RAFFLES INSTITUTION
YEAR 6 ECONOMICS 2023

INTERCONNECTEDNESS OF ECONOMIC AIMS AND POLICIES (REVISION)

Refer to your previous sets of lecture notes for additional points and a more detailed explanation on each point

Outline of Contents

References

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Singapore Budget 2023

1. THE ECONOMIC ROLE OF THE GOVERNMENT

a) The study of Economics has to do with how society allocates its scarce resources so that it can satisfy as many of its wants as possible. Given that human wants are unlimited but resources are limited, every economy has to deal with the following 3 problems:

- What and how much goods to produce?
- How to produce these goods given the many alternative methods of production?
- For whom are these goods produced for? Who gets these goods and services once these goods are produced? How can they be distributed?

b) The 3 problems of What? How? And For Whom? are solved differently in different types of economic system:

- In a free market (or laissez faire) economy, these problems are solved by the market forces of demand and supply. Prices determined by the interaction of market demand and market supply in the goods and factor markets act as automatic signals in coordinating the actions of individual decision-making units. These decision-making units include the households and the firms who seek to maximize their self-interest. Where market demand and supply interact, equilibrium price is set. Motivated by their self-interest of profit-maximising and utility maximizing, the question of
    - What and how much to produce is determined by consumer sovereignty
    - How to produce is determined by the relative prices of resources such as labour and capital
    - For whom to produce is determined by the wealth or purchasing power of the individual or household.
- In a command economy or planned economy, these 3 basic problems are solved by a central planning body.
- The mixed economy uses a combination of free market forces and a planning body in the form of the government to address these issues.

2. ROLE OF GOVERNMENT IN A MIXED ECONOMY

In order to provide a conducive environment for profit-seeking firms, the government has to establish a healthy and effective legal framework in the economy. In doing so, it aims to achieve the following goals.

Microeconomic aims/targets/objectives:

i) Allocative efficiency and productive efficiency
ii) Equitable distribution of resources

Macroeconomic aims/targets/objectives:

i) Internal stability
    a. Sustained, sustainable economic growth and inclusive economic growth
    b. Low rates of unemployment
    c. Low and stable (anticipated) rates of inflation
ii) External stability
    a. A healthy balance of trade
    b. Exchange rate stability

Given the size, cost and influence of the government, it is important to understand the rationale behind the intervention and the extent to which this intervention should take place.

3 POLICIES TO ACHIEVE THESE AIMS

3.1 PROMOTING SUSTAINED ECONOMIC GROWTH & STANDARD OF LIVING

3.1.1 Distinction between Actual and Potential Growth

Sustained growth is achieved only when an economy is able to achieve both actual and potential growth. The following table helps you distinguish the two forms of growth and provides details on how to analyse and explain them.

	Actual Growth	Potential Growth
Definition	Actual growth refers to the percentage annual increase in real national output actually produced. This is a **short run** concept, the result of increased utilisation of present capacity. Actual growth (or output expansion) alone has only a small impact on standard of living	Potential growth refers to the speed at which the economy could grow, if it were to use all its resources. It is required to provide a rising standard of living for a growing population for prolonged periods of time. Potential growth is a **long term** concept associated with the increase in the economy's productive capacity and full employment level of national income.
AD/AS Framework:	Rightward shift of AD curve and/or downward shift of AS curve can result in actual growth – an increase in the amount of national output actually produced.	Potential growth involves sustained outward shifts in the long run aggregate supply curve due to changes in the quality and quantity of its resources and technology over time. There is an increase in the maximum output a country could potentially produce over time.
PPC Framework:	It is illustrated by a movement from a point within the PPC towards the boundary of the existing PPC.	Potential growth is illustrated by an outward shift in the PPC.
Factors Affecting Economic Growth The government plays an important role in the economic growth process, either in providing investments themselves or in providing a stable and encouraging political and economic climate.	• Demand-side factors: Increases in the supply of output need to be absorbed by increases in demand in order for the economy to grow. Increases in C, I, G or X will lead to multiplier effects on a country's real national income. Factors affecting aggregate demand include population size, incomes of trading partners and government policies. • Supply-side factors that lead to lowering of cost of production. This brings about increases in AS and thus increase in real NY.	• Supply-side factors: Quantity of resources available are affected by ▪ population size, age distribution, female labour force participation rates ▪ rate of savings Improvements in the quality of resources through application of new technology Quality of labour through training and education
	• Allocative factors Resource mobility promotes rapid technological change. Given changes in	

	aggregate demand and/or aggregate supply, reallocation of resources must occur. If these reallocations do not occur fast enough, the economy does not grow to its potential. The free market forces of price mechanism may not be effective enough and government assistance is often needed to channel resources and technology into the right places. • Non-economic factors Political stability is also important. Countries which are vulnerable to revolutions or are likely to default on loans find it difficult to retain domestic capital; much less attract foreign investment, which is crucial to both actual and potential economic growth. People's attitude towards work and wealth determine how much time and effort they are willing to put into economic pursuits. Materialism keeps the market expanding and entrepreneurial spirit is the crucial ingredient in a country's economic growth.

