ECON132

تلخيص من إعداد موقع

BZU-HUB

⬇️ محتويات التلخيص

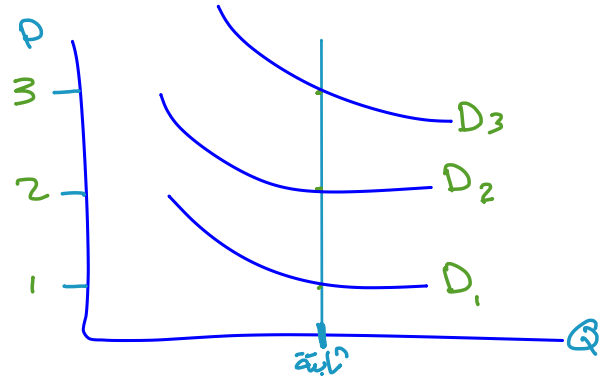
Chapter 26: An Introduction to Macroeconomies

- Savings: Current output > Current Consumption
- Investment: happens when resources are devoted to increase future output.

- Demand Shocks (Short-run)
  - الأسعار بطيئة التغير
  - أول اشي بيضطر للاستجابة إلى تغيرات الإنتاج والعالة
  - بدلاً من التغيرات في الأسعار

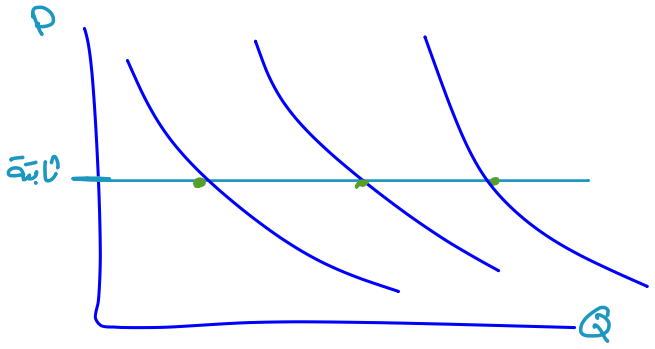
* Negative demand shock: RGDP ↓ inflation ↓ unemployment ↑
* positive demand shock: RGDP ↑ inflation ↑ unemployment ↓
* Negative supply shock: RGDP ↓ inflation ↑ unemployment ↑

- Demand shocks and flexible (متغيرة) prices:



- production is constant, لا يكون هناك تعديلات على المدى القصير
- unemployment ⟶ constant output

- Demand shocks and Sticky (ثابتة) prices:



- production will be adjusted, will be expensive, Cost ↑, Inventories ↓
- Demand ↓ production ↓
  RGDP ↓ unemployment ↑

Chapter 27: Measuring Domestic Output and National Income

overall performance

- GDP= $\sum(P * Q)$
- Production of final-goods-approch: The final price for consumers
- Value added = Value of final goods - Value of intermidiate goods
- The Expenditures Approch:
  - * GDP= $I_g + C + G + X_n$
  - * I_g:
    - ΔInventory = production - Sales
    - I_g = Value of capital goods + ΔInventory
- Gross Investment (replacement capital and added capital) VS Net Investment (I_n) (added capital)
  - * $I_n = I_g$ - Depreciation
- Net Exports (X_n) = Exports (X) - Imports (M)
- The Income approch:
  - * GDP= NI - NFFI + SD + D
  - * NI = W + R + I + Corporate Profit + proprietors' Income + Taxes on P&M
  - * Corporate Profit = Corporate Income taxes + dividends + Undistributed Profit
  - * GNP: المواطنين برا بس بدون الأجانب
    GNP= GDP + NFFI

* Net Domestic Product (NDP)

- NDP = GDP − D
- NDP = $I_n + X_n + C + G$
- NI = GDP − D − SD + NFFI
  = NDP + NFFI − SD

* Personal Income (PI)

- PI = NI − Taxes − SSD − UCP − CIT + Transfer payment

* Disposable Income (الدخل المتاح) = PI − Personal Taxes

or = Consumption (C) + personal Saving ($)

- Price index is given year = $\frac{NGDP}{RGDP} * 100\%$.
  - Price index for the base year = 100

- Inflation Rate = $\frac{\text{Price Index (t)} - \text{Price Index (t-1)}}{\text{Price Index (t-1)}} * 100\%$.

