

### **Explanation that Economic Growth Clashes with Sustainability**

To increase production, firms would employ more factors of production resources such as land which refers to all natural resources used in production, as well as any minerals, water, forests, or other resources (e.g. precious metals, natural gas, coal, crude oil) that are found in or on the land. Therefore, with a higher level of production, more resources are depleted.

Moreover, a higher level of production would also result in a higher level of pollution. This is especially true for countries that are unwilling to decouple growth, and thus still rely on non-renewable energy for production e.g. some oil-importing countries rely on oil as its main energy source for production thus carbon dioxide emissions remain substantial, thereby contributing to global warming, whose effects will be suffered by future generations.

### **Explanation that Sustainability is difficult to achieve because sustained growth is difficult to achieve**

Countries may suffer negative economic growth if they promote sustainability. Declining export revenues (X) from oil will adversely affect their economic growth prospects and national budgets. This is because these countries will face a significant decrease in AD if they decouple from carbon and thus face a more than proportionate decrease in production and income via the reverse multiplier process, which is based on the proposition that a fall in expenditure leads to lower income, and lower income leads to a further fall in expenditure. Thus, these countries might not be willing to suffer a potential recession in the short term to achieve sustainable economic growth in the long term.

Countries might not achieve sustainable economic growth also because their long run aggregate supply (LRAS) might not increase sufficiently to have the spare capacity to sustain the increase in actual growth. This might be because of the lack of investment in infrastructure and technology necessary to achieve higher productive capacity. As a result, high inflation might occur. When LRAS increases much slower than the increase in AD, despite the increase in real output, the general price level would increase significantly. This is because firms would still compete fiercely for the resources needed to increase production, resulting in higher cost of production thus would pass on the higher cost in terms of higher price to consumers to offset some of the higher cost and hence general price level is bid up.

### **Arguments against Sustainability based on geopolitical factors**

Government budget constraints play an important role. If a country is facing serious budget constraint issues, then it might not be able to implement policy measures to, for instance, decouple growth in order to develop environmentally-friendly methods of production to achieve sustainable economic growth. Countries that want to implement expansionary fiscal policies with supply-side effects and a strong focus on sustainability might not be able to carry these out, and thus cannot achieve sustainable economic growth.

Nevertheless, it must be noted that the extent of global cooperation matters too. For example, Singapore is a small country. ‘Tackling climate change requires global cooperation’ (Extract 7). This means that if other countries continue to generate growth via environmentally-unfriendly means, such as the comparatively higher carbon dioxide emissions in Singapore’s neighbouring countries, then future generations in Singapore may still suffer from the significant economic problems of climate change, even if Singapore is already doing her part. Singapore may still be vulnerable to the negative effects of climate change (many of which are transnational and irreversible), such as the damage to economic resources like land, and as such, whether its economic growth remains sustainable is heavily dependent on the extent of regional and global cooperation to tackle climate change.

### **Case Studies for Sustainability Policies**

1. China is leading in developing renewable energy, installing solar panels, wind turbines, batteries and electric vehicles.
2. Singapore’s government has a strong commitment to sustainability,
  - Fiscal plans to finance long-lived major infrastructure with a strong focus on sustainability
  - Carbon taxes implemented in Singapore to encourage firms and households to adopt energy-efficient practices
  - The Zero Waste Master Plan was launched to better manage food waste, packaging waste and discarded electronic devices
  - Buildings in Singapore are also designed to be environmentally friendly.
3. Countries like Russia and Middle East states that have net fossil exports taking up a large percentage of their GDP would face political and economic instability thus might not be willing to decouple from carbon fast enough

“Average” should be a trigger word to indicate to you to write “income distribution”