3.1.2 Inclusive and Sustainable Economic Growth

	Sustainable Growth	Inclusive Growth
Definition	A rate of growth that can be maintained without creating other significant economic problems such as depleted resources and environmental problems, particularly for future generations. (Sustained growth + Environment)	A rate of growth that is sustained over a period of time, is broad-based across economic sectors, and creates productive employment opportunities for the majority of the country's population. (Sustained growth + Income distribution)
AD/AS Framework:	Actual growth reflected as increase in Real GDP due to AD or AS + Potential growth reflected as increases in LRAS due to increased productive capacity Environmental protections / improvements	Actual growth reflected as increase in Real GDP due to AD or AS + Potential growth reflected as increases in AS due to increased productive capacity Improvement in income distribution / Smaller income gap
Policies:	Government incentives provided to firms to encourage R&D in green technology. AD increases with the investment spending leading to Actual Growth AS increases with the improvement in productivity brought about by better technology leading to Potential Growth. Green technologies improve in price and accessibility thus substituting more pollutive methods of production.	Increase tax rates for higher income to fund transfer payments and training for lower income. Leads to increases in C component of AD as lower income groups have higher marginal propensity to consume. Increase in AD causes actual growth. Training for lower income / lower skill groups can lead to better employment and higher wages. The training also increases labour productivity in the economy thus increasing productive capacity leading to potential growth. Better income distribution may lead to more socially stable environment and

		thus encourage business confidence leading to more investment which can further increase potential growth.

3.1.3 Policies that promote Economic Growth & Standard of Living

(I) Demand-side

- Expansionary fiscal policy
- Expansionary monetary policy
  - Reducing interest rate
  - Devaluing the currency

(ii) Supply-side

- Providing the legal framework for a market economy in establishing well-defined property rights, law and order which are favourable for the conduct of businesses and R&D
- Providing basic physical infrastructures such as a good reliable transport and communication network, a reliable supply of water and electricity.
- Developing a sound financial system which is necessary to mobilize idle funds and to provide easy access to credit for businesses. This enables the rate of savings and investment to increase as capital formation is important to increase productive capacity of the economy. Capital also makes land and labour more productive
- Implementing appropriate population policy to influence the supply of labour
- Implementing manpower policy to reduce labour immobility, invest in education and training and create employment opportunities.
- Implementing industrialisation strategies in economies that are predominantly agricultural-based. To diversify such economies, import substitution can be initially adopted so that a domestic industrial base can be developed, dependence on primary products reduced, human resources developed and balance of trade disequilibrium corrected. In addition, such economies also need to be export oriented to reap benefits of economies of scale and increase their competitiveness. Spearheading agricultural development by implementing land reforms, irrigation programmes etc.
- Supporting R&D and innovation efforts through co-funding R&D projects with private firms or via grants and subsidies to encourage innovation projects so as to share the risks of R&D efforts and encourage research-intensive industries within the economy.

3.1.4 Differences between Economic Growth and Standard of Living

Although economic growth and standard of living have many elements that are generally overlapping, the following observations may be made:

Economic Growth	Standard of Living
1. Means a continuous increase in the output of goods and services.	1. An overall measurement of living standards and well-being, a multi-dimensional process.
2. A quantitative dimension measured by rate of change of GDP/GNP.	2. Have both quantitative and qualitative dimensions.
3. Possible to have economic growth without development. For example, an increase in output that does not go to the masses, but only to a privileged group.	3. There must be growth before there is improvement in material and non-material welfare.
4. Illustrate using PPC or AD/AS	4. Cannot be illustrated diagrammatically.

ECONOMIC	SOCIAL	PHYSICAL	POLITICAL
Real growth of GDP/GNP per capita	Health	Living space	Political freedom
Inflation	Education	Water and sanitation	Civil liberty
Labour and employment	Environment and pollution	Food intake	Human rights
Demography and population	Transport and communication		
Income distribution and equity	Housing and living conditions		

3.2 MAINTAINING UNEMPLOYMENT AT A LOW RATE

	Frictional Unemployment	Structural Unemployment	Demand-deficient Unemployment
Definition/ Causes	Unemployment due to labour immobility resulting from the time lag before people find suitable jobs. This arises due to: (I) imperfect information*	Unemployment across industries resulting from changes in the pattern of demand or supply in the economy, possibly from economic restructuring (labour force lacks relevant skills to match job requirements)	Also known as Keynesian unemployment and is associated with cyclical unemployment: Unemployment caused by a reduction in AD and in turn a fall in demand for labour

Policies	*Provision of better job information by govt job centres, private employment agencies & national newspapers
	
	**Reduction in the level of unemployment benefits to make the unemployed more desperate to get a job & be prepared to accept a lower wage
		Supply-side policies:
		
		Encourage workers to be more receptive towards retraining & to accept some reduction in wages, if necessary.
		