- Economic Growth = $\frac{RGDP(t) - RGDP(t-1)}{RGDP(t-1)} * 100\%$.

Chapter 28: Economic Growth

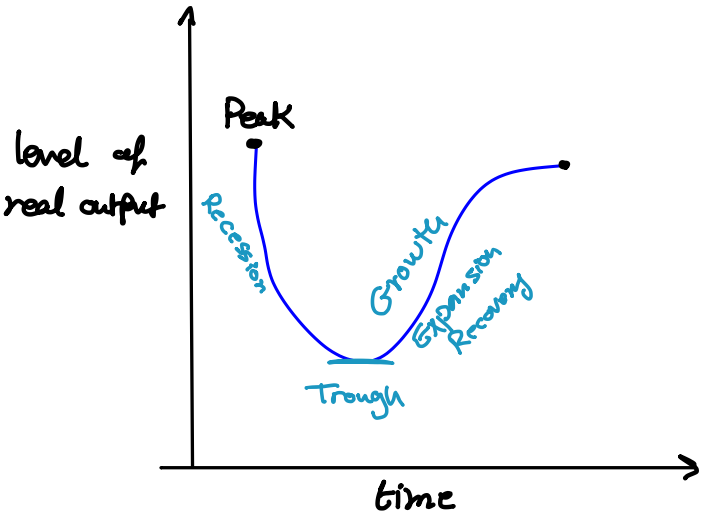
- Real GDP Per Capita = $\frac{\text{Real GDP}}{\text{population}}$
- Economic Growth = $\frac{\text{Real GDP (current year)} - \text{RGDP}(t-1)}{\text{RGDP}(t-1)} * 100\ \%$
- Growth rate of GDP per Capita =

$$\frac{\text{Growth rate of GDP per Capita}(t) - \text{Growth rate of GDP per Capita}(t-1)}{\text{Growth rate of GDP per Capita}(t-1)}$$

- Years to double real GDP = $\frac{70}{\text{annual percentage rate of growth}}$

- Real GDP = hours of Work * Labor production

Chapter 29: Business Cycles, Unemployment and Inflation



- Peak : Price ↑ output ↑
- Recession : GDP ↓ output ↓ unemployment ↑
- Recovery : inflation, [illegible]
- fluctuations : [illegible]

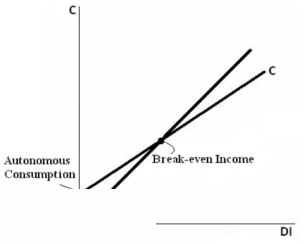
- Labor force = employed (E) + Unemployed (U)
- Total population = labor force + not labor force + under 16
- Unemployment rate = $\frac{\text{Unemployment}}{\text{labor force}} * 100\%$
- Participation Rate = $\frac{\text{labor force}}{\text{labor force + not labor force}} * 100\%$ → population ↑ 16
- Okun's law = 2 * GDP
- CPI = $\frac{\text{Price Index (t)} - \text{Price Index (t-1)}}{\text{Price Index (t-1)}} * 100\%$
- Inflation Rate = $\frac{CPI(t) - CPI(t-1)}{CPI(t-1)} * 100\%$
- Real Income = $\frac{\text{Nominal Income}}{\text{price Index}}$
- % Δ Real Income = % Δ Nominal Income − % Δ price level
- Nominal Interest rate = Real Interest rate + IP

Chapter 30: Basic Macroeconomic Relationship

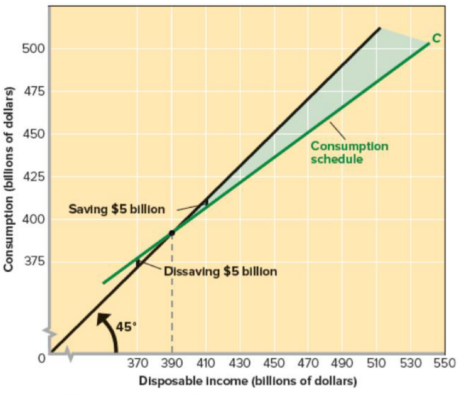
* The income-consumption and income-saving Relationships