## **Desirability of High Speed Economic Growth**

### **SOL:**

- **(+) Material SOL:** To achieve high economic growth, there must be actual economic growth. Assuming no change in population, actual economic growth would result in higher real GDP per capita thus each individual would have access to more goods and services for consumption and hence have a higher material SOL i.e. high economic growth is desirable.
- **(-) Non-material SOL via externalities:** The production of goods and services needed to generate economic growth will inevitably result in the generation of waste materials. For example, the production of goods like metal and chemicals will often generate highly toxic by-products. Moreover, as the economy grows, income and consumption will rise, thus generating waste such as packaging as well as discarded older consumer goods which have been replaced by newer ones. The dumping of waste into landfills or the emission of waste into waterways and the atmosphere will result in land, water, and air pollution respectively. The increased pollution levels would have a negative health impact on residents in Singapore. The illnesses and health-effects would reduce their non-material SOL.
  - To evaluate, high economic growth may not necessarily deteriorate the environment as the technological progress may also result in cleaner and more efficient production, thus lower levels of pollution. This is most likely the case for a high tech high efficient economy with highly skilled labour that invests heavily in green technology like Singapore.
- **(-) Non-material SOL via Leisure:** In addition, if the increase in production is necessitated by an increase in work effort (e.g. longer working hours), then the workers might have higher stress levels and less leisure time. This would reduce their non-material SOL.
  - To evaluate, high economic growth may not necessarily worsen non-material SOL. For example, if the high economic growth is driven by technological progress whereby more can be produced with less manpower hours, workers may have more leisure time and also less resources would be used.

**Unemployment:**

- (+) Another positive effect of high economic growth (EG) is the avoidance of other macroeconomic problems e.g. high unemployment, high inflation. As explained in part (a), to increase production, firms would employ more labour. Therefore, the derived demand for labour would increase. Therefore, demand deficient employment would reduce (i.e. high economic growth is desirable), assuming the economy is operating at less than full employment level of output  $Y_f0$  as illustrated in Fig 1.

**Inflation:**

- (-) If the economy is already at full employment where all resources are used fully and efficiently, high economic growth via actual growth would not reduce demand deficient unemployment but instead results in demand pull inflation. This is because consumers who are unable to obtain the goods are willing to pay higher prices to obtain the goods and/or because firms pay a higher cost to obtain resources to produce the goods thus the firms pass on the higher cost in terms of higher prices to consumers. This is likely for the case of Singapore because of the low unemployment rate in Singapore of less than 2% for the past 10 years i.e. high economic growth is not desirable.
- (+) Next, to achieve high economic growth, there must also be potential economic growth as illustrated by an increase in long run aggregate supply (LRAS) from LRAS0 to LRAS1 in Fig 2. Potential economic growth affords an increase in full employment level of output from  $Y_f0$  to  $Y_f1$  because of an increase in productive capacity i.e. the economy's ability to produce. This is because potential growth is caused by an increase in the quantity of resources, improvement in the quality of resources and/or technological advancement. The former suggests that more output can be produced by having more inputs while the latter two suggests that more output can be produced using the same or less inputs. As such, when aggregate demand increases, for example, from AD0 to AD1 in Fig 2, the economy would be able to produce more goods to meet the higher demand. Moreover, with the increase in the supply of resources, prices of resources would increase at a slower rate / decrease. Hence, prices would only be bided up from  $P_0$  to  $P_1$  instead of  $P_0$  to  $P_1$  when there is no potential growth. Therefore, high economic growth via potential growth especially from improvement in quality of labour (e.g. education) and technological advancement is very important for a resource scarce economy like Singapore to prevent high demand pull inflation i.e. high economic growth is desirable.

**Sustainability:**

- (-) The production of goods and services means greater utilisation of non-renewable resources such as metals, minerals and fossil fuels thus faster their depletion. Other resources such as fishes in the sea and wood from the forests although renewable would take a long time to regenerate. Thus, if the rate of resource utilisation exceeds the rate of regeneration, the total stock of such resources will diminish, leaving less resources available for future generations. The economy's ability to produce may decline, thus future economic growth and hence lower future SOL might be lower i.e. high economic growth is not desirable.
- (+) High economic growth may not necessarily deteriorate the environment as the technological progress may also result in cleaner and more efficient production, thus lower levels of pollution. This is most likely the case for a high tech high efficient economy with highly skilled labour that invests heavily in green technology like Singapore.