		Provide government funded training schemes to equip workers with skills to move on to other jobs
			Expansionary demand side policies:
			- Fiscal policy
			  - increase G, reduce T
			- Monetary policy
			  - Increase money supply, lower interest rates
			- Exchange rate policy with demand-side effects
			  - Depreciate the domestic currency to boost export competitiveness → increase AD

Limitations	- costly - time lag	- costly - time lag - resistance to learning new skills	- costly - time lag - interest - elasticity of MEI - imported inflation

3.3 MAINTAINING STABLE & LOW INFLATION

3.3.1 Types of Inflation – Causes and Solutions

	Demand-pull Inflation	Cost-push Inflation
Definition	Inflation caused by persistent rises in AD, when the economy is operating close to or at Yf	Inflation caused by persistent rises in costs of production
Causes of Inflation	This is associated with a booming economy due to increases in C, I, G, (X-M). There is limited/no spare capacity as the economy is approaching near/at full employment output level, hence causing firms to compete for scarce resources and bid up factor prices. This results in higher COP which are passed on to consumers as higher prices. What are the factors that cause these components of AD to increase?	- **Rises in the prices of factor inputs** - Wage-push inflation: This happens when trade unions push up wages independently of the demand for labour. - Import-induced inflation: Import prices rise independently of the level of AD. - Tax-push inflation: Increased indirect taxation adds to the cost of living - Profit-push inflation: This occurs when firms use their monopoly power to make bigger profits by pushing up prices independently of consumer demand.

Role of expectations in explaining sustained increases in GPL

Inflation is a period of **sustained increase in general price level.** The increase in the GPL can begin with a high level of AD with the economy operating near the full employment level or due to supply-side shocks. However, when economic agents start to see continuous increases in GPL that remain elevated, they begin to form expectations of widespread increase in prices. For instance:

- if there is a positive economic outlook that causes households and firms to expect income and prices to continue to increase in the future, this will incentivise them to increase consumer and investment spending now. This increase in autonomous spending will result in higher demand-pull inflationary pressures. As the economy moves closer to the full employment level, supply-side bottlenecks will lead to higher cost of production for firms due to competition for scarce factor inputs.

- when firms constantly raise prices in an attempt to cover their soaring costs, workers will start to expect prices to continue to increase. They will bargain for further nominal wage increases to maintain their real wages. This will cause a further rise in the COP and the GPL resulting in higher cost-push inflationary pressures, with AS falling (AS curve shifts up). This cycle of rising prices leading to higher wages causes a wage-price spiral.

The following policies can be used to reduce demand-pull and cost-push inflationary pressures, depending on the root causation of the inflation problem:
Explain how each works. Which is the best?

- **Contractionary demand-side policies:** Fiscal Policy: Reduce G and/or increase T; Monetary Policy: Reduce money supply or raise i/r

- **Exchange rate policy:** Allowing the domestic currency to appreciate against foreign currencies or revalue the domestic currency

- **Supply-side policies:** Interventionist Policies such as R&D to increase productivity of inputs

- **Prices and incomes policy:** Ensure wage increment is in line with productivity increases; Reduce power of monopoly to raise price and the power of trade unions to push up wages ahead of productivity increases

3.4 MAINTAINING EXTERNAL STABILITY

3.4.1 External Stability

External stability usually refers to avoidance of persistent and large balance of trade deficits or surpluses and excessive fluctuations in the exchange rates. An economy is in external equilibrium when the country's balance of trade is in equilibrium or when the surpluses or deficits are not too excessive or persistent.

i) A BOT deficit **is not necessarily undesirable** to a country when the deficit is due to import of capital equipment and raw materials (which is recorded as a deficit on the current account) required for the implementation of growth strategies such as industrialization.

ii) Note that **a short term deficit is not always undesirable.** It is only when the deficit is persistent in nature then there is cause for concern.

A persistent BOT deficit means the economy as a whole is purchasing more goods, services and assets from the world than it is selling to the world year after year. The payment for these transactions involves drawing on the gold and foreign exchange reserves or borrowing from abroad. The resultant excess demand for foreign currency can cause a depreciation of the domestic currency and hence reduce its external purchasing power in future years. Incurring external debts through borrowing from abroad may perpetuate the deficit problem as these external debts must be serviced, causing further outflows of currency. E.g. Euro debt crisis, Asian financial crisis

3.4.2 Policies to reduce a long term BOT deficit

Policy	**To increase exports revenue/reduce imports expenditure**			
Measures	Protectionism	Devaluation of home currency	Promote exports through measures such as subsidies, increase productivity, income and price policy	Discourage imports via contractionary fiscal and/or monetary policies
Limitation	- trade war - distort resource allocation	- J curve effect in the short run - imported inflation - retaliation by trading partners	- effective in the long run - uncertainty - resistance to wage cuts	- worsen national income and unemployment if the economy faces recession - worsen economy if demand for imports is income inelastic

Comparison of Policies

Advice: Do not just know and list down the limitations. You must be able to explain each limitation.