- $S = DI - C$
- $DI = S + C$ "علاقة طردية"

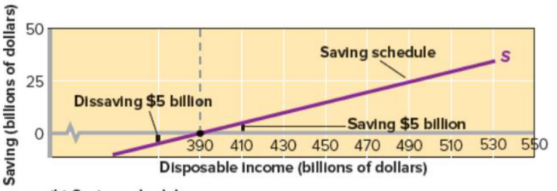
* Autonomous Consumption "الاستهلاك التلقائي"



- DI = Zero



(a) Consumption schedule



(b) Saving schedule

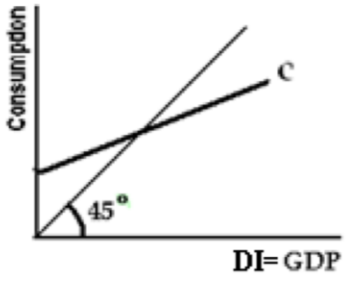
- C > DI → (-) saving (dissaving)
- C < DI → (+) saving

- $APC = \frac{C}{DI}$
- $APS = \frac{S}{DI}$
- $APC + APS = 1$
- $MPC = \frac{\Delta C}{\Delta DI}$
- $MPS = \frac{\Delta S}{\Delta DI}$
- $MPC + MPS = 1$

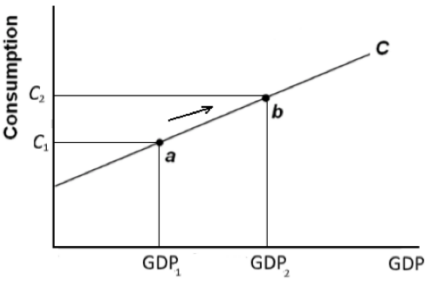
- DI ↑ → APC ↓, APS ↑
- DI ↓ → APC ↑, APS ↓
- Dissavings occures when C > DI
- MPC = slope of the consumption function
- MPS = slope of the saving function

* Determinantes of Consumption and Saving

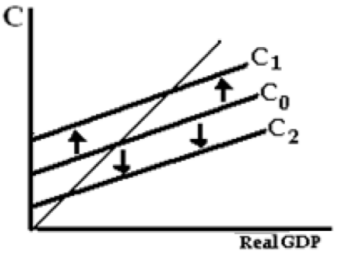
- Switching to the Real GDP

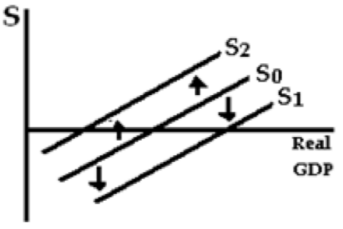


- Changes along Scheduals



- Schedual Shifts





✱Shifters ✱

1 Wealth
- W↑ → C↑ , S↓

2 Borrowing
- B↑ → C↑ , S↓

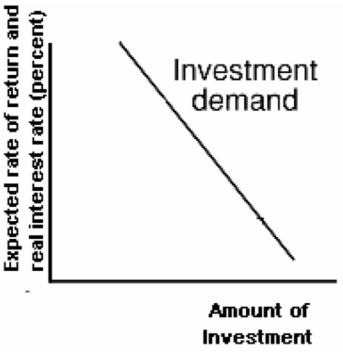
3 Expectation about Future Prices and Income
- توقع رفع الأسعار → C↑ , S↓ (current)
- توقع الركود → C↓ , S↑ (current)

4 Real Interest Rate
- i↓ → C↑ , S↓
- i↑ → C↓ , S↑

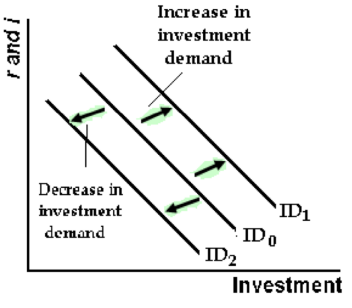
5 Taxation
- T↑ → C↓ and S↓
- T↓ → C↑ and S↑

