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Notes: Macro-Economic Aims and Policies

1. Definition

1.1. Economic Growth

- Economic growth refers to the growth of the actual or potential production capacity.

1.2. Full Employment

- Full employment would refer to the full utilization of resources for the production capacity which is measured in term of employment rate.

1.3. Price Stability

- Price stability is measured by the consumer price index which will indicate whether there is inflation or deflation.
- With price stability, the economy is able to maintain the cost of living and cost of production and thus avoid the detrimental impact of deflation and inflation

1.4. BOP Equilibrium

- At BOP equilibrium, there is no excessive deficit and surplus of the balance of payment and trade which will affect the flow of the currency and thus affect the exchange rate.

1.5. Equal Income Distribution

- Income distribution is measured by the Gini coefficient and Wage to GDP ratio.
- The lower the Gini co-efficient and higher wage to GDP ratio, the less income disparity.

1.6. Jobless Growth

- Situation where there is economic growth without the increasing labour to increase production
- This can happen with the improvement of technology and factors of production.

Inclusive growth – sustainable economic growth with dimensional distribution of economic gain to diverse income group.

Have greater economic prosperity and share the economic prosperity with the population.

- 1) sustainable economic growth / 2) equal distribution of income and wealth to distribute economic benefits to the population
- Achieve high real GDP/ low Gini-co-efficient – Progressive taxation subsidies in terms of social welfare

Scope of Discussion

- o 4 Aims
- o Definition
- o How it is measured
- o Characteristics

- **Explain the aims of government (definition and main features)**

The aims of the government are seen in terms of price stability, low unemployment, economic growth and external equilibrium. In striving to attain price stability, the Singapore government seeks to attain low inflation rate which can be measured by the consumer price index on a year-on-year basis or base year comparison approach. To do so, the government is trying to maintain low cost of living and cost of production to sustain the livelihood for the workers and maintain her external competitiveness. As for low unemployment rate which is measured by the ratio of the unemployed workers to the total working population, it will enable the economy to have higher level of production and thus, raise the rate of utilization of resources.

In achieving these two aims, the economy of Singapore will be able to attain economic growth at a sustainable and stable growth rate when real Gross Domestic Product (GDP) grows without experiencing inflationary condition. In achieving this, the government needs to raise the actual growth which is measured in terms of the growth of the real GDP which is the total monetary value of goods and services produced by the nation within its territory, usually measured in a year and raise the potential growth of the economy by expanding the availability of resources through the outward shift of the long-run supply curve.

(BOP equilibrium – affect **exchange rate fluctuation**)

As for the external equilibrium, this will refer the flow condition of the economic activities that the country will engage with other countries, seen in terms of trade, flow of investment, fund and equity transactions, reflected by the balance of payment. These economic activities will affect the flow of currency which will affect exchange rate that may create adverse effects like asset-based inflation or imported inflation.

BOP – current account, - balance trade, services balance, income balance, transfer balance / Capital account / financial account

- explain how the various accounts in BOP reflects th economic performance

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Both fiscal and monetary policies are known as demand management policy

1.7. Monetary Policy (credit crunch – tightening of money supply)

- The policy involves the variation of money supply and interest rates by the central bank to affect the level of economic activity in an economy to achieve certain macro-economic objectives.
- quantitative easing – increase in money supply – lower interest rate
- lower the interest rate like FED rate (banking lending rate to the commercial bank- not used in SG)
- qualitative monetary policy – control direction of MS

1.8. Fiscal policy (change in government expenditure and taxation)

- The policy involves the variation of government expenditure and taxes to affect the level of economic activity in an economy to achieve certain macro-economic objectives.
- fiscal stimulus – increase in government expenditure
- fiscal policy in LR – implications as a supply side management policy
- austerity measures – reduction in government expenditure and raise taxes to cut down budget deficit – repay public debt (has the effect of contractionary fiscal policy

1.9. Exchange Rate Policy

- The foreign exchange system attempts to adjust the foreign reserves of the country to influence the exchange rate which will affect the trading and investment activities that affect FDI, imports and exports to achieve macro-objectives.
- When exchange rate is managed with the adjustment of interest rate by influencing the local money supply, it is known as the **monetary exchange rate policy.**

As long as money supply is adjusted→affect i/r→capital inflow→dd/ss of currency (local $ in forex) →affect exchange rate

SG Monetary exchange rate policy – direct intervention in the forex market to influence exchange rate – direct buying and selling
lower exchange rate – sell Sing $ - increase in SS of S$
raise exchange rate – buy S$ - need forex to buy S$ (must have forex reserve) – increase in DD for S$

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1.10. Supply Side Policy

- A set of government economic policies which aims to change the underlying structure of the economy and improve both the production capacity of markets and efficiency of the industries, and also that of individual firms and workers within markets so as to aim to achieve the aims of the economy.
- The policy will either raise the efficiency of production which will decrease cost of production, contributing to change in the aggregate supply or the expansion of resources or production capacity which will lead to outward shift of LRAS.
  - de-regulation (market -oriented) (liberalization) or intervention
  - capital accumulation, infrastructural development, technological development, manpower development
  - liberalization of labour market – reduce the regulation by the trade union – improve the mobility of workers – greater production capacity

1.11. Free Trade Agreements (Trade-network policy) – the reduction of trade barriers to facilitate trading activities and promotion of investment among countries

- Deals struck, usually between 2 nations, or sometimes with a grouping of nations to increase bilateral trade through measures such as cutting tariffs on most goods.
- The main aim is to spur trade and investment between the 2 sides

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Explain how FTA affects Standard of Living. (Increase in AD and AS)
introduction
meaning of FTA
meaning of SOL

Main body

1) Explain how FTA raises AD to increase real GDP and therefor raises SOL (real GDP per capita)
   - how FTA raises Real GDP (increase XD and FDI)
   - how real GDP raise real GDP per capita
2) Explain how to raise potential growth to raise future SOL
3) draw diagram to show real GDP and potential growth can occur to rise SOL
4) can FTA raise non-material SOL
5) limitations of FTA in raising SOL (time comparison)

Conclusion

✱**Process on how to explain and evaluate the mechanism of policies**

a) Definition and characteristics of the policy
b) Process of the policy – how the policy is conducted to solve the problems or achieve the aims
c) Evaluation - theoretical factors / contextual factors (based on the economy)
   Contextual Example: increase interest rate under a condition of market optimism – investment may continue as rate of return will be greater than the rise in interest rate, undermining the contractionary effect of monetary policy
d) Basis of evaluation
   ✱In the analysis of the effectiveness of policy, it is important to consider the aims of the policy.
   Eg. Effectiveness of FP in curbing inflation or the use of Exchange Rate Management Policy to solve unemployment
   ✱Protectionism-whether protectionism is justifiable under the context of globalization

Qn: Discuss whether exchange rate management policy is more effective than monetary policy in curbing inflation in Singapore. [25]