Yardstick	Monetary Policy		Fiscal Policy (G,T)	Supply-side Policy
	Interest rate	ER		
1. Time lags	Overall, probably the shortest		Overall, probably in between	Overall, probably the longest
▪ Recognition lag	Same for all policies			
▪ Administration lag	Probably shortest		Longer than MP	
▪ Operational lag	since i/r or ER can be changed overnight Longer than a change in G: Need to wait for econ agents to respond to change in i/r or ER		because changes need to be debated in parliament Shorter than MP if comparing with change in G but similar to MP if comparing with change in taxes	Probably longest time lag
2. Multiplier – size	Extent of change in RNY due to a change in autonomous spending is affected by size of multiplier			Increases the effects of the multiplier
3. Flexibility in implementation	Easier than FP		May be more difficult than MP Reducing G more difficult than increasing i/r	
4. Trade-offs	Trade-off exists between objectives in the short run			No trade-off
5. Main limitation in the context of Singapore to achieve growth	Very free movement of capital in and out of Singapore → i/r in Singapore follows world i/r → futile to control i/r ∴ Use of ex/r in Singapore		Limited by the small multiplier due to high MPS & MPM	Main focus on government to achieve sustainable growth (actual growth accompanied by potential growth)
Other limitations unique to each policy. Note that: a. note that ceteris paribus assumption applies to all) b. List is not exhaustive	• Interest elasticity of MEI; • Other sources of finance;	• Dampens imported inflation but not domestic sources of inflation; • Depends on availability of forex reserves	• Animal spirits (Consumer and investor confidence); • Crowding-out effects; • Availability of funds; • Ricardian equivalence (with reference to expectations of future hikes in taxation to fund current rise in G spending)	• Results not guaranteed • Resistance to wage cuts (labour reforms) • Availability of governmental funds

3.5 PROMOTING EFFICIENCY AND EQUITY

3.5.1 Types of Efficiency

Economic efficiency is achieved when both productive efficiency and allocative efficiency are achieved.

	At the Macro level	At the Micro level
Productive efficiency	**PPC analysis** Productive efficiency is achieved when a country is producing the maximum output possible with its given resources and state of technology. This means production on any point along the PPC is productively efficient.	**Firm level analysis** Productive efficiency is achieved when any given level of output is produced at the lowest possible cost. Any point on the LRAC is productively efficient.
Allocative Efficiency	**PPC analysis** Allocative efficiency is achieved when resources are allocated such that production is in accordance to what consumers want. Only one point on the PPC curve is allocatively efficient. (*note: not required in syllabus to explain which point is allocatively efficient. Requires indifference curve analysis, not within syllabus scope)	**MSB-MSC analysis** Allocative efficiency requires that production is at the level where MSB = MSC In other words, the last unit of output in each industry is valued by their respective consumers at a rate which is equal to the social opportunity cost of producing it. This means that each industry is pricing at social marginal cost (P = MSC). When there is divergence between social costs and private costs, social benefits and private benefits, external costs and benefits need to be considered MSB = MPB + MEB MSC = MPC + MEC TASK: Use a MSB/MSC framework to explain why allocative efficiency is only achieved at the output level (Q*) where MSB = MSC. Explain why allocative efficiency is not achieved when the output level is lower or higher than Q*.

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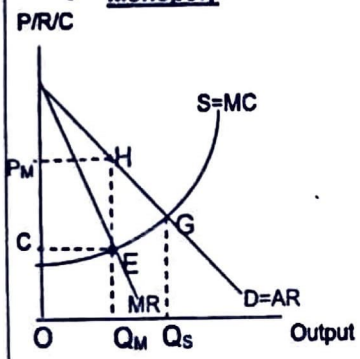
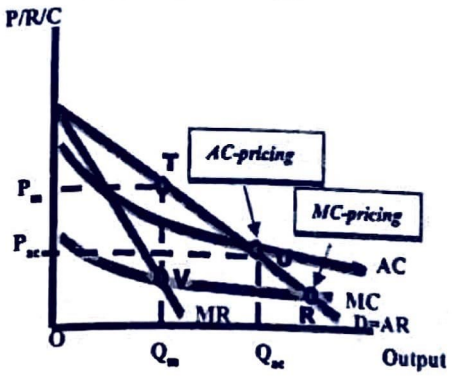
3.5.2 Market Failures and Policies

Sources of market failure	Policies to tackle market failure problem
i) Externalities Externalities refer to spillover effects of an action (production/consumption activity) by an economic agent that influences the well-being of a third party who is not directly involved in the production or the consumption of the good. Presence of externalities generate external costs/benefits that in turn create a divergence between social and private costs and benefits. • **Negative externalities in production and consumption** Analysis for negative externality in production uses the divergence between MPC and MSC. Analysis for negative externality in consumption uses the divergence between MPB and MSB. • **Positive externalities in production and consumption** Analysis for positive externality in production uses the divergence between MPC and MSC. Analysis for positive externality in consumption uses the divergence between MPB and MSB. (Note: when you are unsure, - positive externalities → diverge benefits curves - negative externalities → diverge cost curves)	In general, policies that are devised to tackle market failure can be categorized into **market-based and non-market based policies.** • **Negative Externalities** 1) Indirect Taxes (Market-based policy) 2) Regulation (non-market based policy) 3) Moral Suasion (non-market based policy) • **Positive Externalities** 1) Subsidies (market-based policies) 2) Public Provision (non-market based policy) **Limitations to taxation and subsidies measures** Taxes and subsidies have the flexibility of being adjustable according to the magnitude of the problem. For example, the bigger the external costs of a firm's actions, the larger the tax per unit. However, difficulties tend to arise in the following areas: • Administration difficulties and costs • Practical difficulties • Firms may incur higher costs
ii) Information Failure • **Imperfect Information** The personal cost or benefits of certain goods tends to be under or over-estimated by the individual due to imperfect information. This generally leads to over/under consumption which is sub-optimal. • **Asymmetric Information** Asymmetric information is a situation in which one party has more or better information compared to another when making decisions	• **Education and Campaigns** o Address the root cause by correcting the misinformation • **Taxes/Subsidies** o Influence behavior by changing prices o Discourage by making it more expensive, encourage by making it cheaper. • **Provision of information** • Legislation and Regulation

