

2017 JC2 H1 Econs Prelim Exam

Suggested Answers for Question 4

a) Explain how standard of living is measured in an economy. [10]

b) Discuss whether an improvement in trade balance will help to achieve a higher standard of living in an economy. [15]

Introduction

The term Standard of living (SOL) is broad and is usually examined in terms of material SOL and non-material SOL. The material SOL measures the quantity and quality of goods and services accruing to each person in the country. The non-material SOL measures the intangibles and focuses on the quality of life.

Body – Measuring material SOL

Material SOL can be measured using nominal GDP. Nominal GDP is a national income accounting statistic evaluated at current market prices reflects the money value of all goods and services produced within the territory. Such a statistic is also known as "*current dollar GDP*". *Nominal* GDP estimates reflect the money value of all goods and services produced within the territory but have not been adjusted for price changes. Within the year, there could have been actual increases in output or price increases (eg. inflation) or both. Hence in times of inflation, nominal GDP will increase BUT this may have no positive impact on the amount of goods and services available overtime because no additional goods may have been produced. The magnitude of the increase in nominal GDP estimates during times of inflation may also be due to higher prices rather than the increase of output.

Real GDP on the other hand, measures the money value of all goods and services produced within the territory adjusted for price changes. Hence if there is a rise in real GDP, it is definite that there has been an increase in physical output.

More precisely, real GDP per capita or real GNP per capita are used as we try to measure the material standard of living each person has.

$$\text{Real GDP per capita} = \text{Real GDP} \div \text{Population size}$$

On average, people in high GDP per capita countries enjoy larger, better-constructed, and more comfortable homes, higher quality food and clothing, a greater variety of entertainment and cultural opportunities, better access to transportation and travel and other communications, indicating a higher material standard of living.

The Real GDP pc of a country may have increased over time, however it is important to note that the national pie may not be divided equally among the population of the country despite the higher Real GDP pc overtime. Hence although more goods and services are available, it may not be equally accessible to all.

If the increase in national income is accrued to a minority, this does not mean that everyone is better off. Thus it would be correct to say that more goods and services are accessible to the minority only. In this scenario, although the Real GDPpc may be higher, the income is not evenly distributed and hence the conclusion drawn from the Real GDPpc that each person is now better off may be misleading. Hence it is important to consider the distribution of income before concluding on the welfare of the residents of a country.

The Gini coefficient is an inequality indicator which measures the inequality of income distribution in a country. It varies from zero, which indicates perfect equality, with every household earning exactly the same, to one, which implies absolute inequality, with a single household earning a country's entire income. Hence a country with higher Real GDPpc as well as a smaller Gini coefficient overtime shows a more reliable conclusion about material SOL improvements in general than one with a larger Gini coefficient.

Body – Measuring non-material SOL

The non-material SOL focuses on the life expectancy, standards of education, health, hygiene in the country & other social indicators such as the amount of leisure time, divorce rates etc.

The qualitative aspect of SOL cannot be captured by output or income figures as the average person's well-being is not determined solely by the quantity of goods and services he can consume. Thus there is a need to look at qualitative indicators like the number of leisure hours the average person enjoys.

Measuring leisure hours can provide an indication of the non-material SOL. The fall in leisure time may result in more people falling ill due to being overworked as well as less likely to gain access or enjoy the available goods and services or spend time with family and friends. This may have social implications. Thus the quality of life i.e. the non-material aspect of life may be affected. Similarly the working hours may not have changed but the working conditions could have gotten better (or worse) which may have an impact on the non-material aspect of life.

Measuring pollution level can provide an indication of the non-material SOL. A higher pollution level if unaddressed may also reduce the quality of life. People may be faced with health issues that may arise from water or even air pollution. Again, although a larger real GDPpc from increased production of goods would imply a higher material SOL, the increasing negative externality due to the increased production would result in a lower non-material SOL.

Conclusion

Many ideas have been developed and promoted, to complement the GDP figures with other indicators of welfare to better reflect both material and non-material aspects of life or the quality of life for policymaking. An example would be a composite indicator such as the Human Development Index (HDI).

The HDI is a simple average of three indicators of development designed to capture three key components of human development:

1. Life expectancy at birth
2. Education attainment (adult literacy and years of schooling)
3. GDP per capita (measured using PPP exchange rates).

A composite index therefore may provide a more complete measurement that includes both the material and non-material aspects of SOL.

L1	- An answer that lacks the use of relevant economic concepts - Largely irrelevant answer - Listing of points without explanation. - Glaring conceptual errors.	1 - 4
L2	- An answer that uses relevant economic concepts	5 - 6

	<ul style="list-style-type: none"> • Real GDP per capita • Other indicators <p>- Some explanation (but with gaps) of real GDP per capita and other indicators in assessing rise in SOL.</p>	
L3	- Good elaboration of the indicators that can be used to assess material and non-material SOL with some mention of composite indicators.	7-10

b) Discuss whether an improvement in trade balance will help to achieve a higher standard of living in an economy. [15]

Introduction

The balance of the export and import values is called the balance of visible trade or visible trade balance. A trade surplus is when the value of visible exports exceeds the value of visible imports. A trade deficit is when the value of visible exports is less than the visible imports. An improvement in the trade balance may have positive and/or negative impacts on the material and non-material standard of living.