Introduction
Definition of inflation, exchange rate policy and monetary policy
main Body

1) Explain how the monetary policy will solve inflation
2) Explain how the exchange rate policy will solve inflation
3) Evaluate why exchange rate management policy is better than monetary policy in curbing inflation (comparative evaluation)
    - Exchange rate MP is more effective as it can curb imported inflation but MP will be less direct and permanent than in raising exchange rate
4) Limitations of the exchange rate monetary policy
   (comparative evaluation – depict that MP may be better in certain situation)
5) analytical factor – nature of inflation – determines which is more effective

Conclusion
retrospective summary – restating your stand –
opinion development

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2. Macro-economic policies

2.1. Concept of Fiscal Policy

→uses of government expenditure and taxation –influence AD-so as to achieve aims of government

2.1.1 Expansionary Fiscal Policy

- It is used to solve recession or curb unemployment by raising aggregate demand
- Increase in government expenditure → increase aggregate expenditure directly through infrastructural development and provision of public services
- Tax reduction → increase disposable income → raise consumption and increase return on investment, (lower tax on corporate earnings) contributing borrowing from the public through the issues of government bond the rise in investment expenditure → rise in aggregate expenditure/national income (multiplier effect)
- This will close up the deflationary gap and thus curb recession.
- Evaluation
    - Low multiplier → reduces effectiveness of policy (High MPS/High MPM)
    - Crowding out effect – If the government expenditure is financed through borrowing by the issue of government bond -increase in demand of loan – increase in interest rate→increase in cost of borrowing-discourage private investment as there is deprivation of fund for private investment and higher cost of borrowing due to high interest rate [contractionary effect that undermines the impact of expansionary FP] – crowd out the fund available for pte investment
    - Fiscal drag - income increases (expansionary policy) → public in a higher tax bracket → slower growth in disposable income → slower increase in C → reduces effectiveness of FP. This is the result of automatic stabilizers that are in place in the fiscal system
    - Time lag
    - High cost of financing
    - Saturation of infrastructural development will lead to under-utilization of public facilities -

the government needs to consider the crowding out effects when it uses fiscal policy to solve unemployment as it will undermine private investment from getting fund to increase investment and thus, failing to raise production and employment

2.1.2 Contractionary FP

- It is used to curb demand-pull inflation by lowering aggregate demand
- Decrease in government expenditure will decrease aggregate demand directly.
- Tax increment will reduce disposable income and thus lower consumption while the return on investment decrease due to higher tax on corporate earnings, contributing the fall in investment expenditure
- The effect will lead to the fall in aggregate demand which will decrease national income via the reverse multiplying effect. This will close up the inflationary gap and thus curb inflation.

- **Evaluation**

✓ Low multiplier- reduces effectiveness of policy
✓ Time lag
✓ Expenditure on public works projects already happening cannot be cut. Reductions in expenditure may be minimal. (↓SOL/undermine efficiency of industries)
✓ ↑ tax is politically unfavourable
✓ cannot be used to solve cost-push inflation (↑tax to ↓AD will lead to tax-based inflation) and imported inflation

2.1.3 Explain why Singapore introduces fiscal policy for its supply-side implications rather than the demand-side implications

a. FP→affect AD→Demand-side implication
-depending factors –time period
–impact on resource (△AS) or production capacity (△AD)

b. FP→affect resource / production capacity → affect potential growth (SS-side implication) – outward shift of the LRAS
-infrastructural development and manpower development will enhance mobility of resource, which will expand availability of resources – shift LRAS to the right – lower cost of production to reduce price →↑AD on a quantity basis, ↑real GDP (achieving sustainable EG)

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Explain how FP affects other AD components?
On consumption – thru taxes and subsidies
investment – reduction in corporate tax / government exp – lower cost of production and smoothen operation of work
Export demand – lower cost of production (subsidies) – decrease price of export demand – increase export demand

Explain how Fiscal solve demand deficient unemployment in Singapore.

1. Economic causation
2. Draw diagram
3. Description of the diagram

2.1.4 Assess the extent of the effectiveness of the fiscal policy in Singapore

- Effective as a policy to help to reduce unemployment as it can create direct and indirect impact on the issue of employment
  a) Productions induce employment with direct provision of goods and service by government (more teaching staff)
  b) can train the workers to help them adapt to structural changes and imperfect market information (solve skill incompatibility)
  c) The increase in employment will have significant benefits to a large economy – more labour intensive forms of jobs
- Can help to generate growth as it will expand production capacity with infrastructural development to reduce immobility of resources like expressways and MRT transit link (↑FDI→↑production→↑N^+)
- Fiscal policy can also be used to raise the efficiency of industries through manpower development and infrastructural development
- Use as a policy eliminate disparity of income as subsidies are to lower income group and infrastructural development will raise the standard of living as it provides convenience and comfort to the people

Evaluation

- ✓ Government expenditure is inadequate to compensate the loss from external demand (17% Govt exp of GDP compared to 250% XD to GDP)
- ✓ Time lag
- ✓ Efficiency and Effectiveness depends on the public administrative body
- ✓ Small k effect in Singapore – high MPS/MPM
- ✓ high cost of financing – need to raise tax burden for future generation / may need to raise in public debt (need to tax more in the future)

2.2 Concept of Monetary Policy

It involves the variation of money supply and interest rate to influence AD components so as to attain the aims of government

2.2.1Expansionary MP

- To raise AD to solve recession and unemployment
- When expansionary monetary policy is conducted, the government will increase the money supply through the buying of government bonds which will lower interest rate. This will lower the cost of credit consumption and reduces the reward for saving which will encourage more consumption and reduce willingness to save. Also, the level of investment will be raised as the level of profitability is raised since the cost of investment is lowered as lowering interest rates lowered the cost of borrowing. Consequently, there will be a rise in consumption and investment which will raise the aggregate demand, via the multiplier effect and thus raises the real GDP, production and employment.
- Qualitative MP (direction of money supply)→provide more liquidity to firms to prevent business failure→prevent retrenchment
  control of credit cards – influence consumption – areas of spending

- Fall in interest rate → outflow of hot money (→ depreciation of currency of the country → ↓P_x/↑P_m→ increase in (X-M), assuming demand for X and M is price-elastic

(Exchange Rate Monetary Policy → ↓P_x → ↑Xd→↑AD)
⇨Not adopted by Singapore (No use of interest rate to affect exchange rate
Use interest to influence the exchange rate to control imported inflation – capital control (prevent short term change of local currency into forex)

2.2.2 Monetary Transmission Mechanism

Evaluation (monetarist – direct , Keynesian – indirect)

a. Can central bank control MS?