and transactions. Due to asymmetric information, moral hazard and adverse selection problems arise.	
iii) Public Goods Public goods are goods which are valuable socially in satisfying collective wants, but whose provision will not be undertaken by private enterprise. Hence, when left to the free market, it results in zero provision. Their non-provision by the private enterprise is explained by the two key features of **non-rivalry in consumption** and **non-excludability**, with the latter resulting in the **free-rider problem.**	Govt makes use of Cost-Benefit Analysis to decide if a public good is produced or not. "It is a method by which individual investment projects are appraised by a balancing of current and future costs against current and future benefits, using an appropriate discount rate to evaluate the present value of future returns. Social costs and benefits... may be handled within this framework." (Economic Review. Exam Special. March 1988). In other words, this is a technique that **compares the benefits obtained from a public good with the costs of producing it.** **Limitations** • It is hard to measure the value (benefits) of public goods as they are not traded in the market • Problems also arise when it comes to trying to measure social costs and benefits, when by definition there are no obvious 'prices' that can be used to value them • Most public goods are investments. The benefits accrue over a long period of time. It is difficult to calculate the value that future generations place on a public good. • Public goods are **non-rejectable**, therefore consumers that do not derive benefit from the good are not excluded from the effects of the provision of the good and are still taxed accordingly.
iv) Market Dominance • **Monopoly**  • Firm's level of analysis framework o Self-interest (assume profit maximizing firm o Allocative inefficiency (Pm>MC) o Deadweight loss (due to	**Monopoly** 1) Legislation (to reduce BTE OR anti-trust laws/enforcing standards) 2) Lump-sum tax (to reduce inequity) 3) Nationalisation (for efficiency & equity reasons) **Limitation to Nationalisation** • Opportunity costs to funds to acquire the private companies. • Potential X-inefficiency & Dynamic inefficiency

underproduction ie. Under allocation of resources to production) o Loss in consumer surplus and producer surplus • **Natural monopolies**  	**Natural monopolies** 1) Government regulation (regulatory pricing): o MC pricing o AC pricing If the government forces the monopolist to adopt MC pricing, the firm will be making losses since P<AC. Under such circumstances, one solution is to allow the monopolist to charge a **two-part tariff** or to provide **subsidy** to cover losses. **Limitations to MC and AC pricing** • Government subsidy to cover losses is unsustainable. The inherent difficulty encountered under such schemes is often used to pressure governments to take over such industries, that is, nationalisation.
v) Immobility of Resources (FOP) • Occupational Immobility Workers may have job specific skills that are not necessarily needed by the growing industries. • Geographical immobility	**Rectifying factor immobility across industries** 1) Protectionism to protect sunset industries so that massive unemployment will not arise and time is provided for workers to acquire new skills through 2) Education or upgrading or retraining to equip them with new skills to take up jobs in sunrise industries

3.5.3 Inequity and Policies

Income inequality • Income can be made up by wage and income from assets (eg, financial asset and real asset). Income inequality arises from the difference in wage and amount of assets possessed. Income inequality and high prices of goods and lead to inequitable distribution of resources where essential goods are not made available to those who need it.	**1) Minimum Wage / Income Policies** The use of policies such as a minimum wage to boost the income of lower income brackets. The use of wage-subsidies to encourage firms to pay their workers more. The use of a price floor to increase revenue earned by poor producers (e.g. farmers) **2) Price control / Subsidies (Affordability)** The use of price ceilings or production subsidies to ensure that basic necessities are affordable for all. **3) Demand-side policies:** Demand side policy works through increasing the demand for low skilled labour by raising their

	productivity levels, hence raising their nominal wages, cet par. **4) Tax and Redistribution Policies** The use of Fiscal policy such as taxing the rich and subsidizing the poor in consuming education/healthcare services through transfer payments.

4 COMPATIBLE OBJECTIVES AND POTENTIALLY CONFLICTING OBJECTIVES

4.1 COMPATIBLE OBJECTIVES

- ***Economic Growth with Reduced Unemployment (AD/AS model)***

  Higher levels of production and expenditure would reduce the level of unemployment. This particularly applies to unemployment due to demand deficiency, also known as cyclical unemployment.

- ***Price Stability with External Stability***

  Lower domestic inflation relative to inflation in other countries makes it possible to improve international competitiveness of exports and lessen demand for imports. When export revenue increases and import expenditure falls, the balance of trade will improve, ceteris paribus.

