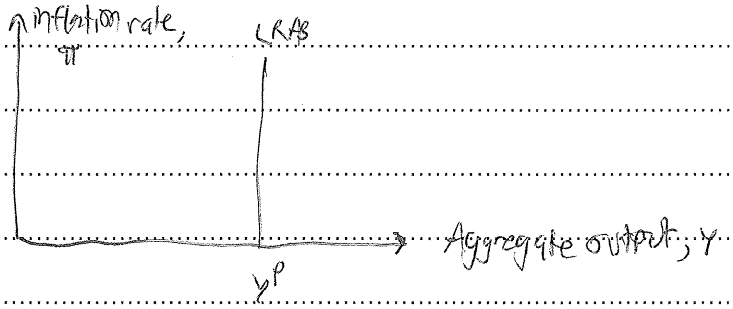
ธนาคารแห่งประเทศไทย

Aggregate supply curve

- AS describes relationship between quantity of output supplied and the price level.
- As curves differ in the short and long run → because prices and wages take time to adjust to their long run level.
- Long run aggregate supply curve is determined by:
  1) Amount of capital in the economy
  2) Amount of labor supplied at full employment

     Note that full employment ≠ zero unemployment

     full employment means demand for labor equals to supply of labor, of which level of unemployment is above zero → natural rate of unemployment
- 3) The available technology
- Natural rate of unemployment is where economy gravitates in long run
- Natural rate of output (potential output) is the level of aggregate output produced at natural rate of unemployment. It is where economy settles in the long run for any inflation rates
- Hence, the long run aggregate supply curve (LRAS) is vertical at potential output (denoted by Y^P)



- Short run aggregate supply curve ~~SRAS~~ (AS) based on 3 factors driving inflation
  1) expectation of inflation
  2) output gap
  3) price (supply) shocks

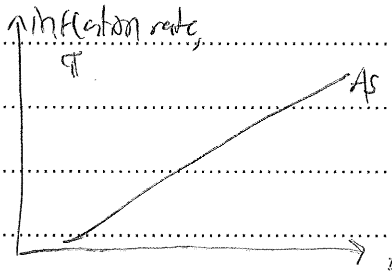
- Expected inflation (π^e) - workers and firms care about wages in real terms (in terms of goods and services that wages can buy). When workers expect the price level to be rising → they will adjust nominal wages upward 1-for-1 with the rise in expected inflation, so that the real wages does not decrease → overall inflation will also rise 1-for-1 with increases in expected inflation because wages are the most important cost of producing goods and services.
- Output gap - the difference between aggregate output and potential output $(Y - Y^P)$

  If $Y > Y^P$ → output gap is high → inflation ↑

  when output exceeds its potential level, there is very little slack in the economy and workers will demand higher wages and firms will take opportunity to raise prices

  If $Y < Y^P$ → output gap is negative → inflation ↓

  when output gap is negative, there will be a lot of slack in the economy → workers will accept smaller increases in wages → firms will need to lower prices to sell their goods.



Upward sloping AS curve:

the higher is aggregate output → the greater is the output gap → the less slack in the economy → inflation ↑

- Price (supply) shock: occurs when there are shocks to the supply of goods and services produced in the economy that translated into price shocks

  It is shift in inflation that are independent of the amount of slack in the economy or expected inflation ex oil supply shock, energy price shock
- equation for short run aggregate supply curve:

$$\pi = \pi^e + \gamma\underbrace{(Y - Y^P)}_{\text{output gap}} + \underbrace{\rho}_{\text{price shocks}}$$

; AS is upward sloping $Y\uparrow \rightarrow (Y - Y^P)\uparrow \rightarrow \pi\uparrow$