**Inclusivity:**

- (+) Next, with higher income, more tax revenue can be collected, assuming no change in tax rates. This is because in Singapore, as employee incomes rise, they automatically pay more taxes as they move into higher income tax brackets, paying higher marginal tax rates i.e. progressive tax system. In addition, firms would also pay more corporate taxes as their profits are also higher. Also, households may consume more with higher income, thus increasing tax revenue from GST – goods and services tax in Singapore. The higher tax revenue can be used to provide more subsidies (e.g. unemployment benefits, utility rebates for residents staying in public housing, CDC vouchers for low-income earners in Singapore) for the poor to ensure the benefits of growth are shared more equitable. It can also be used to fund upskill and re skill programmes for low skilled workers (e.g. SkillFuture in Singapore) so that they have higher employability thus have greater opportunity to participate in the growth process. Inclusivity can be better achieved with high economic growth and hence improving non-material SOL i.e. high economic growth is desirable.
- (-) To evaluate, high economic growth might not be desirable if the potential growth is caused by, for example, overly fast paced technological advancement that led to structural changes in the economy hence leading to structural unemployment. The technological advancement might lead to the rise in tech-intensive industries and cause

the decline of non-tech related industries. Low skilled workers from the sunset non-tech related industries do not have the skills required to gain employment in the rising tech-intensive industries thus become structurally unemployed. Hence, the income of the poor decreases. On the other hand, as a country experiences actual economic growth, the value of assets which are primarily concentrated in the hands of the wealthy increase. This is because economic growth fosters investor confidence, leading to greater investment in various assets. The increased demand for investments can drive up asset prices, so that the rich are able to increase their rental income from owning property and dividends from owning shares in firms. Hence, as the rich get richer and the poor get poorer, there would be greater income disparity thus, worsening inclusivity.

## **Impacts of Inflation**

### **SOL:**

- **Material SOL:** Inflation causes an erosion of purchasing power, and thus reduces households' ability to purchase goods and services. Having lower access to goods and services for consumption to satisfy wants and needs, this leads to a fall in their consumption and thus lower material standard of living (SOL) in the country. This is especially true for households on fixed income as their real income would fall since their nominal income does not increase to offset the increase in general price level.
- **Non-material SOL:** In addition, the erosion of purchasing power during inflation forces low income households who do not have much savings to work harder and longer hours in order to maintain their material SOL. They may have to work longer hours or take up additional part-time jobs so as to increase their income to keep up with the rising costs of living. This results in higher stress and less time for leisure, hence reducing their non-material SOL i.e. qualitative aspect of welfare.
  - Contextualise to an economy: Overall SOL - which comprises both material and non-material SOL - would decrease. The negative effect on SOL would be felt severely by developing countries such as Vietnam and Indonesia due to their large proportion of low income earners.
  - The above assumes that the inflation is largely cost push in nature and thus not only did the general price level increase, but real national output also decreases. If the inflation is mild and is caused by an increase in aggregate demand (AD) when the economy is operating at the upward sloping portion of the AS curve where there is availability of spare capacity, despite the increase in general price level, real national output is still increasing thus material SOL might still be improving instead of worsening. No doubt non-material SOL might still worsen due to devoting more hours to work even if the inflation is mild and is caused by an increase in AD, the effect on SOL should not be overstated.