4.2 CONFLICTING OBJECTIVES

Attainment of	May conflict with
Economic Growth	- May result in inflation (particularly demand-pull inflation) - May put on pressure on exchange rates (if growth is export-led or generated by inflows of foreign capital) - May lead to BOT deficits (if growth encourages consumption of imported goods)
Price Stability	- Attainment of low inflation rate by curbing demand-pull inflation results in lower AD and may compromise employment levels - May result in lower economic growth
Low Unemployment	- May result in higher general price levels through demand pull and cost push pressures. - May result in balance of trade deficit from higher import spending, cet par
Healthy/Favourable BOT	- Correcting a persistent BOT deficit by adopting a weak currency stance to promote export competitiveness may result in inflationary pressures (eg. Demand-pull from excessive exports or cost-push from more expensive imports of raw materials)

a) Unemployment versus Inflation

British economist A.W. Phillips, verified the existence of a stable negative relationship between unemployment and the rate of inflation in the 1950s & '60s. This predictable tradeoff existed between unemployment and inflation led some economists and policy makers to decrease unemployment by deliberately stimulating the economy with monetary and fiscal policies, and incurring somewhat higher inflation in the process. Thus growth and price stability are seen to be in conflict with one another *(Use the AD/AS framework and shift the AD curve rightwards to show the trade-off between higher actual growth/lower unemployment and higher inflation).*

However, history has shown us that the situation is clearly not that simple. In the current global economic environment as well as the early 1970s, many economies in the world is suffering from/suffered from stagflation; high inflation coupled with high unemployment and low economic growth. The trigger for the current stagflation problem has been partly attributed to supply-side disruptions from the pandemic as well as the Russian-Ukraine crisis, while for the 1970s stagflation, this was due to the Arab oil embargo of the 1970s which sent oil prices sky-rocketing. *(Illustrate and explain this phenomenon using the AD/AS framework).*

The global stagflation shock of 2022: how bad could it get?

b) Efficiency versus Equity

Can a more equitable distribution of income increase welfare of society? The marginal utility of an additional dollar of income is higher to the lower income group than to the higher income group. Thus progressive tax structures and welfare payments, if adopted by the government to redistribute income from the rich to the poor, will increase total utility to society as a whole. This is necessary as society may also not be willing to accept a certain level of income inequality which in turn can result in economic instability and social tensions. Thus welfare of society can be increased with a more equitable distribution of income.

However, efficiency and equity might come into conflict with each other. Too much effort on the part of the government to reducing income inequality can reduce efficiency. For example, increased unemployment benefits may result in workers being less motivated to make a living on their own effort. This reduces work incentive and efficiency.

While some economists believe that problems of income distribution are normative questions in that they involve value judgment on what distribution of income is fair, governments would have to decide on the economic trade-off between reducing inequities and fostering economic efficiency, simply because there are high costs involved in achieving more equality. In this regard, the economist's role is to advise on which policy achieves the targeted distribution of income with minimum cost.

4.3 COMPATIBLE OR CONFLICTING OBJECTIVES?

Whether or not macro objectives conflict with each other will depend on two factors: the current/present state the economy is in and the choice of policy instrument adopted.

Example: State of the Economy - Internal versus External Balance

Recall that internal stability in an economy occurs when the rate of unemployment falls below 3 to 4% and the annual rate of inflation is 0 to 3%. Such an economy is said to be experiencing internal stability. External stability refers to a balanced or favourable BOT position.

Depending on the current state of the economy, the macro objectives might or might not conflict. For example, looking at position 1 in the table below, there is high inflation and a BOT deficit. A contractionary government policy stance will rectify both problems; hence there is no conflict in macro objectives. However if there is unemployment and a BOT deficit (position 6), an expansionary policy stance is required to raise employment while a contractionary stance (expenditure reducing policies) is required to shrink the BOT deficit. In this case, there is a conflict in the attainment of both macroeconomic aims.

Current Internal State	Policy Stance to Rectify Internal State	Current External State	Policy Stance to Rectify External State
1 Inflation	Contractionary	Deficit	Contractionary
2 Unemployment	Expansionary	Surplus	Expansionary
3 Stable	None	Balance	None
4 Inflation	Contractionary	Surplus	Expansionary
5 Inflation	Contractionary	Balance	None
6 Unemployment	Expansionary	Deficit	Contractionary

7 Unemployment	Expansionary	Balance	None
8 Stable	None	Deficit	Contractionary
9 Stable	None	Surplus	Expansionary

From the table above:
i) Positions 1-3 involve no conflicting objectives
ii) Positions 4-9 involve conflicting objectives

Your Task: Think of specific policies you can use to surmount some of the above conflicts.

4.4 FACTORS AFFECTING CHOICE OF MACROECONOMIC POLICIES

There are various policies a government can undertake to achieve these macroeconomic objectives. What policies a government will undertake will depend on the following factors:

i. **Type of economy**
This looks at the size of the economy, whether it is small or large. The degree of openness will also play an important role in the choice of policy. Eg. The choice between AD or AS management policies or the choice of the type of AD management policies etc)

ii. **Its order of priorities**
Economic goals may conflict. The government is thus forced to assign priorities and decide which is the most important at each given point in time. For example, if the government considers a low inflation rate is of first priority, then it must be prepared to accept, at least for the time being, a lower rate of economic growth and higher level of demand deficient unemployment.

iii. **The school of thought it subscribes to.**
There is a broad distinction between two main schools of thought. One subscribes to the idea of relying more on the free market to do the job, and the other believes that the government must intervene more actively since the free market might fail to achieve some, if not all, of these objectives. The difference in the policies used and the extent to which the government intervenes in the economy will depend partly on which school of thought it subscribes to.

