Macroeconomics Keynesian IS-LM Model

**IS-LM Intersection**

In the short run, the economy moves to the intersection of the IS and LM curves (figure 1).

Production adjusts to demand to put the economy on the IS curve.

Bond prices and the interest rate adjust to achieve equilibrium in financial markets, putting the economy on the LM curve.

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**Business-Cycle Fluctuation**

A shift in either the IS curve or the LM curve can cause a business-cycle fluctuation. Different economic forces shift the IS and LM curves, so the curves shift independently.

A change in aggregate demand shifts the IS curve but not the LM curve.

A change in the demand or supply of money or bonds shifts the LM curve but not the IS curve.

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**Exogenous Price Level**

For an economy in recession, Keynesians take the price level as exogenous. Any drop in the price level in response to excess supply is minimal.

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**Monetary Policy**

Monetary policy is exogenous. With the price level taken as exogenous, the money supply sets the position of the LM curve.

Monetary policy has no effect on the IS curve.

Expansionary monetary policy shifts the LM curve down (figure 2). The money supply increases, and the interest rate falls. The economy moves down along the IS curve: the fall in the interest rate raises investment demand, which has a multiplier effect on consumption.
Fiscal Policy
Fiscal policy is exogenous. The level of government expenditure and taxation and the tax code set the position of the IS curve.

Fiscal policy has no direct effect on the LM curve. Increased government spending or a tax cut is assumed to be financed by borrowing. The money supply does not change, so the LM curve does not change.

Expansionary fiscal policy shifts the IS curve to the right (figure 3). The multiplier effect on consumption raises the national income and product. The increase in the interest rate partially offsets the expansionary effect.

Disequilibrium, not Equilibrium
The Keynesian IS-LM model is a model of disequilibrium, not equilibrium.

The IS curve does not represent the condition that demand equals supply for goods.

Instead the IS curve represents the condition that demand equals product. There is excess supply, with demand and product less than supply.

Stocks, Not Flows
The LM curve deals with stocks, not flows.

Portfolio demand and supply set the position of the LM curve. The LM curve is entirely independent of desired investment and saving. Instead these factors influence the IS curve.

Desired saving is not the demand for bonds; a flow cannot equal a stock. Desired investment is not the supply of bonds.

Aggregate Demand Curve
The aggregate demand curve is a construction derived from the IS-LM model. A given price level \( P \) fixes the real money supply \( M/P \), which sets the LM curve.

The national income and product determined by the IS-LM intersection can then be seen as a decreasing function of \( P \). If \( P \) falls, the real money supply \( M/P \) rises. The LM curve shifts down, so \( y \) rises.
Aggregate Demand and Supply

Aggregate supply is just the productive capacity of the economy at full employment and is taken as exogenous. In recession, aggregate demand is less than aggregate supply (figure 4).

Increased Aggregate Demand

Consider a given price level $P$.

An autonomous increase in aggregate demand shifts the IS curve right. National income and product increase, as the IS-LM intersection moves to the right and up.

Hence the aggregate demand curve shifts right.