## Economic Growth

- Actual Growth/ Demand-Deficient Unemployment:
  - If the increase in general price level is large and inordinate, it adds uncertainty to firms' decision making. If firms are uncertain about the future prices of their inputs and the prices of their output, and thus run the risk of making losses, firms may be deterred from investing. Severe inflation also encourages a diversion of effort towards speculation and away from productive activity. Rather than invest in capital equipment, firms might use their funds to purchase non-productive wealth (e.g. jewels, gold and other precious metals, real estates, etc.) as hedges against inflation.
  - Overall, there would be a fall in investment expenditure (I) and thus a decrease in aggregate demand (AD) given  $AD = C + I + G + (X - M)$ . The decrease in AD would cause a more than proportionate decrease in national income via the reverse multiplier effect. Thus, actual growth would decrease.
- Potential growth: If the rate of capital accumulation is now slower than the rate of capital depreciation, the stock of capital in the economy would decrease. If so, the economy's ability to produce and thus its productive capacity would decrease. With the leftward shift of the economy's long run aggregate supply (LRAS) curve due to lower quantity of capital resources, its full employment level of output would decrease and hence the economy's potential growth would decrease.
  - The analysis on economic growth would largely apply to countries such as the US where the marginal efficiency of investment is interest elastic where even a small increase in interest rates would result in a significant decrease in investment.
- To evaluate, the above assumes that inflation is severe. But if inflation is mild, it might stimulate investment instead as the rate of return on investments increases, which leads the economy to higher levels of output and employment. Mild inflation may indicate that the economy is growing at a healthy pace and generate positive expectations about future economic growth. Firms thus expect demand for their goods and services to increase and thus would invest in more machinery and equipment or expand their operations to increase output in order to meet the expected rise in demand and hence maximise their future profits.

## Balance of Trade

- If there is inflation in one country (for example Singapore) and not in the others, and assuming that the rate of exchange between the currencies is unchanged at that point in time, domestically produced goods become more expensive compared to imported substitutes in consumption with positive cross elasticity of demand ( $XED > 0$ ). As a result, many individuals will switch from consuming domestically produced goods to the relatively cheaper imports, resulting in an increase in demand for imports and an increase in import expenditure (M). Additionally, Singapore will find it more difficult to sell its exports because they are now relatively more expensive than those of the other countries. Hence, there would be a decrease in quantity demanded of exports. Assuming demand for exports is price elastic ( $PED_x > 1$ ) due to the high availability of substitutes of Singapore's exports, the increase in revenue due to the increase in export prices would be smaller than the decrease in revenue caused by the more than proportionate fall in quantity demanded, resulting in a net fall in export revenue (X). would lead to a fall in Singapore's net exports (X-M) and thus might worsen Singapore's balance of trade (BOT) position. The above analysis on BOT would largely apply to a very open economy like Singapore where the sum of its export revenue (X) and import expenditure (M) takes up around 400% of its GDP. It is also highly applicable to Singapore because Singapore's domestic goods have many close substitutes from nearby countries e.g. computer chips from Korean, Japan, Taiwan etc.
- To evaluate, the above analysis assumes that other countries are not having inflation and even if they do, their inflation rates are lower than that of Singapore. In reality, Singapore has been keeping severe inflation at bay by having a strong SGD. So, even if Singapore is having inflation but if other countries inflation is higher than that of Singapore, then Singapore net exports (X-M) would increase thus contributing positively to improving Singapore's BOT position.
- To evaluate, with inflation, export revenue decreases, resulting in a decrease in demand for domestic currency. In the long run, assuming a free floating exchange rate system, currency depreciation occurs suggesting consumers in foreign countries need less foreign currencies in exchange for one unit of domestic currency to buy the export. Exports become cheaper and imports become more expensive so (X-M) will start to increase in the long term. Therefore, given a flexible exchange rate system, the negative effects should not be overstated as least in the long run.

**Exchange Rate:**

- Exchange rate: Furthermore, countries that adopt a flexible exchange rate system such as Singapore will also see a fall in the external value of their currency if Singapore has a relatively higher inflation rate compared to its trading partners. This is because there will be a decrease in the demand for their currencies due to a decrease in the demand for their exports as a result of the relatively higher prices due to inflation.