✱ The interest rate – investment Relationship
- The marginal benefit from investment is the expected rate of return (r)
- The marginal cost is the interest rate (i) , cost of borrowing
- If (r > i) → will invest → profitable
- If (r < i) → will not invest → unprofitable
- Expected Rate of Return (r) = $\frac{\text{Total revenue} - \text{Total Cost}}{\text{Total Cost}} = \frac{\text{Profit}}{\text{cost of investment}}$

✱ Investment Demand Curve



✱ Shifts:
- r↑ , investment demand ↑ Shifts to the right
- i↓ , investment demand ↓



* Determinants :

1. Acquisition, Maintenance, and Operating Cost
   - $r = \frac{\text{Profit}}{\text{cost}}$
2. Business Taxes
   - T↑ , C↑ , r↓ , investment demand ↓
3. Technological Change
   - Tech ↑, C↓ , r↑ , investment demand ↑
4. Stock of Capital goods on Hand
   - ما البضاعة تخلص بالمخزون بترة → r↓ , investment demand ↓
   - لا البضاعة بتنباع أول بأول → r↑ investment demand ↑
5. Planned Inventory Changes
   - Planning to increase inventories → investment demand ↑
   - Planning to decrease inventories → investment demand ↓
6. Expectations
   - توقع جيد → investment demand ↑ Shift to the right
   - توقع ركود → investment demand ↓ Shift to the left

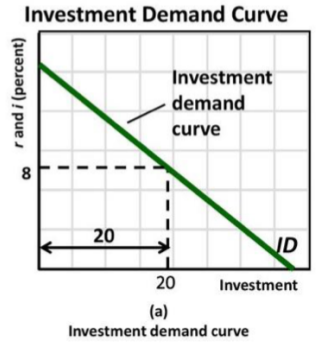
* The Multiplier Effect

- An economic term, referring to the proportional amount of increase, or decrease, in final income that results from an injection, or withdrawal, of capital

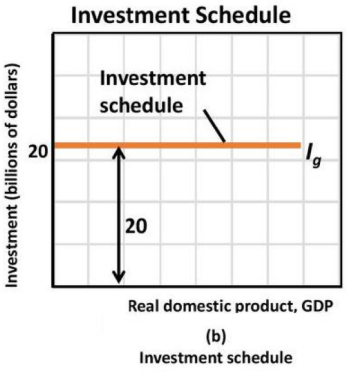
- Multiplier = $\frac{\text{Change in income}}{\text{Change in spending}}$

Chapter 31: The Aggregate Expenditure Model

*Consumption and Investment Schedules



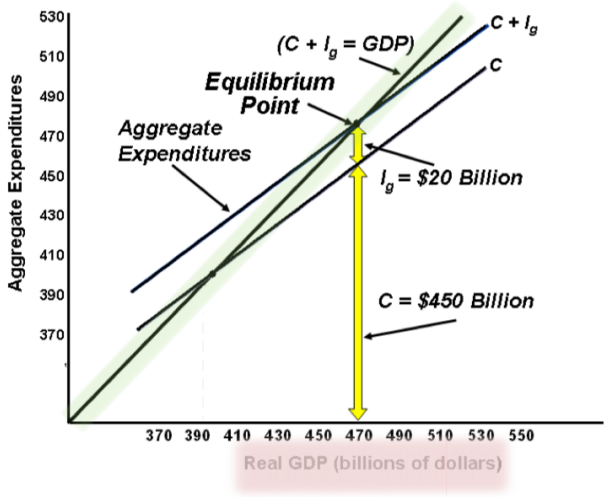
- Negative Relationship between the amount of investment and interest rate
- I_g ↑ , r ↓



- Investment Schedual is independent of level of GDP
- rate of return and the interest rate together determine the amount of investment

