INTERMEDIATE MACROECONOMICS -I

Unit1-Aggregate demand and supply curve

Aggregate demand

Aggregate demand is a measurement of the total amount of demand for all finished goods and services produced in an economy. Aggregate demand is expressed as the total amount of money exchanged for those goods and services at a specific price level and point in time.Aggregate demand is a term used in macroeconomics to describe the total demand for goods produced domestically, including consumer goods, services, and capital goods. It adds up everything purchased by households, firms, government and foreign buyers (via exports), minus that part of demand that is satisfied by foreign producers through imports.

Components of Aggregate demand

- An economy's aggregate demand is the sum of all individual demand curves from different sectors of the economy. It is typically the sum of four components. The formula for aggregate demand is given as-
- AD = C + I + G + (X-M).
- Consumption Spending (C)
- Consumption spending (C) is the largest component of an economy's aggregate demand, and it refers to the total spending of individuals and households on goods and services in the economy.
- Investment Spending (I)
- Investment spending (I) is the total expenditure on new capital goods and services such as machinery, equipment, changes in inventories, investments in nonresidential structures, and residential structures.

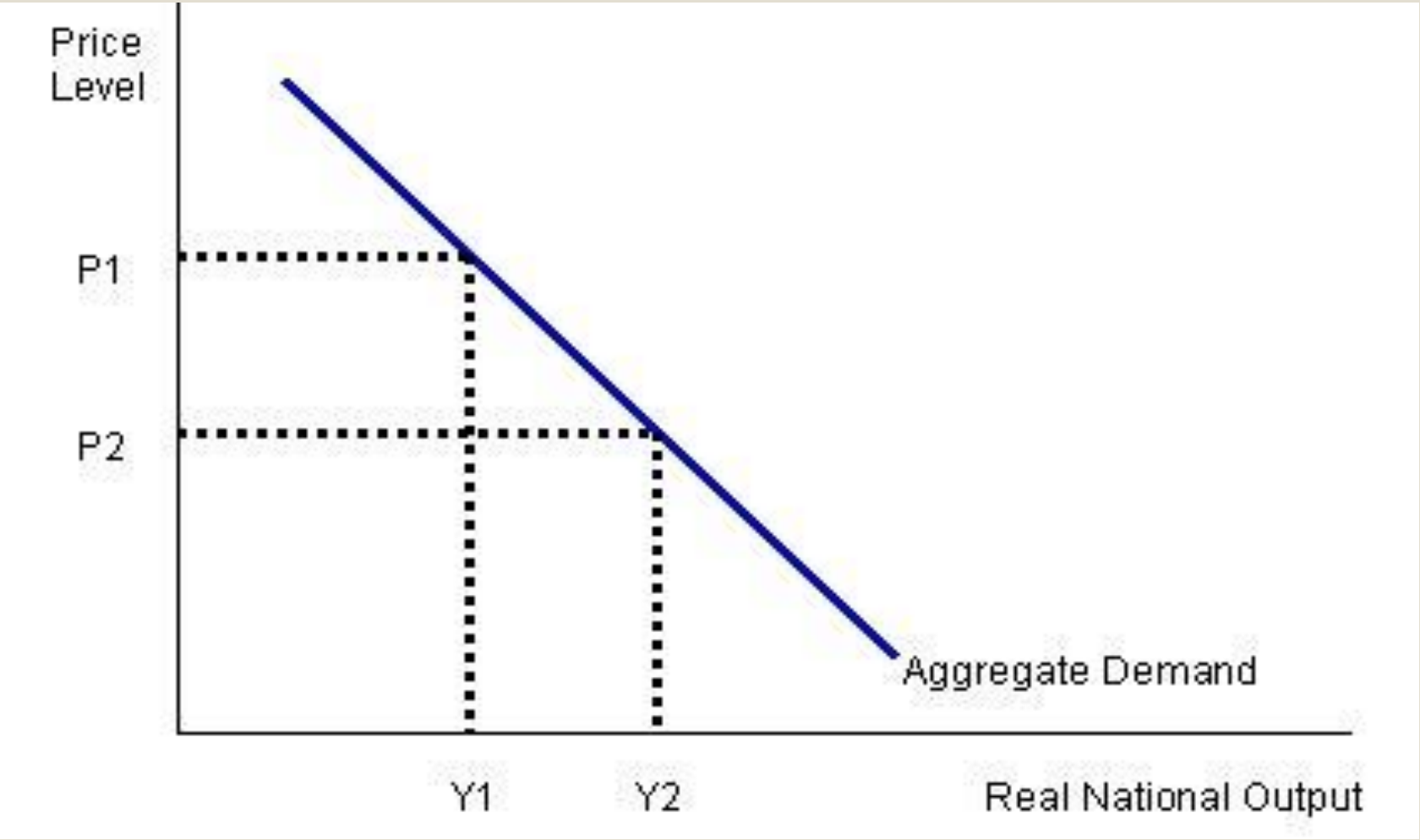
- Government Spending (G)
- Government spending (G) is the total amount of expenditure by the government on infrastructure, investments, defense and military equipment, public sector facilities, healthcare services, and government employees.
- Net Exports (X–M)
- Exports are products that are produced by domestic producers and sold abroad, while imports are products that are manufactured abroad and imported for domestic purchase.