5. SHOULD THERE BE MORE OR LESS GOVERNMENT INTERVENTION?

The economic role of government is pivotal. There are three broad reasons justifying government intervention. Firstly, the government sets and enforces the rule of law. For example, by ensuring that property rights are respected. This provides the foundation necessary for the free market to function. Secondly, Governments also intervene to improve efficiency (in the case of market failures) and equity. Lastly, governments aim to smoothen out fluctuations in economic performance through the use of macroeconomic policies, for eg. Expansionary fiscal policy during economic recessions etc.

However, "it does not follow that whenever laissez faire falls short, government interference is expedient; since the inevitable drawbacks of the latter may, in any particular case, be worse than the shortcomings of private enterprise." (Harry Sidgwick, 1887. Quoted in Gwartney.)

5.1 FACTORS THAT WEAKEN THE CASE FOR PUBLIC-SECTOR INTERVENTION

a. Economic Factors

i. Lack of signals and incentives to promote operational efficiency

The public sector has poor mechanisms available in deciding how to allocate resources. In the market, prices are an automatic mechanism through which consumers indicate the value they

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place on different goods and services. In the private sector, there is a strong incentive to produce efficiently because lower costs mean higher profits, and high costs mean losses and even business failure. Bankruptcy weeds out inefficiency in the private sector but the public sector does not have this mechanism at its disposal to eliminate inefficiency.

When price information is available, it is arguably the case that the private sector will be more effective at interpreting the information than the public sector. However, in the event where price information is not available, the public sector will tend to use cost-benefit analysis to determine whether the benefits or value of an intervention outweigh the costs. The success of such cost-benefit analysis as a mechanism depends on the public sector's ability to accurately assess both the costs and benefits of intervention.

Furthermore, the following tend to be missing in the public sector:

- The index of performance (profit rate) is often not available since governments do not run the country for a profit.

- Public sector's action of doing something is often not reflected in the capital market. When a corporation announces a strategy or a plan that investors believe to be inappropriate, the price of the firm's stock will drop. No similar mechanism is available in the public sector and this makes inefficiency hard to detect.

- Direct competition from other firms is usually absent in the public sector. Bureaucratic leaders are freer to pursue their own narrow goals and interests even if it is at the expense of higher costs over benefits. Public sector managers seldom gain personally from reduced costs, hence this reduces the incentive to be cost-efficient in its intervention.

ii. Imperfect Information

The public sector does not necessarily 'know' enough to enable it to make effective decisions about the best way to allocate scarce resources (eg. Lack of perfect information and lack of expertise in provision etc)

b. Political Factors

i. The Power of Special Interest Groups

A special-interest issue is defined as an issue that generates substantial individual benefits to a small minority while imposing a large individual cost on many other voters. As such, the cost to the majority exceeds the benefits to the special-interest group. Special interest groups like the gun lobby in the US are rich, highly organized and highly vocal. For the vote-seeking politician, it makes sense to support the interests of such well-organised groups in exchange for vocal supporters, campaign workers, coordinated voting from the group and most importantly financial contributions to the election campaign. By contrast, little political gain would be derived from supporting the interests of the largely uninterested, uninformed and disorganised majority. As such, politicians might have a tendency to support legislation that provides concentrated benefits to special interest groups at the expense of the majority, even if the total community benefit from the special-interest programme is less than its cost. This could possibly explain why gun laws in the US are so liberal despite the obvious external costs borne by society.

Furthermore, it can be argued that such favour seeking (also called rent-seeking) activity by special interest groups worsens inefficiency by diverting resources away from the actual production of goods and services.

ii. Shortsightedness effect

The shortsightedness effect refers to the misallocation of resources that results because public-sector action is biased:

- in favour of proposals yielding clearly defined current benefits in exchange for difficult-to-identify future costs and

- against proposals with clearly identifiable current costs but yielding less concrete and less obvious future benefits

As a result of the short-sightedness effect, politicians have a strong incentive to promote programmes providing easily observable benefits prior to the next election; this often comes at the expense of the long term benefits for the economy.

Concluding remarks:

In conclusion, not only does the invisible hand of the market sometimes fail to meet our ideal efficiency criteria; so too does the visible hand of government. Understanding the shortcomings of both the private market and the public sector are important if we are to improve our current economic institutions.

Note to students: Questions on whether government intervention in the economy is justified take a wide variety of forms. The issue can be approached from a micro/macro perspective. Questions also may or may not be context specific. It is the prerogative of students to tailor their answers judiciously depending on the question.