*Equilibrium GDP: C + Ig = AE

- AE = Ig + C
- At Equilibrium GDP: GDP = AE
- GDP = Ig + C
- if GDP < AE → • Spending > Production
  - Δinventory = GDP − AE
  - negative unplanned changes in inventories (Shortage)
  - Tendency of employment, Output and Income (Increase)
- if GDP > AE → • Production > Spending
  - Δinventory = GDP − AE
  - positive unplanned changes in inventories (Surplus)
  - Tendency of employment, output and Income (Decrease)
    - How to adjust that?
      - cutting back on the rate of production
      - output ↓ , jobs ↓ , total income ↓
- GDP = DI



- GDP = DI = 45° ال بيا
- Break-even point → DI = C
- Equilibrium point → AE = GDP
- DI = S + C
- APC = $\frac{C}{DI}$
- MPC = $\frac{\Delta C}{\Delta DI}$
- APS = $\frac{S}{DI}$
- MPS = $\frac{\Delta S}{\Delta DI}$
- I_g = difference between C and C+I_g (مسافة العمودية)

* Other Features at Equilibrium GDP

* When GDP = I_g + C, في كمان مميزتين :-

1 S = I_g (تسرّب)

- Saving is a leakage
- Investment is an injection
- At equilibrium : leakage = injection
- leakage > injection → GDP > AE
- injection > leakage → GDP < AE

2 No unplanned changes in inventories

- at equilibrium : GDP − AE = 0
- GDP = AE
- production = purchases

* Changes in Equilibrium GDP and the Multiplier

* Changes in Equilibrium GDP:

- I_g ↑ or C ↑ → AE ↑ (upward) → equilibrium GDP ↑
- I_g ↓ or C ↓ → AE ↓ (downward) → equilibrium GDP ↓
- interest rate (i) ↑ → investment ↓ , AE ↓ , GDP ↓
- rate of return (r) ↑ → investment ↑ , AE ↑ , GDP ↑

* The Multiplier Effect

- Multiplier effects: a change in a component of total spending (I_g, C) leads to a larger change in GDP
- Multiplier (m) = $\frac{\text{change in Real GDP}}{\text{initial change in spending}}$ (I_g, C, G, X)

* The Multiplier and the Marginal Propensities

- Multiplier = $\frac{1}{1-MPC}$ or $\frac{1}{MPS}$
- MPC ↑ ⟶ m ↑
- MPS ↑ ⟶ m ↓
- ΔGDP = m * ΔI_g
- new level of real GDP = initial ± ΔGDP (Calculated)

decrease إذا حسب
Increase ↑ if

* Adding International Trade

- Total Exports = X − M
- X > M ⟶ Trade Surplus
- X < M ⟶ Trade deficit
- X = M ⟶ Trade Balance
- AE = C + I_g + X_n ⟶ private open economy
- X_n is independent of GDP (X_n does not change)
- + X_n ⟶ AE ↑, GDP ↑
- − X_n ⟶ AE ↓, GDP ↓
- ΔGDP = m * ΔX_n

* International Economic linkages (Factors Affected X_n)

1 Prosperity Abroad (Increase Foreign income) الرفاهية في الخارج

- Foreign income ↑ ⟶ Exports ↑ ⟶ net exports ↑ ⟶ real GDP ↑

2 Tariffs الجمارك

- Tariffs ↑ ⟶ imports ↓ ⟶ net exports ↑ ⟶ real GDP ↑

3 Exchange rates سعر الصرف

- Depreciation of domestic currency ⟶ X ↑, M ↓, X_n ↑, GDP ↑ انخفاض
- Appreciation of domestic currency ⟶ X ↓, M ↑, X_n ↓, GDP ↓ ارتفاع

* Adding Public Sector

- private closed economy ⟶ AE = I_g + C
- private opened economy ⟶ AE = I_g + C + X_n
- mixed closed economy ⟶ AE = I_g + C + G
- mixed opened economy ⟶ AE = I_g + C + G + X_n
- GDP changed ⟶ G does not change