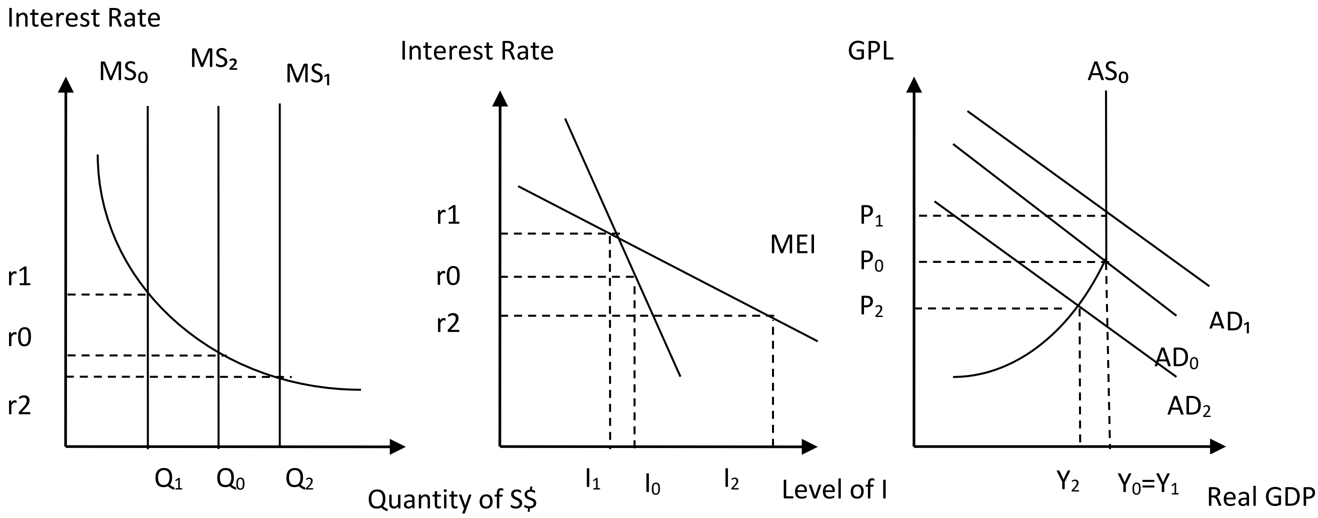
- Liberalization of banking system/foreign banks ∵ difficult for MAS to control money supply

b. Can Interest Rate affect Investment?

-Interest-inelastic MEI

c. Can Aggregate Demand affect Real GDP?

-Small multiplier



Expansionary MP	↑MS→↓Interest Rate from r_0 to r_2	↓ Interest Rate→ ↓Cost of borrowing, ↑I (H1 is not included)	↑I→↑AD from AD_2 to AD_0 →↑Y from Y_2 to Y_0
Contractionay MP	↓MS→↑ interest rate from r_0 to r_2	↓ interest rate→↑cost of borrowing→↓I	↓I→↓AD from AD_1 to AD_0 →↓P from P_1 to P_0

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2.2.3 Evaluation of Expansionary Monetary Policy

Advantages

- Can create a more market-oriented impact on the economy which is more permanent as it induces private investment
- Market-based economic activities will be more effective as the production may be more innovative and efficient (more diversified form of investment → dynamic for economic development → more sources of growth of NY and greater variety of employment opportunities
- liquidity provided by the government will induce stability for
- the economy (more money supply will enable higher level of consumption/more fund for business operation) – more cash flow

Disadvantages

- Inability of the central bank in controlling money supply due to liberalization of the banking sector
- Inelastic MEI – Investment is based on FDI and low local interest rate cannot affect FDI/Market pessimism may not induce borrowing
- Small multiplying effect-undermining the MP from expanding the economy(high MPS and MPT)
- Increase in local investment may not be able to compensate the loss in production due to fall in external demand

Qn: Why expansionary MP cannot raise AD to solve recession?

✓ Cannot compensate the loss of external demand (global economic recession due to sub-prime crisis cannot be reverted by the expansionary MP)

✓ Market pessimism will not induce ↑ AD even if i/r is lowered

Qn: Why some governments may still need to lower i/r to raise AD?

✓ The economy is large with huge population and credit consumption is significant part of AD (US and Euro Zone)

✓ Avoid the dependency of external market demand/avoid the adverse effects of protectionism

2.2.4 Contractionary MP

- When contractionary monetary policy is conducted, the government will reduce the money supply through the selling of government bonds which will **raise interest rate**. This will raise the cost of credit consumption and raise the reward for saving which will discourage consumption and raise willingness to save. Also, the level of investment is lowered as the level of profitability is reduced since the cost of investment is higher as rising interest rates raised the cost of borrowing. Consequently, there will be a fall in consumption and investment which will lower the aggregate demand, via the reverse multiplier effect and thus lower the real GDP, production and employment→↓P (curb inflation)
- **Rise in interest rate→** inflow of hot money → appreciation of currency of the country →↑dd for local $→ ↑$P_x$/↓$P_m$→decrease in (X-M), assuming demand for X and M is price-elastic
- Lower down P_m (temporary)-profit-taking (speculator will sell the local currency when it appreciates)
  ∴Cannot curb imported inflation permanently
  solution – introduce capital control – keep the local currency for a period of time

Evaluation

- ✓ Ineffective if the interest elasticity of capital/investment (MEC/MEI) is highly inelastic. E.g. due to positive business expectations (Investors are still willing to ↑ despite high cost of financing.)
- ✓ Effectiveness is reduced if the MPW in the country is high and k is small
- ✓ Unrestricted movement of short term capital (hot money) will reduce effectiveness- Appreciation of local $ will be dampened by profit-taking→Appreciation is for very short period (speculator will sell local $ → ↑SS of local $→ exchange rate depreciates immediately
  ∴Exchange rate MP is usually introduced along with capital control
- ✓ Higher interest rates may be politically unpopular as it increases cost of servicing mortgages on residential and industrial properties.
- ✓ (only countries like Vietnam, Indonesian, Malaysia)

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2.2.4 ✱**Why MP is ineffective in Singapore?**

- Singapore is an interest-rate taker in the international financial market
- lack of control of MS - liberalization of banking sector – commercial banks like DBS set their own interest rate
- MEI is interest-inelastic -small k
- Govt focuses on the control of exchange rate rather than interest rate – need to stabilize the exchange rate since external demand is 4.5 times of GDP
- Imported inflation is a significant source of inflation → use exchange rate management to control inflation

2.5. Strong Exchange Rate Policy (Reduce imported inflation)

- Increase in exchange rate → imports cheaper in domestic currency → reduce imported inflation.
- This can be done through the manipulation of the FOREX market through direct buying of the local currency, implying an increase in demand for the currency which will appreciate the foreign value of the local currency

Evaluation

- ✓ Limit on how much exchange rate can be appreciated→amount of forex available/extensive fluctuation in price of global resources
- ✓ Price of imported resources may rise excessively→appreciation may be too extensive→need to raise more forex but the country may have limited forex reserve (price of resources subjected to international market condition) SG is a price -taker in the international market)
- ✓ Resource owners may raise the price of resources as the value of US$ owned by the resource owners may be lowered, prompting them to raise the price of oil
- ✓ Exports would be more expensive in terms of foreign currency → fall in X, assuming Marshal-Lerner condition → unemployment in export industries (SR – Pedx + PEDm >1) appreciation – (decrease Pm - increase in import exp) > (increase in Px – decrease in export revenue - balance of trade deficit
- ✓ Government needs to set aside funds for intervention in forex market – Rise in opportunity cost – seen in terms of the usage of fund for other aspects of economic development.