Aggregate demand curve

Aggregate demand is the relationship between the total quantity of goods and services demanded (from all the four sources of demand) and the price level, all other determinants of spending unchanged. The aggregate demand curve is a graphical representation of aggregate demand.

The **aggregate demand curve** represents the total quantity of all goods (and services) demanded by the economy at different *price levels*.

Aggregate demand curve



Aggregate supply

- In economics, aggregate supply or domestic final supply is the total supply of goods and services that firms in a national economy plan on selling during a specific time period. It is the total amount of goods and services that firms are willing and able to sell at a given price level in an economy.
- Aggregate supply is the total supply of goods and services produced within an economy at a given overall price level in a given time period.
- Aggregate supply is used to show the amount of goods that can be produced at different price levels in a given time period – usually one year.

Components of Aggregate supply

Aggregate supply is the money value of total output available in the economy for purchase during a given period.

Main components of aggregate supply are two, namely, consumption and saving. A major portion of income is spent on consumption of goods and services and the balance is saved. Thus, national income (Y) or aggregate supply (AS) is sum of consumption expenditure (C) and savings (S).

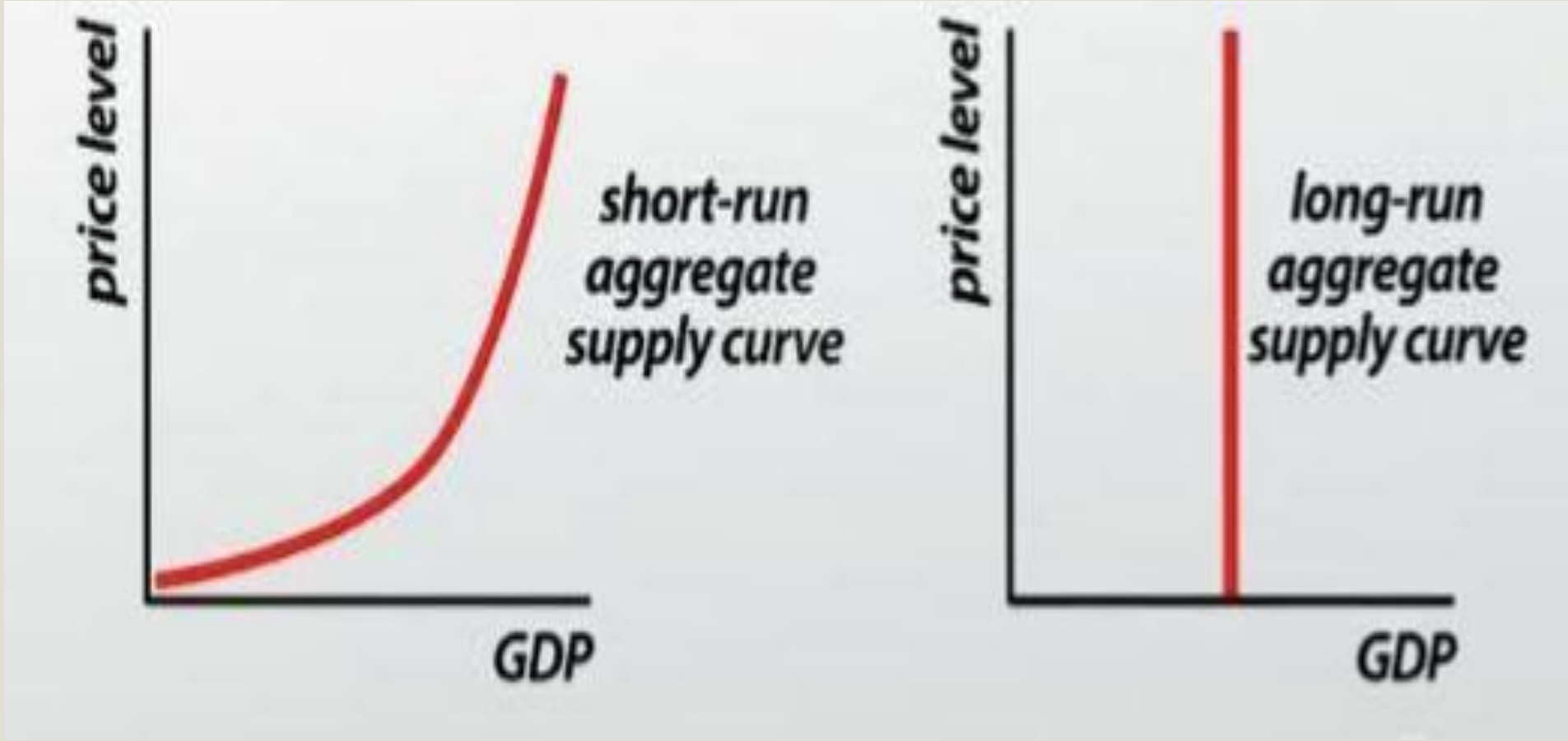
Put in the form of an equation:

AS = C + S, i.e., Y = C + S

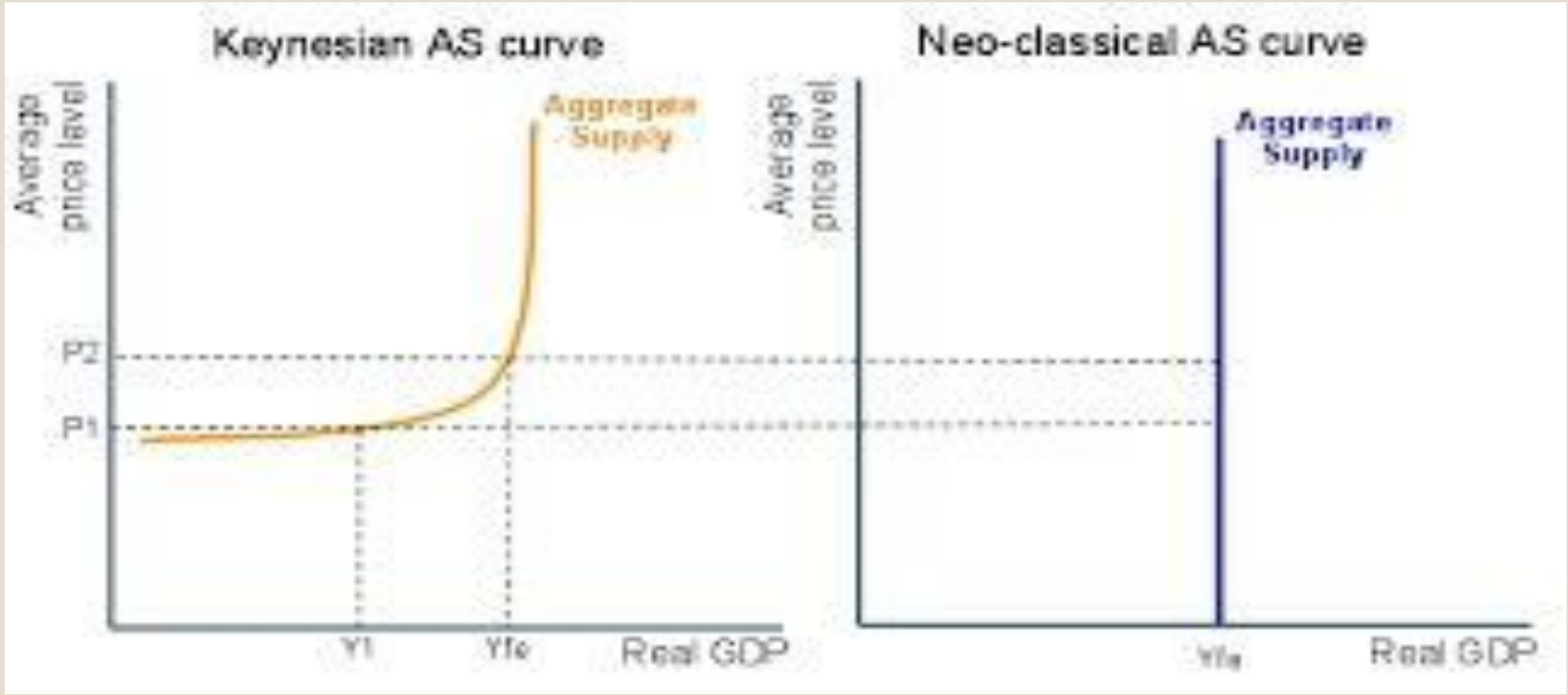
Aggregate supply curve

- Aggregate supply is the total quantity of output firms will produce and sell—in other words, the real GDP.
- The upward-sloping aggregate supply curve—also known as the short run aggregate supply curve—shows the positive relationship between price level and real GDP in the short run.
- The aggregate supply curve slopes up because when the price level for outputs increases while the price level of inputs remains fixed, the opportunity for additional profits encourages more production.