* Government purchases and Equilibrium GDP

- G ↑ → GDP ↑ ($\Delta GDP = m * \Delta G$)
- G ↓ → GDP ↓

* Taxation and Equilibrium GDP

- Lump-Sum tax: is a tax of a constant amount or a tax yielding the same amount of tax revenue at each Level of GDP
- T ↑ → C ↓ by (MPC * T), S ↓ by (MPS * T)
- T ↓ → C ↑, AE ↑, equilibrium GDP ↑
- Tax multiplier $= \frac{-MPC}{1-MPC}$
- $GDP = m_t * \Delta T$
- DI = GDP − T

* Injections, Leakages and unplanned changes in inventories

- At equilibrium GDP: Leakage = injection
  $(S + M + T) = (I_g + G + X)$
  - no unplanned changes in inventories (GDP = AE)

* Balance Budget multiplier

- If G ↑ and T ↑ by same amount → GDP ↑ same amount
- If G ↓ and T ↓ by same amount → GDP ↓ same amount
- The balance budget multiplier = 1

* Equilibrium Vs. Full Employment GDP

- Equilibrium GDP and Full employment GDP is not the same

* Recessionary Expenditure Gap الفجوة الانكماشية

- If at full employment, GDP > AE → Recessionary Gap
  - The size of the gap = GDP − AE
  - Causes cyclical unemployment

- Kenyes' Solution to a Recessionary Gap:
  1. Increase government spending
  2. Lower Taxes

* Inflationary Expenditure Gap

- If at full employment, GDP < AE → Inflationary Gap
  - The size of the gap = AE − GDP
  - Causes demand pull inflation

- Multiplier $= \frac{\Delta GDP}{\Delta AE}$
- $MPC = \frac{\Delta AE}{\Delta GDP}$ = Slope of the Consumption Function = Slope of the AE

Chapter 32 : Aggregate Demand and Aggregate Supply

* Aggregate Demand

- Real output (Real GDP) that payers collectively desire to purchase at each possible price level

- The relationship between GDP demanded and price level is inverse
  P↑ , GDP↓ P↓ , GDP↑

* Why the AD is downward slope?

1. Real Balances Effect
   P↑, purchasing power of assets ↓ , C↓, GDP↓

2. Interest-Rate Effect
   P↑, money demand ↑, interest rate ↑, Investment ↓ , GDP↓

3. Foreign Purchases Effect
   P↑, X↓ and M↑, X_n ↓ , GDP ↓

* Change in Aggregate Demand

- ΔGDP = m * Δspending

* Determinants of Aggregate Demand : Factors that shift the Aggregate demand curve

1. Change in Consumer Consumption (C)
   - C↑ , GDP↑ , AD shift to the right
   - C↓ , GDP↓ , AD shift to the left

   * Factors that shift AD because the change of C :
   ① Consumer Wealth : wealth↑ , C↑ , AD shift to the right
   ② Consumer Expectation on Real Income and Prices : future income↑, C↑
   ③ Household Borrowing : Borrowing↑ , C↑, AD shift to the right
   ④ Taxes : T↑ , DI↓ , C↓, AD shift to the left

2. Change in Investment Spending (I_g)
   - I_g ↑ , GDP↑ , AD shift to the right
   - I_g ↓ , GDP↓ , AD shift to the left

   * Factors :
   ① Interest rate (i) : interest ↑ , investment ↓ , GDP↓ , AD shift to the left
   ② Expected return (r) : r↑ , investment ↑ , GDP ↑ , AD shift to the right

3 Change in Government spending (G)

- G↑ , GDP↑, AD shift to the right
- G↓ , GDP↓ , AD shift to the left

4 Change in Net Exports Spending (X_n)

- X_n↑ , GDP↑, AD shift to the right
- X_n↓ , GDP↓, AD shift to the left

* Factors:

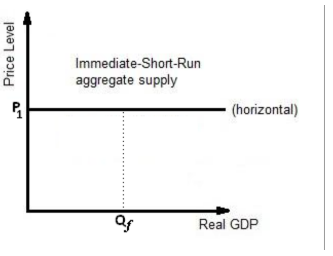
- National Income Abroad : National income↑, X_n↑, AD shift to the right
- Exchange Rate: • Depreciate ⟶ GDP↑, AD shift to the right
  • Appreciate ⟶ GDP↓, AD shift to the left