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Disadvantages

Appreciation→↑P_x→↓Xd→loss of export competitiveness

∴Solution: Produce high-value production → Ped_x price-inelastic (increase in px – increase in export revenue) – less substitutable

⇨But reliance on technological advancement → structural UN^+

Qn: Why Singapore government can maintain a strong exchange rate?

a. Ped_x is price-inelastic→Appreciation→↑P_x in foreign value→↓Xd
   ⇨TR_x will still ↑ (Why Ped_x is price-inelastic→Xd is high-value added – low degree of substitution) Pharmaceutical industries
b. Strong exchange rate→↓P_m→↓COP,↓P_x/↓Xd→maintain export competitiveness
   ⇨↓P_m→↓COL→prevent wage increment→lower COP -> ↓P_x

2.6. Weak Exchange Rate Policy (Increase employment and actual output) **– SG – zero appreciation – allow it to stay stong withour further rise (aim to curb imported inflation without further undermining export competitiveness)**

- Fall in exchange rate → export becomes relatively cheaper in foreign value and imports relatively more expensive → rise in (X-M) assuming Marshal-Lerner condition is > 1 → rise in AE, increases employment and growth. (export revenue increases)
- lower exchange rate – Px decreases – TRx increases as PEDx > 1
- This can be done through the manipulation of the FOREX market through direct selling of the local currency, implying an increase in supply for the currency which will depreciate the foreign value of the local currency

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Evaluation

- ✓ Import prices would be higher in terms of domestic currency-imported inflation
- ✓ Government needs to set aside funds for intervention in forex market
- ✓ Exchange Rate Depreciation will not raise X_d or FDI if the world economy is in a recession as the fall in X_d/FDI is due to lower foreign NY

  ∴ Price ↓in X_d will not raise X_d (e.g. sub-prime market crisis in 2009)

  Qn: Why Singapore cannot conduct depreciation to solve the lack of XD/FDI?

a. Depreciation→↑P_m in local value →↑COL/↑COP→↓cost of competitiveness and increase the need to raise wages
b. Depreciation→↓real wage of foreign workers in terms of foreign value → will induce wage increment→↑COP
c. Depreciation may not ↑XD/↑FDI if the fall in XD/FDI is due to ↓NY of foreign nations
d. Need of a strong exchange rate to stabilize Singapore as a financial centre (must ensure foreigner savings, will be maintained in future value) – encourage Singapore to become a wealth-management centre

2.7. Direct Controls

- Income Policy (Reduce inflation)/Flexible Wage Structure
  - keep Wage Cost competitive

    →fixed portion

    →variable portion is adjustable
  - Wage cuts freeze→↓COP→Maintain N^+
  - Wage increases to move in line with productivity

- Evaluation
    - May face problems with militant trade unions - strikes - education in production- increase in inflation
    - wage structure will help to keep cost of wage down to prevent retrenchment
    - to sustain employability – prevent retrenchment

Wage credit scheme – subsidize 40% of wage increment for workers below $4000 – aim – raise the workers' wage – solve income inequality / raise purchasing power / help the firms to sustain the wage cost
skills future

Workfare – given to lower income worker to help them subsidize the lower wage – below $1500.

2.8. <u>Price Policy (Reduce inflation)</u>

- Price ceiling set below equilibrium
- May increase the supply of the resources through the government buffer stock
- Evaluation
    - Suppressing the symptoms of the problem without addressing the main cause →Shortage of supply→How to ↑SS?
    - May lead to severe shortages - rationing - administrative costs to government
    - Shortages- illegal activities (smuggling, black markets, etc.)
    - Most effective in curbing wage-price spiral (Advantage)

      Eg. HDB- Price ceiling
      →↓Price of public housing
      →sustain purchasing power
      →prevent wage increment
      →prevent price -wage spiral

2.9. Supply-Side Policy

- Through the implementation of the policies, the government can expand the availability of resources (supply of resources) and increase the utilization of resources (productivity of wage) thereby increasing the supply of the goods and services to raise actual and potential growth without incurring rising cost condition.
- It involves the implementation of policies to (1) increase the rate of utilization of resources so as to raise actual production capacity and (2) the expansion of the availability of resources to raise potential production capacity

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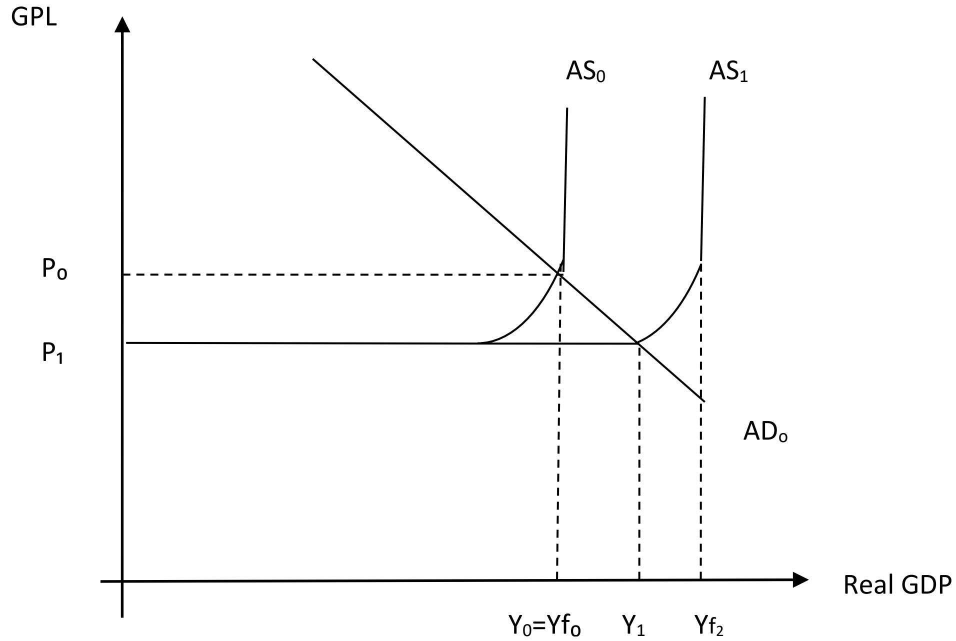
2.9.1. Explain how the introduction of supply-side management policy can be used to solve inflation and raise GDP (sustainable EG)

There will be an increase in quantity of aggregate demand from which will induce a rise in national income from Y_0 to Y_1 as the level of investment has increased



Note: This diagram is used to explain the mechanism of supply-side policy to solve UN^+/curb rising cost condition/how to ↑actual/potential growth – achieving sustainable economic growth (↑real GDP w/o ↑P)

As seen from the diagram, the expansion of the resource capacity due to the implementation of the supply-side will shift the vertical AS from AS_0 to AS_1. This will lead to a rise in the real GDP from Y_0 to Y_1 as the expansion of the resource capacity has lowered down the cost of production from and thus, a fall in price level from P_0 to P_1, raising real GDP without ↑P.