Aggregate supply curve

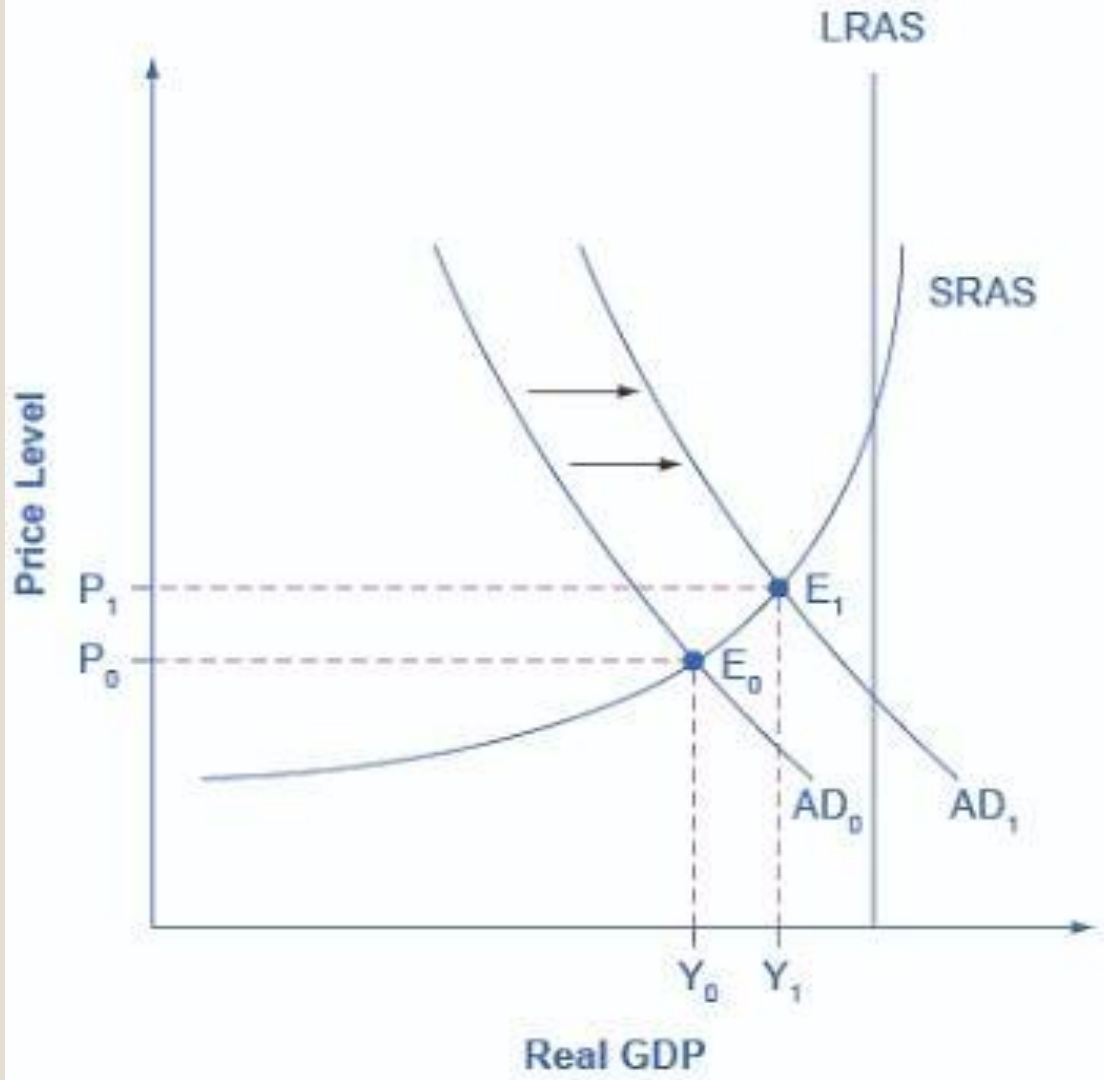


Keynesian AS curve

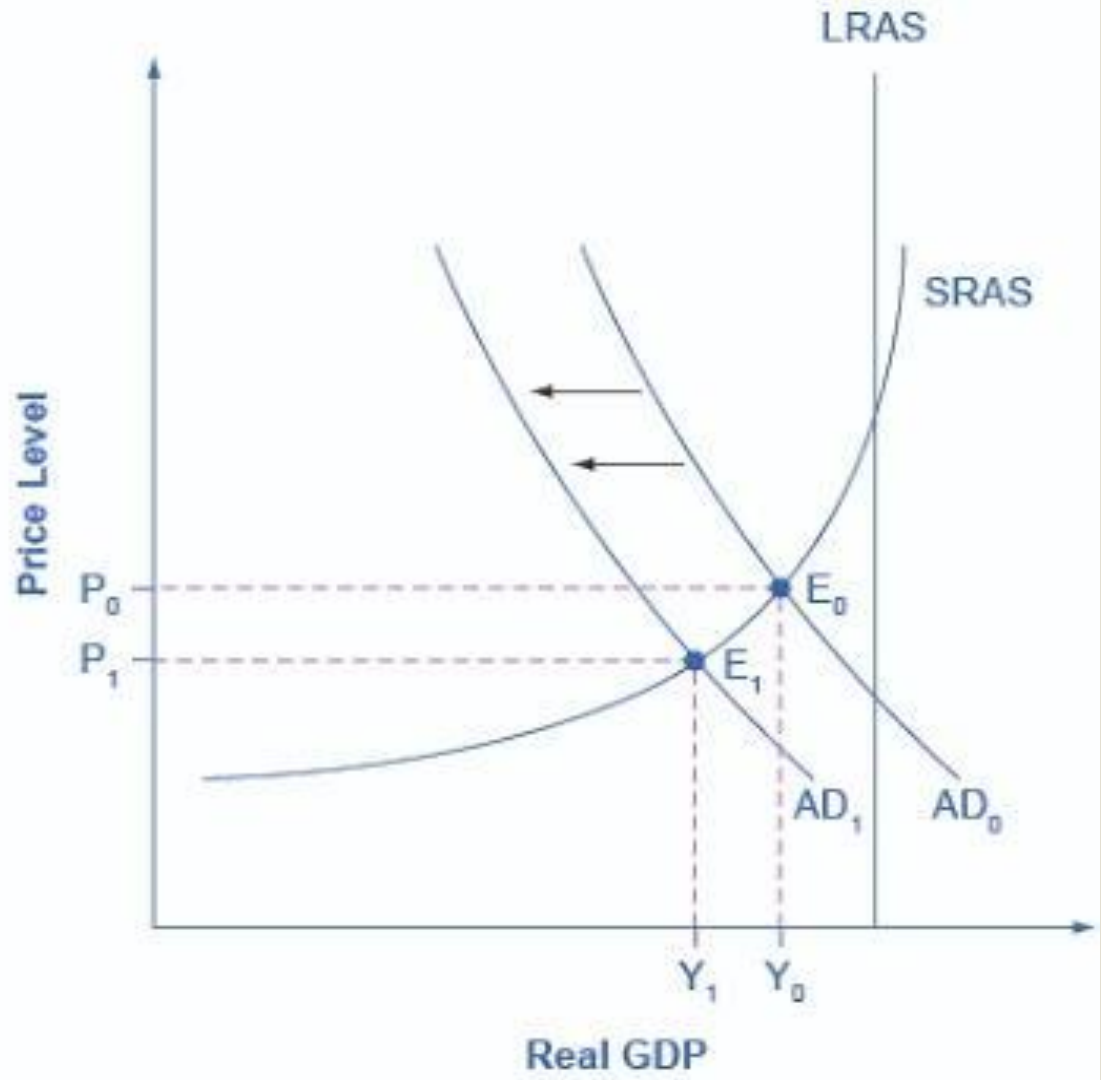


Shifts in Aggregate demand curve

- The aggregate demand curve, or AD curve, shifts to the right as the components of aggregate demand—consumption spending, investment spending, government spending, and spending on exports minus imports—rise. The AD curve will shift back to the left as these components fall.
- AD components can change because of different personal choices—like those resulting from consumer or business confidence—or from policy choices like changes in government spending and taxes.
- If the AD curve shifts to the right, then the equilibrium quantity of output and the price level will rise. If the AD curve shifts to the left, then the equilibrium quantity of output and the price level will fall.
- Whether equilibrium output changes relatively more than the price level or whether the price level changes relatively more than output is determined by where the AD curve intersects with the aggregate supply curve, or AS curve.