* Aggregate Supply

- The relationship between the price level and the amount of real domestic output that firms in the economy produce
- This relationship depends on the time horizon and how quickly output prices and input prices can change

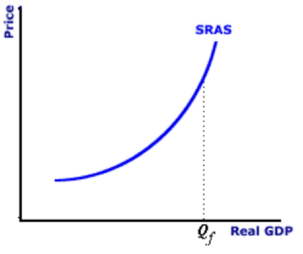
* Aggregate Supply in the immediate Short Run

- Input and output prices stay fixed
- Output may be higher or lower than the economy's full employment (Q_f)
- only output can change



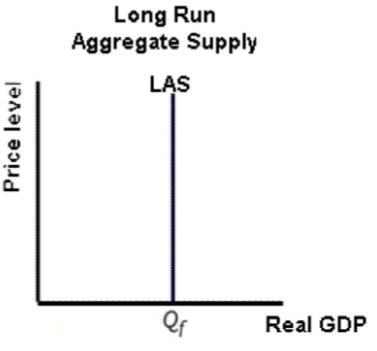
* Aggregate Supply in the Short Run

- output prices are flexible
- input prices are fixed or highly inflexible
- The AS Cure is upward slopping → direct positive relationship between the price level and GDP
- The AS slope is relatively steep (ʃLΔ) beyond the full employment output (Q_f), because shortages and capacity limitation make it difficult to expand real output as the price level rises
- Both output and input can change



* Aggregate Supply in the long Run

- Both input and output prices are flexible
- They produce in full employment level no matter what the price is
- Wages and input are matching the level of the price
- only price will change

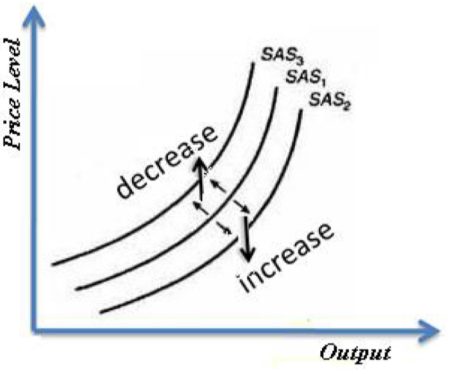


* Change in Aggregate Supply

* Determinants of AS

1 Input (Resources) prices

- Domestic Resources Prices
  - Resources prices ↑ (wage, rent, interest, profit), cost per unit ↑, AS ↓ (Shift to the left)
- Prices of imported prices
  - per unit cost ↑, AS ↓ (Shift to the left)



2 Productivity

- Productivity = $\frac{\text{Total output}}{\text{Total input}}$
- per unit production Cost = $\frac{\text{Total input cost}}{\text{Total output}}$
- Productivity ↑, per unit production Cost ↓, AS Shift to the right

3 Legal Institutional Environment

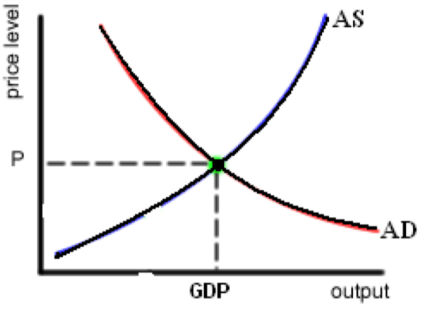
- Business Taxes
  T ↑, per unit production Cost ↑, AS ↓ Shift to the left
- Business Subsidies الدعم الحكومي والإعانات
  Subsidies ↑, per unit production Cost ↓, AS ↑ Shift to the right

4 Government Regulations

- More Regulations ⟶ Cost ↑, AS shift to the left
- less Regulations ⟶ cost ↓, AS shift to the right