**Productive Efficiency:**

- The shoe-leather cost of inflation refers to the time and effort that people take to counteract the effects of inflation. Inflation reduces the real value of money. As a result, people save more of their money in banks rather than hold it on hand as they may earn interest to partially offset the increase in general price level. Hence, they must make frequent trips to the bank or to the automated teller machines (ATM) to withdraw cash as they quickly run out of it. This reduces efficiency as the increase in frequency of transactions (due to more visits to the banks and ATM) results in greater time wastage, which in turn results in reduced time spent on productive activities. Thus, there is an opportunity cost in terms of goods and services that could have been produced and income that can be earned forgone, etc.
- Menu Cost: Furthermore, efficiency also arises because of the menu cost of inflation. It refers to the cost involved in constantly revising price lists. In periods of high inflation, restaurants and firms have to frequently adjust the prices of the goods and services that they sell. As a result, they incur costs every time they reprint and reissue their product catalogues, publicity material, bar codes and/or menus. Menu cost has an impact on efficiency as it means that time and resources are wasted in having to reprint prices, menus and product catalogues, etc.
  - Contextualise to an economy: Overall, inflation might result in inefficiency. The analysis on inefficient would largely apply to countries, for example Myanmar and Cambodia, that are low tech in nature. High tech countries such as Singapore would have largely transit to using e-payment (i.e. less need to visit bank and ATM) and e-menu (e.g. scanning QR code for menu) which are time saving mode of operation and thus are not affected much by shoe leather and menu cost of inflation.
- Evaluation using whether inflation is anticipated: To evaluate, the extent of the negative effects would be smaller if the inflation is anticipated because people can take steps to

protect themselves from the negative effects. For example, if they accurately expect a similar percentage of inflation that had occurred in the past to continue in the future (let's say 5%), they would hold 5% more cash on hand, they would not suffer more time wastage due to more frequent travel to the bank or ATM. Also, if firms expect to increase their prices of their products by 5% every year because they expect their cost to increase by 5% and thus build their inflation forecast into their production and pricing decisions, less time and resources are wasted in having to update prices etc. Overall, inefficiency would not be as high as if inflation is not anticipated.

### **Allocative Efficiency:**

- Inflation may lead to distortions in relative prices which can then result in misallocation of resources. During inflation, relative prices may be distorted by speculative activity or structural rigidities which cause prices to rise at different rates but not reflecting long term demand conditions. Resources may therefore be diverted to goods whose prices are rising faster than others, even though their long term demand may not have changed significantly. This results in allocative inefficiency. For example, high and rising inflation may cause people to buy more fixed assets such as gold and property as a hedge against inflation. Such speculative purchases cause prices of property to rise rapidly, increasing the profits of real estate developers and prompting them to build more houses. However, the rise in prices is mainly due to speculative buying and may not reflect the long term needs of the country based on its population demographics.
- At the same time, prices of essential goods such as rice or oil may be depressed by government price controls, which may not reflect an actual increase in long term demand due to population growth. As a result, too little resources may be allocated for such goods. Hence, there would be allocative inefficiency.

### **Inclusivity**

- Since the rich have more assets (e.g. real estates, gold) that will earn capital gain (i.e. gain the value of the assets) during times of inflation whereby prices of these assets would be increasing. In addition, the middle class typically work higher skill jobs in expanding industries which are represented by vigorous trade unions to keep their wages apace with, or ahead of inflation. Hence, overall, the rich get richer. On the other hand, those of low income would typically not be able to bargain for higher wages as they work low-skilled jobs in declining industries and are lucky just to have their nominal

income remain constant with a decrease in derived demand for these workers as the economy grows. Hence, with inflation, they receive dollars of decreasing real value and their real income decreases as their wages are not indexed to inflation. This would lead to a widening of the income gap as the rich get richer and the poor get poorer.