2.9.2. Manpower Development (Solve UN^+)

- raise the productivity of the workers with skills development through a constructive and efficient training system – overcome skill incompatibility and displacement of workers
  - must be able to induce investment - creating new scope of production – SS – side policies must diversify the economy
- **Evaluation**
  - educational level of the workers must be at a certain level
  - cost of training and availability of facilities and trainers
  - difficulty in retaining training benefits

2.9.3. Technological Development

- Raise the technological level of the economy through training and research and development (↑competitiveness – Raise EG) →will raise the efficiency of production
- Decrease cost of production but may create structural unemployment as technological advancement will contribute to skill incompatibly and displacement of workers due to greater use of machinery
- **Evaluation**
  - requires the facilities and pools of skilled labour
  - problems of funding
  - source of technological transfer – depends on the developed nations
  - ✱ the need of a research environment
  - ✱ the need of intellectual property right law

2.9.4. Capital accumulation

- Creation of a financial centre for the creation of funding for investment (Raise EG) →cost of funds for I↓ (for low i/r)
- Evaluation
  - requires financial knowledge and expertise
  - political stability

2.9.5. Infrastructure development – build up facilities to attract more investment and raise the productivity of the economy. This will lead the expansion of the PPC – widen the scope of economic growth

- **Evaluation**
    - source of funding - budget strain
    - problem of white elephant and rise of corruption

2.9.6. Significance of Supply-side Policy on Singapore
- overcome the limited resource capacity due to small size of economy
- raise competitiveness by increasing productivity of the workers
- Use to contain LT issues→E.g. Structural UN+/Sustainable EG (↑real GDP, suppress inflation)
- diversification of the economy to accommodate economic and systemic global changes

2.9.7. Disadvantages of Supply-side policies
- Long time period – cannot contain short term issues
- Cost of financing
- Experience complexity in adjustment – change in legislation
- E.g. effectiveness greatly depends on the efficiency of public administration
- Cannot contain external impact directly
-

Qn: Why the widening of scope of EG is beneficial?

a. Avoid excessive specialization
b. Raise efficiency of industries
c. Expand and modify the structure of the economy through diversification → greater variety of N^+
d. Provide N^+ directly
e. Improve SOL

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2.10 <u>(International Policies)Protectionism</u> – introduce trade barriers to raise price and decrease the quantity of imports to protect local industries.

i. Import substitution strategy (replace Md with local production)

→↑local production → ↑N^+

→solve structural UN^+ (protect declining industries)

Qn: Why import substitution strategy will not promote economic growth?

-deprivation of advanced level of technology from developed nations (will not encourage the transfer of technology) →↓Md for capital goods from developed economy (no import of new goods)

Qn: Justify the use of protectionism in the era of Globalization

- ✓ Prevent UN^+ brought about by greater foreign competition that undermine the growth and failure of industries
- ✓ Act of dumping will undermine local industries
- ✓ Become vulnereable to trade and business cycles

2.10.1 <u>(International Policies) Tariffs</u>

- A tariff is a tax levied on imports mainly to protect home industries by making import less competitive than local products. Tariffs-increase price of imported goods - increase in quantity purchased of domestic goods and fall in quantity of imports. (import substitution→raise local production to raise employment)
- Evaluation:
  - Tariffs bring revenue to the government
  - Tariffs increase prices. It will have little impact on quantity if the demand for import is inelastic
  - Domestic customers have to pay a higher price. This means more inefficient local producers are able to sell their product
  - Deadweight loss is created due to resource misallocation
  - Retaliation measures may be undertaken by the exporting countries

2.10.2 <u>(International Policies) Quotas</u>

- Quotas take the form of a physical limitation on the quantity of the commodity or value of the commodity which is allowed to enter the country in a given year. It is usually enforced by issuing licenses to some group of individuals or firms
- Evaluation:
  - Quotas do not bring revenue to the government
  - It is usually set on the basis of certain volume which may grow increasingly out of date with times. This might penalize a local form that wishes to expand its production
  - It might invite retaliation measures by the exporting countries

2.9.8. <u>(International Policies) Subsidies</u>

- ↓COP
  i. $\downarrow P_x \rightarrow \uparrow X_d$
  ii. $\downarrow P \rightarrow$ Import Substitution – Replace foreign imports with cheaper local goods
- Subsidies can be given in the form of outright cash payments to a domestic producer, or they could also be indirect in the form of tax concessions, loans at below market interest rates, etc. These provide domestic firms a cost advantage, a subsidy allows them to market at lower prices than their foreign competitors
- Evaluation:
  - It may lead to a drain in government resources as subsidies invoke government expenditure that could have been spent on development projects. Taxpayers eventually pay for the subsidies.

2.9.9. <u>Exchange Controls</u>

- control the amount of FOREX available for exchange

2.9.10. <u>Embargos</u>

- total ban on particular good

2.9.11. <u>Technical & Administrative Controls</u>

2.9.12. <u>Export Development Policies/ Export Promotion</u>

- Refer to essay on international trade for the mechanism of the graph

Qn: Is it justifiable for government to impose protectionism during a global economic downturn?

prevent business failure which will lead to unemployment
size of the domestic economy
prevent dumping – foreign companies are solving their recession through a cheap export strategy
severity of unemployment

not justifiable
- contraction of world trade – fall in national income
small domestic market demand
small multiplier – need of the use export demand to compensate loss in output

2.10. Free Trade Agreements (Promote actual and potential economic growth) – absence of trade barriers and restrictions on flow of investment (FDI)

Qn: Why Singapore needs FTA? (increase in export dd and increase import expenditure – increase in AD and shift of LRAS)

- ↓cost of import-expand resource capacity – attain potential Growth
- expand export market – overcome our limited local market demand
  - ⇨ increase AD and raise AS – sustainable economic growth – combine with social planning – inclusive growth
- To date, Singapore has concluded 8 other bilateral ones with New Zealand (ANZSCEP), the European Free Trade Association (ESFTA), Japan (JSEPA), Australia (SAFTA), the United States (USSFTA), India (CFCA), Jordan (SJFTA) and South Korea (KSFTA) and an FTA between Singapore, Brunei, Chile and New Zealand.
- Through trade, ↑Xd→↑FDI→↑AD→↑production and employment
  - A well-connected trade network with many trading partners
  - air and sea port facilities
  - strategic geographical location
  - FTA with many countries
  - Integrated services of a global hub

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Qn: Analyse the impacts of FTA on Singapore/China

- ✓ **Positive/Negative impacts**
  - →Basis of analysis – Degree of severity / Beneficial impact
- aims of government