* Equilibrium and changes in Equilibrium

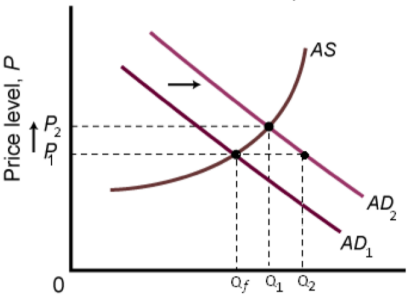
- At Equilibrium → AD = AS
- If AD > AS → GDP Shortage
- If AD < AS ⟶ GDP Surplus
- Δ GDP = (GDP @ equilibrium − الناتج المحلي الإجمالي)



*Changes in Equilibrium

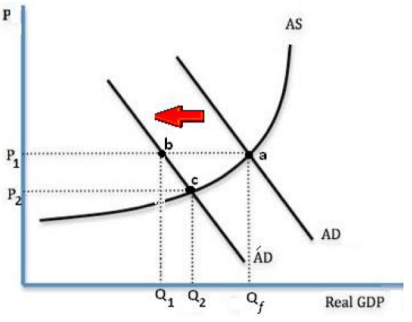
*Increase in AD: Demand-Pull Inflation

- Inflationary GDP Gap = $Q_1 - Q_f$
- Price ↑ → multiplier effect ↓
- Price remains the same → multiplier would have been at full strength



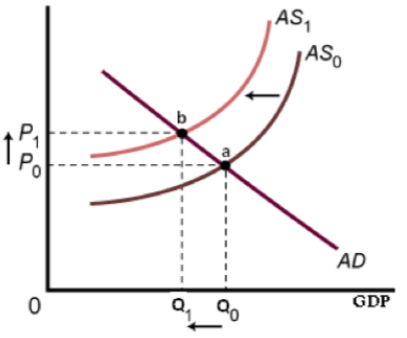
*Decrease in AD: Recession and Cyclical Unemployment

- Price inflexible ↓:
  - Economy ↓ from a to b
  - GDP Gap = $Q_1 - Q_f$
- Price flexible ↓:
  - Economy ↓ from a to c
  - output ↓ = $Q_f - Q_2$
  - Recession and cyclical unemployment



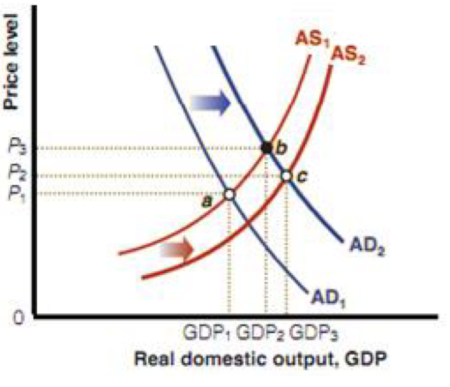
*Decrease in AS: Cost-Push Inflation

- AS ↓ → P↑ from P_0 to P_1
- GDP Gap = $Q_1 - Q_0$



*Increase in AS: Full Employment with Price Level Stability

- Increase in Real output:
  - Productivity ↑, AS ↑
  - Economy ↑ from a to c
  - Strong economic growth = $Q_3 - Q_1$
  - Full Employment
  - Only very mild inflation P_1 to P_2



Chapter 31 : Fiscal Policy, Deficit, and Debt

Fiscal Policy

government's power of taxation and spending

Expansionary Fiscal Policy

*When recession :

- G ↑ or T ↓, C ↑ or both
- AD to the right
- Δ GDP = m * Δ G , $m = \frac{1}{MPC}$
- Δ GDP = m * ΔC
- Δ G = MPC * ΔT
- Δ GDP = m_t * ΔT , $m_t = \frac{-MPC}{1-MPC}$

Contractionary Fiscal Policy

* To slow an economic expansion and prevent inflation
* May lead to higher unemployment
* When demand-pull inflation occurs : G ↓ or T ↑ → C ↓ or both
* AD to the left
* G ↓ ⟶ Price ↓
* T ↑ ⟶ GDP ↓

* Government Budget Types: The government budget = T − G

if ① Balanced Budget : T = G

will creat ② Suplus Budget : T > G

③ Deficit Budget : T < G