- To evaluate, the government may intervene to decrease income inequality by implementing policies like unemployment benefits. This may help to provide a source of disposable income for retrenched workers, hence narrowing the income gap slightly.

#### **Budget:**

- **Taxes:** During inflation, businesses may face challenges in managing the increased costs associated with inflation, especially if the nature of the inflation is cost-push. Hence, firms become less profitable and corporate tax revenue decreases. On the other hand, inflation results in higher prices of goods and services, resulting in a greater tax revenue from goods and services tax. The net increase in nominal incomes during inflation pushes people into higher tax brackets which increases tax revenue from income tax
  - Depending on which effect is greater, this may either increase the government budget or put a strain on it.
- **Government Spending:** The increase in unemployment during inflation, as well as the presence of fixed nominal income receivers causes the governments to have to increase their subsidies and unemployment benefits in order to maintain the standard of living of these demographics. For example, subsidies on essential goods may be increased to offset the rising prices, resulting in a strain on the government budget. Moreover, government infrastructure projects often involve long-term contracts and financing arrangements. Inflation can increase the costs of construction materials and labour, resulting in higher costs of construction materials and labour, resulting in higher expenditure on infrastructure projects. This puts a strain on the government budget.

#### **Inflation**

- Firms hoard materials and finished products in anticipation of future price increases to capitalise on the greater revenue they would earn if they sold it in the future to maximise their profits as they have produced these products at a lower cost than they would be produced in the future. This worsens inflationary pressures as supply of materials decreases, resulting in an increase in cost.

## **Impacts of Deflation**

### **Economic Growth/ Unemployment and SOL:**

- Deflation is usually associated with prolonged economic recession which occurs due to too little spending and investment. When there is a sustained decrease in the general price level, consumers pay a lower price compared to previously. Hence, consumers expect the general price level to continue falling and choose not to spend. Moreover, they may be more pessimistic about the future and expect wages to fall, so they are more cautious about spending.
- In the face of depressed demand, sales fall below production with lower demand inventories pile up, forcing firms to cut back on production. Firms hence have lower incentive to invest in productive capacity as there is a loss in business confidence which translates to an expectation of continued low demand in the future. Hence, the returns on investment would be low since any additional productive assets would cause firms to incur an additional fixed cost as the greater ability to produce goods and services would not match the demand. Hence, overall, investment falls. This leads to a fall in AD and a multiple fall in income/ output. As firms respond to the fall in output by demanding less labour, unemployment increases.
- Deflation also increases the real burden of debt, leading to bankruptcies and possibly increasing the risk of bank failures if the financial system is already fragile. All these negative effects result in a downward spiral of falling incomes, falling demand, falling prices, falling investment and falling employment and output, resulting in a deflationary spiral, which makes sustained deflation a serious concern
- To evaluate, the decrease in AD and thus the effect on economic growth, unemployment and SOL might not be that significant because with deflation, Domestic exports become more price competitive thus more attractive to consumers in foreign countries, resulting in increase in quantity demanded for domestic exports and imports from foreign countries become relatively more expensive thus less attractive to domestic consumers, resulting in a fall in quantity demanded of imports. Assuming the demand for the country's exports is price-elastic,  $(X-M)$  would increase  $>$  AD would increase due to increase in  $(X-M)$  to offset the decrease in AD due to decrease in C and I. Considering this, should not overstate the negative effects of deflation.
- To evaluate, if deflation is due to the increase in AS caused by improvements in technology or increase in productivity and skills, it can be beneficial rather than damaging thus negative effects of deflation should not be overstated. The improvement

in technology or increase in productivity would lead to lower unit cost of production, increasing short run aggregate supply (SRAS) i.e. rightward shift in SRAS curve. This leads to an increase in real output / income and hence actual economic growth and improvement in material SOL. At the same time, the increase in output means that more labour is needed for production (i.e. increase in derived demand) and more jobs are created, thus resulting in a fall in unemployment. In addition, the higher productivity or improved technology means that the economy can produce more goods with the same amount of resources, leading to an increase in productive capacity and hence potential growth i.e. rightward shift of the LRAS curve. If you have already explained this fully in part (a), you should draw references to part (a) and provide a brief explanation here.