6. CHALLENGES AND OPPORTUNITIES FACING SINGAPORE

6.1 CHALLENGES THAT SINGAPORE FACES IN ACHIEVING SUSTAINABLE ECONOMIC GROWTH

- External Challenges facing Singapore:
  1. USA & China trade and technological disputes that had caused shifts in global and regional supply chains
  2. Slowing support for globalization & a slowdown in the global economy
  3. The rise of new digital economy and a loss of competitiveness in traditional economic pillars of growth resulting in a need for structural transformation
  4. The world has changed considerably due to COVID-19, global merchandise trade fell by 9.2% in 2020. Being a small and open economy, Singapore was also adversely impacted by the profound shifts in global trade caused by the pandemic.
  5. Supply-chain disruptions and rising global commodity prices exacerbated by the Russian-Ukraine Crisis

- Internal Challenges facing Singapore:
  1. Increased social spending to support an increasingly ageing population
  2. Land constraints that call for the need to turn to solutions such as going high-rise, underground or turn to shared facilities
  3. Labour constraints that call for the need to accelerate structural transformation and skills development to "revamp for relevance"
  4. Lack of local entrepreneurship (too dependent on foreign investment)
     i. Lack of an innovative culture in Singapore e.g. fear of failure
     ii. Not much respect and career progression for technical talent
     iii. Limited number of R&D institutions
  5. Issues regarding housing affordability which contributes to political stability and social cohesion
  6. To obtain energy that is secure, reliable, affordable and environmentally friendly in the long run

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6.2 CHALLENGES THAT SINGAPORE FACES IN ACHIEVING EQUITABLE INCOME DISTRIBUTION

- Singapore economy is highly exposed to economic shocks elsewhere
  - (X+M) significant % of GDP

- Inflationary Pressures
  - Energy, food crisis and disruptions to supply chains especially for essential items. The current crisis in Ukraine has resulted significant disruptions to the supply chains for energy and food. Around 95% of Singapore's electricity is generated from imported natural gas. The rise in price of natural gas makes the cost of producing electricity higher. Ukraine is a major global exporter for agricultural commodities like wheat, and the current war in Ukraine has severely disrupted the global food supply chains and significantly raised food prices. Russia plays a significant role in fertilizer and metals markets, in addition to oil and gas. This has also similarly disrupted the supply chains in the food and commodities market. Overall, what we are seeing today in rising energy, food and commodity prices are a natural consequence of Singapore's vulnerability to global supply side shocks.

- Intensifying competition for investments and talent resulting in the need to build deep enterprise capabilities locally

- Widening wage disparities between low-skilled and high-skilled labour
  - A general rise in the Gini coefficient from 0.44 in 1990 to 0.464 in 2014 (based on household income from work per household member, **before** accounting for any government transfers and taxes) indicates a widening of the income gap. Despite the bigger economic pie, the income increase for the low-skilled, low-income workers was negligible and had always lagged behind the higher-income groups. That being said, efforts had been made by the government to ensure better redistribution of incomes resulting in a fall in the Gini coefficient to 0.44 in 2021.
  - Rapid technological changes and destructions to traditional industries/jobs
  - Structural unemployment especially among older, less-skilled workers resulting in the need to deepen capabilities of Singapore's workforce.
  - The impact of COVID-19 on the various income groups has been disparate and uneven but skew unfavourably towards lower income earners. The extent of income deterioration in the F&B, hospitality and aviation sectors was more pronounced compare with other industries.

6.3 OPPORTUNITIES FOR SINGAPORE IN ACHIEVING SUSTAINED ECONOMIC GROWTH

- Rising Asia with increasing urbanization and fast growth
- Emergence of new technologies eg. Robotics and Artificial Intelligence that makes geography and size less important in determining Singapore's economic potential
- Superior air and port infrastructure that calls for continuous investments made in connectivity to the world especially in non-physical domains eg. In finance and data
- A pro-business environment that continues to build on Singapore's competitive advantage in trust and standards on the quality of goods/services produced

6.4 WHAT SINGAPORE HAS ACHIEVED SO FAR AND HER ASSETS

Compared to other countries and over time,

- Sustainable economic growth
- Low inflation
- A stable currency
- Budget and current account surpluses
- High standard of living
- High savings rate
- Highly skilled and highly educated and highly disciplined workforce

- Excellent infrastructure
- Good institutions with an absence of divisive politics
- Sound economic fundamentals with a sound financial system
- Strategic Location in a Region of Opportunities and active participation in regional & bilateral trade agreements
- Pro-business environment

6.5 SINGAPORE'S HOPES

- INCLUSIVE economic growth through the government's efforts in the expansion of its social safety nets to improve lives for all.
- Keeping Singapore safe and secure, ensuring that its industries continue to transform.
- Create good jobs for its workers and to build a Smart Nation that is green and liveable.

******END******

Appendix 1: Further Reading

	Singapore faces challenges, but significant opportunities ahead (Source: Channel News Asia)
	Singapore Budget 2023 (Source: www.gov.sg)
	Domestic policy challenges for Singapore in an uncertain external environment (Source: East Asia Forum)
	Uncertainties remain in global economy, with US-China trade war being biggest risk: Chan Chun Sing (Source: Channel News Asia)
	Singapore economy likely to grow in 2022 but don't rule out recession, stagflation: Lawrence Wong (Source: Business Times)