

## IS/LM plus Aggregate Supply and Demand

### Introduction

The conclusions of the Basic IS/LM Model can be reached under the assumption that the price level is constant. This is not, of course, a realistic view of reality, and the price level very likely does adjust in response to changes in other macroeconomic variables.

The present model is one view of how that adjustment might take place. It adds an aggregate supply curve and an aggregate demand curve. The latter is based on the point that changes in the price level affect the real stock of money and, hence, shift the LM Curve. Aggregate supply is taken to be an upward sloping function of the price level as a result of (here) unspecified properties of the supply process.

### The Model

The aggregate supply curve is given by

$$P[t] = P[t-1] + 0.002 (Y-500) + 0.001 (Y-500).$$

The full employment level of  $Y$  is taken to be 500. The lag structure gives the simulations a more realistic dynamic structure than would a static aggregate supply curve.

The aggregate demand curve is derived from the properties of the Basic IS/LM Model.

### Exercises

1. Aggregate Demand. Raising the price level decreases the real money supply, shifting the LM curve, and lowering income  $Y$ . Set the price level to 0.75, 1.00, and 1.25 successively to show the aggregate demand curve.

Please make sure you have selected the Flexible Prices Model before you leave the Aggregate Demand page.

2. Draw the Aggregate Supply Curve.
3. The Monetary Policy page shows the dynamic response of the model to a change in the nominal money supply. Why does  $Y$  return to 500 in the long run?
4. The Fiscal Policy page shows the dynamic response of the model to a change in the nominal money supply. Why does  $Y$  return to 500 in the long run?