Depending Factors

- State of economic development
- Degree of reliance on external market and on imports
- Size of economy

FTA raises employment – degree of its impact on employment (increase in XD and increase in FDI)

Factors affecting the choice of using FTA and protectionism as a measure to curb the negative effects of globalization

1) severity of unemployment
2) size of the economy – degree of dependence on trade / size of domestic aggregate demand
3) size of multiplier
4) size of government reserve – influence reliance on tariff to fund the government expenditure
5) efficiency of the government in controlling the domestic market

2.10.1. Benefits of FTAs

- Trade creation as removal of tariffs encourage greater volumes of trade between signatories (to lower cost of product through outsourcing by trade)
- Availability of larger markets - a larger market place and broaden business opportunities for firms. Also FTAs help suppliers to offer their services to customers in partner countries
- Removal of tariffs translate to savings and lower prices- Goods and services cheaper in partner country due to tariff savings- increased X, reductions in tariffs on some categories of goods, e.g. alcoholic drinks- cheaper goods for consumers/ greater variety of goods
- Job creation and growth opportunities due to increase in investment and trade- FTAs will encourage more FDIs between the signatory countries -job opportunities and increased productive capacity (long term economic growth) - diffusion of technology
- Fewer restrictions on services trade, foreign investment, flow of profits and flow of labour e.g. USSFTA - liberalization of banking services- Citigroup can tap into local network. Singaporeans find it easier to work in US and more US and Australian universities are recognized in Singapore
- Helps small nations like Singapore remain competitive and build better goodwill between countries

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2.10.2. Costs of FTAs

- Trade diversion - trade is diverted away from cheaper nation in favour of a less efficient tariff free member of FT A
- May incur higher cost of production- e.g. in Singapore- US FTA, textile and apparels must use yarn that are from Singapore or US which may not be the cheapest source to get duty-free treatment
- Poorer countries may be left out from enjoying benefits of FTAs signed between richer countries or may get the losing end of a FTA signed due to the inability to bargain with a powerful developed partner
- Greater income inequality within countries may benefit the larger firms rather than the SMEs
- Increased dependence on foreign countries may be risky particularly tor strategic goods and necessities

2.11. ✱Trade Facilities Development

- The development of international air and sea routes with air and sea ports acquired by the national-linked PSA and CAAS along with the national airlines and shipping firms to help to provide trading facilities to help to promote trade and investment. This is vital to Singapore to place herself as a global city.

2.11.1. Trade Exhibition and other trading associations will help to build up the development of trade connections to promote trading activities.

2.11.2. Impact of AFTA 2015 on Singapore: Countries that trade with ASEAN will export to Singapore and distribute the goods to other ASEAN members because of our export capacity

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Aims of Government/ Macroeconomic Values

Objective, Problem and Indicator	Causes	Effects of High Inflation	Government Policies

Objective: Price Stability
Problem : High Inflation
Indicator: Inflation Rate
 	
$= \frac{CPI_t - CPI_{t-1}}{CPI_{t-1}} \times 100\%$
 	
Stagflation – cost push inflation, Decrease in real GDP
 	
(decarese in AS > decrease in AD –
Increase in GPL and fall in real GDP
 	
-Explain why inflation will occur while real GDP falls.
	• Demand Pull – Increase in AD in a situation where the economy is near or at full employment. Due to increase in income, excessive growth in money supply (monetarist theory)
	• Cost Push – Increase cost of production that exceeds increases in productivity. Due to successful wage demand by prices of essential raw materials, increase in indirect taxes
	• Structuralist Theory – AS unable to keep up with AD due to structural rigidities e.g. low savings, rigid govt policies, etc.
	• Imported inflation – Increase in prices of imported essentials and raw materials → higher prices
	• Profiteering – monopoly power → sellers reducing output to increase price – Inflation
		• Redistributes income in against fixed income earners, businessmen (if mild demand pull inflation) and debtors (if unanticipated)
		• If high inflation or cost push inflation →uncertainties → fall in output, investment and employment→ not conducive for economic growth
		• Hyperinflation →Money may not perform its functions → barter trade
		• Distorts the working of the price mechanism
		• Worsening of BOP and depreciation of exchange rate as X less competitive (assuming demand for X and M >1)
		• Loss of business confidence in times of high inflation → less inflow of FDI and outflow of investment → not conducive for growth
			• Contractionary FP (Dd-pull)
			• Contractionary MP (Dd-pull and Monetarist)
			• Supply side policy (Cost Push and demand pull)
			• Revalue exchange rate (imported inflation)
			• Price and income policies
			  ○ Wage freeze/ cuts (cost push)
			  ○ Price ceiling
			  ○ Encourage saving (dd-pull)
			(Evaluation of policies)

Aims of Government/ Macroeconomic Values

Objective, Problem and Indicator	Causes	Effects of Unemployment	Government Policies
Problem: Unemployment Indicator: Unemployment Rate $= \frac{No.Unemployed}{LabourForce} \times 100\%$ Explain how the unemployment will occur based on As-AD diagram What types of unemployment will occur in SG? Explain how demand deficient unemployment will be eradicated	• Cyclical changes – downswing in trade cycle i.e. fall in AD • Structural changes ○ Fall in demand for output of a specific industry ○ Automation/changes in technology ○ Movt of industry to a different location due to cost of production ○ Changing comparative advantage • Seasonal factors • Frictional – imperfect knowledge • Real wage unemployment due to minimum wage legislation • Ricardian unemployment– Inadequate investment to create jobs to low savings ratio	Costs to Nation and Govt • Loss of production and waste of resources • Reduction in the level of NY • Possible erosion of skills over time • Loss of purchasing power → fall in consumption → lower SOL • Governemnt raises spending on unemployment benefits – Drain on resources • Unequal 09distribution of income Social and Personal Costs • Increase in crime, divorce etc. • Personal hardship and misery • Decline in physical and mental health of unemployed	• Expansionary FP (Cyclical) • Expansionary MP (Cyclical) • Retaining facilities to increase mobility (structural) • Grants and subsidies to control location and industries (Structural) • Controlling rate and timing of technological changes (Structural) • Adding on other lines of production (Seasonal) • Rearranging production process such that it is spread evenly throughout the year (Seasonal) • Better job information and employment exchange services (Frictional) Others • Reduce unemployment benefit • Reduce marginal rate of tax Relocation (Evaluation of policies)

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Aims of Government/ Macroeconomic Values

Objective, Problem and Indicator	Causes	Effects of Economic Growth	Government Policies

Problem : Sustained Economic Growth
Increase in real GDP without corresponding increase in GPL
Problem: Slow/ Negative Economic Growth
Small percentage increase in real GDP and this is due to the fact that there is small percentage in AD under rising cost condition
 	