- Evaluation > Hint: Adaptation from key requirement 1a. Deflation > Increase in purchasing power > SOL improves.

**SOL:**

- An increase in unemployment results in a loss of wages for the retrenched workers, resulting in lower purchasing power and lower ability to purchase goods and services to fulfil needs and wants, causing material SOL to fall. Moreover, the stress from being unemployed and less able to support families results in a worsening mental health. If the duration of unemployment is long, skills possessed by current workers become obsolete due to changes in the economy, resulting in them facing more job-related anxiety as they fear that they might not be able to find future employment. This lowers non-material SOL.

**Economic Growth:**

- Higher unemployment undermines confidence of consumers and firms in the economy due to lower efficiency as a result of more idling resources not being used to achieve higher output. Hence, consumption (C) and investment (I) expenditures decrease causing aggregate demand (AD) to decrease illustrated by leftward shift of AD curve, resulting in a fall in real national income decreases more than proportionately via the reverse multiplier effect. Hence, Actual growth decreases.
- In the long term, workers' skills are eroded and this reduces their chances of gaining employment in the future, resulting in a fall in the quality of labour resources. Moreover, if higher unemployment is due to structural unemployment due to mismatch of skill sets and due to technological advancement, workers' skill sets and knowledge become obsolete and this de-motivate workers to work, which may prompt them to drop out of the labour force entirely, causing the quantity of resources to decrease. This results in a decrease in the ability of the economy to produce, resulting in a fall in productive capacity of the economy illustrated by the leftward shift of the long run aggregate supply (LRAS) curve. Hence, the full employment level of output decreases and there is **reduced** potential growth.

**Inflation:**

- With a decrease in the quality and quantity of the labour force, the supply of labour decreases as there is a lower ability of the labour force to provide labour. Hence, there is a shortage of workers resulting in wages to be bidden up. This results in an increase in cost of production for firms, which results in lower profitability, assuming revenue remains the same. Hence, firms cut back on production and pass on higher cost of

production in the form of higher retail prices to protect their profit margin. As a result, in the long run, unemployment can also cause cost-push inflation.

**Balance of Trade:**

- Link from inflation

**Government Budget**

- With higher unemployment, the government receives less personal income tax revenue and less GST revenue as households reduce consumption expenditure but need to spend more of, for example, unemployment benefits. This puts a strain on the government budget as they have to spend a greater proportion of their budget to mitigate the effects of unemployment. This causes a fall in the ability to pursue fiscal policies such as building of infrastructure to develop the economy or to provide subsidies for firms to carry out innovative projects that could contribute to the country's economic growth. The government may thus face a budget deficit, running down its reserves and thus it is less able to achieve its macroeconomic objectives.

**Equity/Inclusivity:**

- Moreover, distribution of income becomes more uneven if the group retrenched is largely the older and less skilled workers mainly from the low value-added industries. This widens the income gap between rich and poor which makes the government less able to achieve inclusivity which is a government's objective.

**Productive Efficiency:**

- With higher unemployment, less resources are used to produce outputs and there is a movement of production points, for example, from Point A to Point B within the Production Possibility Curve (PPC) as illustrated in Fig 1. Outputs of the economy reduce from  $X_a$  to  $X_b$  and  $Y_a$  to  $Y_b$ . The underutilisation of resources thus results in loss in potential output and national income of the country would also be lower. Hence, there is a loss in potential standard of living.

[Youth unemployment in Italy - Wikipedia](#)

- Italy's has a problem of youth unemployment caused by its inflexible labour market

- Italy's welfare model has exclusive unemployment benefits coupled with inflexible labour market policy, which means workers have high employment protection and are unlikely to be fired, which creates inhospitable conditions for young people seeking jobs.