(a) Aggregate demand shifts right

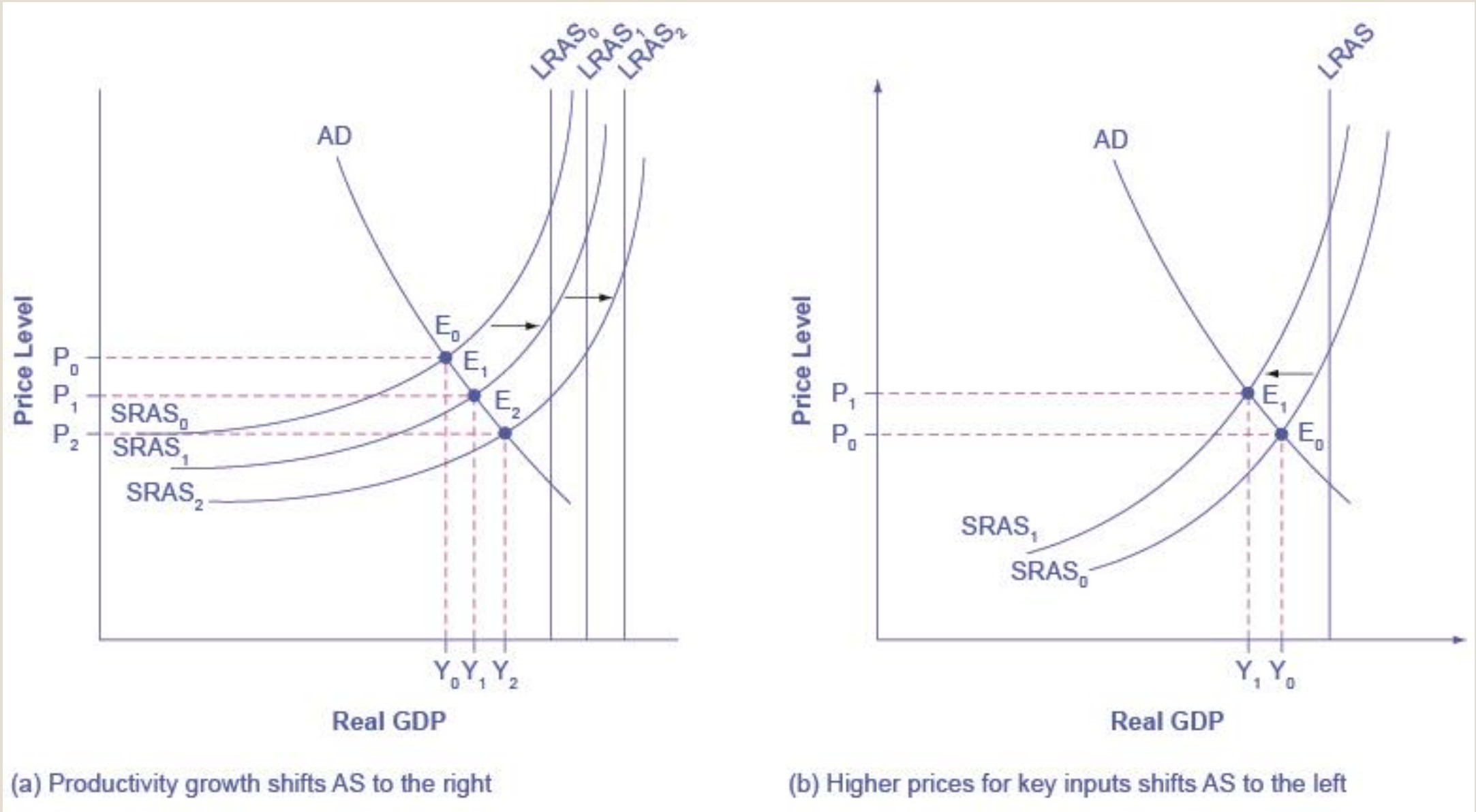


(b) Aggregate demand shifts left

Shifts in Aggregate supply curve

- Movements of either the aggregate supply or aggregate demand curve in an AD/AS diagram will result in a different equilibrium output and price level.
- The aggregate supply curve shifts to the right as productivity increases or the price of key inputs falls, making a combination of lower inflation, higher output, and lower unemployment possible.
- The aggregate supply curve shifts to the left as the price of key inputs rises, making a combination of lower output, higher unemployment, and higher inflation possible.
- When an economy experiences stagnant growth and high inflation at the same time it is referred to as stagflation.

- In the long run, the most important factor shifting the SRAS curve is productivity growth. Productivity—in economic terms—is how much output can be produced with a given quantity of labor. One measure of this is output per worker, or GDP per capita.
- Over time, productivity grows so that the same quantity of labor can produce more output. Historically, the real growth in GDP per capita in an advanced economy like the United States has averaged about 2% to 3% per year, but productivity growth has been faster during certain extended periods.
- A higher level of productivity shifts the SRAS curve to the right because with improved productivity, firms can produce a greater quantity of output at every price level.


LRAS0
LRAS1
LRAS2
AD
E0
E1
E2
P0
P1
P2
SRAS0
SRAS1
SRAS2
Price Level
Y0 Y1 Y2
Real GDP
(a) Productivity growth shifts AS to the right
LRAS
AD
E1
E0
P1
P0
SRAS1
SRAS0
Price Level
Y1 Y0
Real GDP
(b) Higher prices for key inputs shifts AS to the left