Indicator: Growth Rate
$= \frac{GDP_t - GDP_{t-1}}{GDP_{t-1}} \times 100\%$
I
	Causes of slowdown in Economic Growth
	• Depletion of non-renewable resources
	• Relatively poor quality labour
	  ○ Poor education and training
	  ○ Poor standard of health and welfare
	  ○ Poor work culture
	• Lack of investment due to low savings and investor pessimism
	• Lack of enterprise
	• Inadequate expenditure on Research & Development
	• Inadequate foreign investments
	(Any factor that would decrease AD or AS)
	→higher unemployment, lower SOL
		Benefits of Economic Growth
		• Improves standard of living
		• Easier to redistribute income
		• Provides funds for reducing the environmental costs of growth
		• Increases confidence in the economy → attract FDI
		Costs of Economic Growth
		• External costs
		• Personal cost as skills become obsolete, change of job more frequently, changes in the method of working
		• Depletion of non-renewable resources
		• Increase income inequality
			Policies should aim to
			• Increase the amount of resources available
			  ○ Relax immigration laws
			  ○ Investment grants
			  ○ Reclamation programmes
			  ○ Tax incentives to encourage enterprise
			  ○ Improve infrastructure
			• Increase productivity
			  ○ Retraining programmes
			  ○ Training grants
			  ○ Capital deepening
			• Improvement in technology
			  ○ Fiscal incentives to encourage R&D
			  ○ Encouraging FDI to allow for transfer of technology
			(Evaluation of Policies)

Aims of Government/ Macroeconomic Values

Objective, Problem and Indicator	Causes	Effects of BOP disequilibrium	Government Policies

Objective: Healthy BOP position
Problem: Large and persistent BOP deficit/ Surplus or large and persistent disequilibrium in current account
Indicator: BOP position – Surplus or deficit
-it affects the exchange rate but SG controls the exchange rate and thus, the impact of the BOP disequilibrium will not affect the exchange rate – negate the need to regulate BOP deficit and surplus – furthermore, SG BOP is often in surplus
	Causes of deficit
	Current Account
	• Loss of competitiveness of domestic output (assuming demand for X and M>I)
	  ○ Relatively higher inflation
	  ○ Relatively lower productivity
	  ○ Relatively higher cost of production
	• Non-price factors
	  ○ Relatively poorer quality exports
	  ○ Relatively higher growth in income within the country
	• Others: increase in aid
	Capital Account
	• Lower interest rate → outflow of hot money
	• Higher cost of production → outflow of investments
	• Higher cost of production → outflow of investments
	• Expectation of a fall in exchange rate → outflow of hot money
	(Opposite would cause a surplus)
		Effect of deficit
		• Drain on country's gold and forex reserves
		• If funds borrowed to finance deficit
		  ⇨ Strain on future generations
		  ⇨ Lower domestic NY and c as export earnings used to repay debts
		  ⇨ Depreciation of the currency may lead to imported inflation
		  ⇨ Slows down economic growth and may cause unemployment
		Effects of a surplus
		• De-industrialisation – surplus used to finance industrial imports
		• Feedback effects – trading partners may impose protectionist measures
		• Appreciation of the currency →Increases competitiveness of imports
		• Increase in NY may have inflationary pressures. In fixed exchange rate sys →Increase money supply
		• Depression of domestic SOL
			Policies to reduce a deficit
			• Expenditure reducing
			  ○ Contractionary FP
			  ○ Contractionary MP
			• Expenditure Switching
			  ○ Tariffs and subsidies
			  ○ Devaluation
			  ○ Quotas
			  ○ Exchange controls
			  ○ Boosting exports
			  ○ Increasing productivity
			Policies to reduce surplus
			• Reflation
			  ○ Expansionary FP and MP
			• Lower interest rates
			• Revaluation of the currency
			• Increase foreign aid
			(Evaluation of policies)

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Aims of Government/ Macroeconomic Values

National Income	Difficulties in Calculation	Uses	Limitations of Using GDP in Comparing SOL over Space/ Time
GDP – income earned/ value of final output produced within a country in a given year without making allowance for depreciation GDP = C + I + G + X – M GNP - Income earned/ value of final output produced by residents of a country in a given year without making allowance for depreciation GDP + factor income from abroad –factor income sent abroad = GNP NNP –income earned/ value of final output produced by residents of a country in a given year after making allowance for depreciation GNP –depreciation = NNP	• Difficulties in valuation ○ Depreciation ○ Non-market output ○ Imputed income services • Danger of double-counting ○ Intermediate goods ○ Govt expend on health & education • Availability and reliability of data • Arbitrary and reliability of items – interest on public bonds	• Measures economic growth • Compare SOL over time and space • Shows contribution of various sector • Shows distribution on income amount FOPs • Shows the pattern of expenditure • Guide to govt policies • Evaluation of economic climate by non-govt bodies • Classify the economic status of the country	Other considerations • Population size/ changes • Cost of living/ inflation rate • Factor income from abroad and paid abroad • Conversion to common currency • Distribution of income • Differences/ changes in composition and quality of goods • Availability and reliability of data • Different patterns of demand • Average working hours • Externalities

Focus – assessment on standard of living and economic performance – link to the implicati

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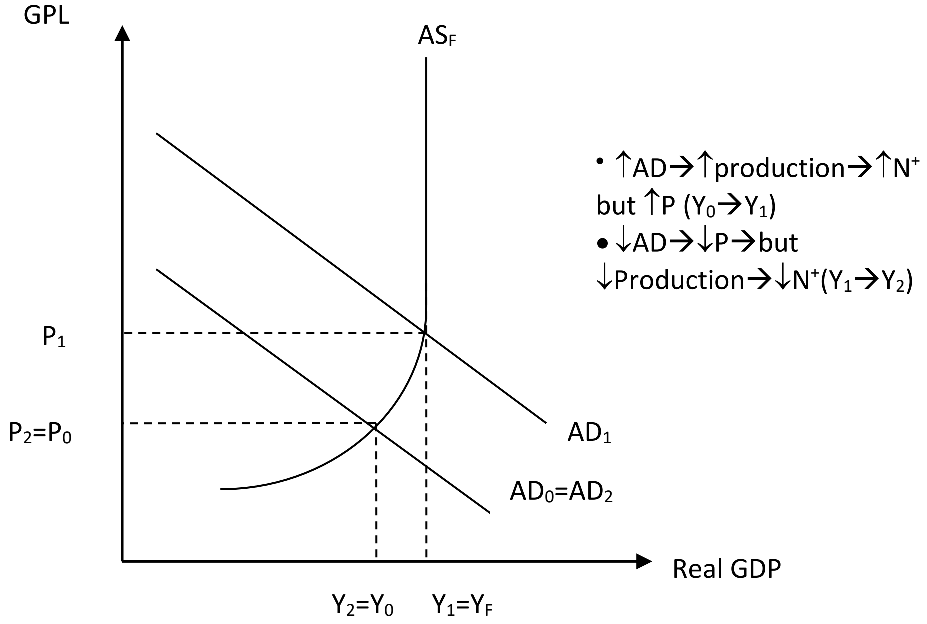
3. Conflicting aims of policies

3.1. Price Stability vs. Full Employment

- To overcome the recession, the government needs to raise the aggregate demand to increase real GDP (Y_0 to Y_1), production and employment. However, the rise in AD will lead to a rise in price level (P_0 to P_1), creating an inflationary condition.