#### [How the right type of education can drive down unemployment in Africa](#)

- Africa is a continent that has been grappling with high unemployment rates for many years
- The right type of education can play a crucial role in reducing unemployment.
  - Integrating entrepreneurship and innovation into education: Shifting youths' mindsets from seeking jobs to creating marketable opportunities for themselves, African states can give the youth the support needed to create market/employment opportunities.

# Glossary of Financial Terms

## 1 Current Account

**Net Factor Income From Abroad (NFYA)** refers to the income earned by residents of a country from their ownership of foreign assets or investments located abroad. It includes rent, interest, profit and dividends. This does not involve the production of additional goods and services.

- **Rent:** Income earned by residents from the use or leasing of land, real estate, or other tangible properties located abroad.
- **Interest:** Income earned from lending money or investing in interest-bearing assets such as bonds, loans, or deposits in foreign countries.
- **Profits:** Income earned by residents from their ownership of foreign businesses, subsidiaries, or investments in the form of dividends, retained earnings, or capital gains.
  - **Dividends:** Income received by residents from their ownership of foreign stocks or equity investments, typically distributed by foreign corporations to their shareholders.

**Governmental Aid** refers to assistance provided by governments to countries in need in the form of financial assistance or provision of goods and services.

- Financial Aid is also known as **Donation**
- Important to Note: Governmental aid is a **Unilateral Transfer**. I.e. Governments provide funds, goods, or services without the expectation of receiving something in return. Hence, When the government provides material aid (i.e. goods and services), it is not recorded in the balance of trade as goods and services are provided without payment.

## 2 Capital and Financial Account

**Hot Money** refers to short-term capital flows that move quickly in and out of financial markets in search of the highest short-term return or interest rate. Investors deploying hot money are primarily driven by speculation rather than long-term investment objectives.

**Treasury Bills (T-bills)** are short-term debt securities that are issued by a government typically with maturities ranging from a few days to one year.

- How it works: The government issues T-bills and some investors buy them. After a short period of time, the government pays back the T-bills with interest.

**Trade Credits** refer to a short-term financial arrangement between a buyer and a seller where the seller allows the buyer to purchase goods or services for payment at a later date, usually within a specified time frame.

**Non-produced, non-financial assets** refer to long-term assets that are not produced through production processes and are not financial instruments.

- **Tangible Assets:** Land (Mineral deposits, forests, water resources)
- **Intangible Assets:** Assets that lack a physical form (Patents, trademarks, copyrights, goodwill, and intellectual property rights). These assets are often created through intellectual or creative endeavours rather than physical production processes.

**Fixed Assets** are long-term assets that are used in the production or operation of a business and are expected to provide benefits to the company for more than one accounting period.

**Capital Transfers** refer to the transfer of ownership of a real asset between entities, typically without any direct exchange of goods or services.

- This includes debt forgiveness, transfer of ownership of fixed assets, and acquisition and disposal of assets
  - **Debt Forgiveness:** the act of a creditor cancelling a debt owed by a debtor. (This is a credit to the debtor and a debit to the creditor)

**Foreign Direct Investment (FDI)** refers to the investment made by an entity or individual from one country into productive assets located in another country to acquire significant influence or control over the foreign enterprise.

**Portfolio investments** refer to the acquisition of long-term financial assets such as stocks, bonds, with the expectation of earning a return on the investment. This does not involve the production of additional goods and services.

- **Bonds** are debt securities issued by governments or firms to raise funds.
  - How it works: The buyer of a bond lends money to the issuer for a predetermined period during which the issuer pays periodic interest payments.
- **Stocks** also known as **Shares** or **Equities**, represent ownership interests in a firm.
  - How it works: The buyer of stocks of a company purchases partial ownership of that company, and receives dividends from the firm's profits if profitable.

