to Keynes aggregate supply can not be increased in short run).Since AD> AS there would be Excess Demand in the economy.Excess demand will further increase price in the economy.As price increases, supply will increase(due to the application of law of supply).When producer want to increase supply of goods they will demand more labour.

Since there is full employment, wage will further rise. Rise in wages will increase the cost of production and there will be inflation in the economy which will further enhance the wage rate , cost of production, prices and inflation(wage price spiral).

As domestic interest rate fall there will be capital outflow from the economy. It will depreciate value of domestic currency and nominal exchange will rise. In this situation exports (X) will increase and imports (M) will decrease. [AD= C+I+G+(X-M)]. It will shift the IS to IS1. It is explained with the help of diagram as follows –

* Initially IS0 and LM0 intersects each other at E0 .
* As money supply increases LM will shift to LM1 , for this rate of interest will fall below the world interest rate. There will be capital outflow for this. For the capital outflow, there will be current account deficit. It will depreciate the domestic currency.
* As domestic currency depreciates, exports will rise and imports will fall. It will increase the aggregate demand and as a result the IS curve to IS1  .

LM0

IS1

LM1

IS0

Rate of interest [domestic as well as international]

E4

E0

E3

E2

Y0

Income /Output

Y1

0

* At IS 1 as aggregate demand is high, price will increase but aggregate supply will not increase for this real balance or the value of money (M/P) will fall. As a result LM will shift back to LM0 and new equilibrium will be at E3.
* In such situation rate of interest will rise which implies that the domestic rate of interest is higher than the world interest rate . It will attract the capital and that there will be surplus in capital account. It will appreciate the value of domestic currency and thus export will rise and import will fall. It will decrease the aggregate demand and thus is will shift back to its initial position IS0 and finally the initial equilibrium E0 is reached. Thus exchange rate overshoots and finally reaches the initial equilibrium position.