  To curb inflation, the government needs to lower the aggregate demand condition which will lower the price level but it will reduce real GDP (Y_1 to Y_2), production and employment

  conflicting aims of government – under the demand management condition



- **Relate to Singapore (Assertion may not be relevant and why)**
  - Emphasis on capital formation by Singapore, results in both AD and AS shifting outwards. Therefore employment is increased but there is low inflation (SS-side policy with demand-management policies)
  - Increase in employment may result in some mild inflation but it is an **affordable trade-off – why?**

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3.2. Full Employment vs. Healthy BOP

- Falling unemployment & rising income & growth leads to rising import expenditure (rising C & M)
- With full employment, prices may rise and rising inflation causes P_X to rise →Falling export revenue
- Falling X revenue and rising M expenditure results in unhealthy BOP
- Growth and BOP deficit (assertion could be relevant to Singapore)

	BOP surplus ↑NY→↑M (↑AD)	BOP deficit ↓NY→↓M (↓AD)
Curb Inflation ↓AD	Conflicting	Harmony
Curb UN$^+$ ↑AD	Harmony	Conflicting

MPM = $\frac{\triangle M}{\triangle NY}$ → ↑NY→↑M (MPM X △NY = △M

- Explain how growth might lead to BOP deficit; relate to Singapore
  - Singapore in general has a BOP surplus
  - With DD management policies, the deflationary gap can be closed. However, the increase in income could lead to more import expenditure which might create a BOT deficit, in Singapore, the MPM is relatively high

  SG will focus on unemployment as it solve unemployment by raising export demand – solve the BOP deficit.

3.3. Healthy Economic Growth & Income Inequality

- High income group (businessmen, savers, capital owners) contribute to & benefit more from growth compared to lower income group - worsening income inequality
- Appreciation of Assets – create wealth for the rich
- inflationary pressure - ↑COL for the poor

  ∴ Widening income disparity

Focus – **conduct inclusive growth** – raise real GDP and distribute income more dimensional and downward

3.4. **Growth and full employment** (assertion is relevant for Singapore in the short run)

- Explain jobless growth (**too much focus on capital-intensive industries) and relate to Singapore**
  - Owing to advancements in technology and increasing productivity of factors of production, the economy grows. However more workers are not required due to the increase in productivity and technology.
  - Our emphasis on productivity has a double edge effect
    →Displacement of workers
    →Skills incompatibility
  - Production for goods and services may be increased but it does not mean more workers are needed
  - There is a need for Singapore to equip workers with new skills and also look for new demand which require the employment of more workers

4. Economic growth may conflict with other macro-economic objectives:

4.1. ST growth (increasing actual output through expansionary FP & MP):

- If the economy is near to or at full employment, prices may begin to rise. If bottlenecks are serious, the rise in the price level can be substantial
- Conflict of aim between economic growth and price stability
  - Excessive increase in demand for resources or factors of production → cost push inflation
  - Increase in income will induce increase in consumption, stimulating rise in AD → demand-pull inflation
- Increase in income will increase imports substantially if the demand for imports is income elastic. A buoyant domestic market may divert some exports to the local markets. This could worsen the BOP

4.2. LT growth (increasing potential output through supply-side policies):

- Growth may be brought about by technological advancement. This may result in increase unemployment (structural unemployment). New skills are needed as a result of technological advancement and some skill will have become obsolete/displacement of workers due to ↑productivity
- Growth may also increase unemployment if potential growth outstrips actual growth – excessive active working population
- Growth may reduce equity. Those who are able to see and seize opportunities and the educated and skilled would benefit more. Income gap may widen (Appreciation of Assets/↑$P_{resources}$)
- Growth may require the import of more capital goods, raw materials and technical expertise. More imports of consumer goods may also take place as income increase. BOP may be adversely affected. However, there could be more inflow of investment into the country assuming that the investment climate in the country is positive to induce this inflow (High EG→attract more FDI)

4.3. Why government needs to achieve economic growth?

Economic growth will lead to rise in real GDP and this will raise real GDP per capita when percentage rise in real GDP is greater than Population growth, indicating improvement in Sol

economic growth will lead to higher employment as there will be greater output, inducing greater demand for labour, solving unemployment.

4.4. Why government will not achieve growth at all costs?

Economic growth will contribute inflation (demand-pull inflation) when there is excessive rise in AD, under the rising cost condition or full employment.

Economic growth will give rise to greater income disparity as the workers who are more skilled and asset owners who own resources are deriving greater income while low end income earners pay for higher prices of goods and services., contributing to income disparity.

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5. Reducing a current account deficit may conflict with other macro-economic objectives

- Conflict between deflating demand to correct BOP and to support the exchange rate and full employment and economic growth
- Conflict between the need to deflate the economy and the need to devalue the currency to correct a deficit in the BOP and achieving a high exchange rate to reduce inflation
- Methods to correct BOP such as deflation or devaluation or increase home productivity and promoting exports - increase in exports and fall in imports- may correct BOP and if this continues- BOP surplus- inflation therefore conflict between healthy BOP and inflation. A rise in inflation may -- fall in unemployment (Philips Curve) therefore objective achieved
- Protectionism such as tariffs to reduce to reduce imports- increase price of imports - may correct BOP deficit but cost push inflation may rise- fall in production- increase in unemployment, hamper economic growth

  →Consumers have to pay for higher price of imports due to taxes

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6. Reducing inflation rate may conflict with other macro-economic policies

- Contractionary policy to reduce demand pull inflation- higher unemployment and slower economic growth
- Increasing savings to reduce unemployment- because lower C- higher unemployment and lower actual output (therefore, needs to use saving promotes investment – lower the interest rate to increase borrowing for investment)
- Increasing the exchange rate to reduce imported inflation - reduction in competitiveness of exports- lower X (assuming Marshal- Lerner condition) – higher unemployment and lower actual output
- Lower AE - lower income- fall in import expenditure - increase in BOP surplus where the country is already) having problems with a large and persistent surplus – trade retaliation and exchange rate appreciation – lower export competitiveness.
- Lower AE- lower employment - loss of jobs, particularly among unskilled- increase income inequality
- Reducing inflation through increase in progressive taxes - disincentive to work -rising unemployment and falling economic growth

7. Reducing unemployment rate may conflict with other macro-economic policies

- Falling employment due to decrease in production as a result of the reduction in export demand & rising import expenditure as a result of greater preference for imported goods contributes to balance of trade deficit (unemployment causes trade deficit)
-
- With full employment, prices may rise -rising inflation
- Reducing unemployment by reducing progressive taxes- increase in income inequality