Body – Improvement in trade balance helps to achieve a higher material standard of living

Actual growth occurs when there is an improvement in trade balance. With reference to the AD-AS framework, an increase in $(X-M)$ that gives rise to an increase in real national income on the horizontal axis due to a rightward shift of the AD curve.

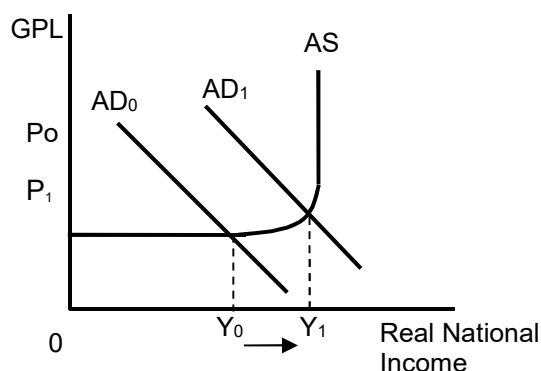


Figure 1a: Actual growth due to shift in AD

Provided economic growth outstrips population growth, it will lead to higher real income per head. Since labour is a derived demand, when demand for goods and services increase, demand for labour increases, creating more employment opportunities. If national incomes rises, government can redistribute incomes from the rich to the poor without the rich losing. For example, as people's income rise, they automatically pay more taxes. This extra revenue for the government can be spent on programmes to alleviate poverty. All these leads to higher levels of consumption of goods and services and higher material standard of living.

Body – Improvement in trade balance helps to achieve a higher non-material standard of living

With economic growth due to an improvement in trade balance, cyclical unemployment will fall as firms will hire more workers in export-oriented industries to increase production since demand for labour is a derived demand. The fall in unemployment could possibly lead to fewer social problems like falling crime rates and hence rise in non-material SOL.

A higher income from an improving trade balance may also allow greater access to better healthcare resulting in a longer life-expectancy hence rise in non-material SOL.

Higher national income may allow governments to improve on the standard and increase the access of education leading to an improvement in non-material SOL.

Body – Improvement in trade balance may not achieve a higher material standard of living

Improvement in trade balance leads to economic growth. An economy that is near full employment enjoying high economic growth leads to demand pull inflation. Demand-pull inflation is usually the consequence of high growth as AD rises at a rate that is not matched by the increase in output of goods and services (ie, AS). Also, wages tend to go up when the economy is near full employment as resources become scarcer leading to wage-push inflation. A sustained increase in general price level will lead to a deterioration of material SOL.

Improvement in trade balance due to changing CA may result in structural economic changes. Different groups of labour with different skills and education will benefit differently. For example, Singapore moving away from low-end manufacturing result in many low skilled and educated workers losing their jobs. On the other hand, other workers in sunrise export oriented industries will benefit from more job opportunities and higher salaries. Thus different groups will experience differing rates of returns, resulting in widening disparity in income hence worsening material SOL.

Body – Improvement in trade balance may not achieve a higher non-material standard of living

A higher demand for a country's exports from an improvement in trade balance may result in an increase in the working hours of the population. The opportunity cost of increasing working hours is leisure time. The fall in leisure time may result in more people falling ill due to being overworked as well as less likely to gain access or enjoy the available goods and services or spend time with family and friends. This may have social implications. Thus the quality of life i.e. the non-material aspect of life may be negatively affected.

An improvement in trade balance can also result in greater pollution level due to the increased levels of non-environmentally friendly production. A higher pollution level if unaddressed may reduce the quality of life. People may be faced with health issues that may arise from water or even air pollution. The increasing negative externality due to the increased production would result in a lower non-material SOL.

Suggested evaluation

Evaluate the overall impact of an improvement in trade balance on SOL

- Different reasons for BOT improvement may have difference outcomes
 - Acquiring a new CA?
 - Depreciation?
 - High investment in R&D?
 - Expenditure reducing/switching policies, protectionism?
 - FTAs?
- Short term vs Long term impact
- Economy at different stages of development

L3	For a well-developed explanation of how an improvement in BOT will affect material and non-material standard of living positively and negatively.	9-11m
L2	For an under-developed explanation of how an improvement in BOT will affect material and non-material standard of living positively and negatively. Max of 7 marks for one sided discussion – Only material or non-material SOL OR only improvement or deterioration of SOL	6-8m
L1	Descriptive answer lacking in economic analysis.	1-4m

E2	• Clear judgement with strong substantiation	3-4m
E1	• Judgement with some clarification and substantiation	1-2m