In 2012, the Singapore government announced enhancements in measures to improve labour productivity and increase general living standards in Singapore. More grants were given to SMEs to invest in its workers and its operations.

- (a) Explain the main macroeconomic indicators that can be used to compare changes in living standards across countries. [10]
- (b) Assess the extent to which an improvement in labour productivity is beneficial to the SOL in Singapore. [15]

Suggested Answer Outline

(a) Explain the main macroeconomic indicators that can be used to compare changes in living standards across countries. [10]

Question Requirements:

- Explain what SOL is
- Explain significance of comparing changes in SOL across countries
- Explain indicators that can be used to compare such changes

1. Explain SOL

- Standard of living: level of well-being and comfort enjoyed
- 2 aspects of SOL: material and non-material SOL
- Material SOL: quantity and quality of goods and services available to be enjoyed
- Non-material SOL: quality and affordability of housing, hours of work required to purchase necessities, gross domestic product, inflation rate, number of holiday days per year, affordable (or free) access to quality healthcare, quality and availability of education, life expectancy, incidence of disease, etc.
- 2. Explain significance of comparison of changes in SOL across countries
 - Changes in SOL show how the population in the country become better off over time and shows the progress of the economy
 - Comparing changes in SOL across countries allows economists to assess how well economies and governments are doing, relatively, in improving living standards in their countries

3. Explain real GDP

- Gross Domestic Product: measures the final value of all goods and services produced within the geographical confines of an economy within a given period of usually a year.
- To measure changes within a country across a period of time → need to compensate for inflation (i.e. the sustained, inordinate increase in general price levels) → use real GDP in order to take into account inflation.

4. Explain real GDP PER CAPITA

 Different countries have different population sizes → need to account for differences in population sizes → to make numbers comparable, divide real GDP by population size to obtain real GDP per capita

5. Explain real GDP per capita, PPP adjusted

 For comparison across countries, there is a need to use the same base currency for fair comparison → typically use exchange rate to convert into the same currency, usually USD.

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- Due to various reasons like differences in stage of development, there are differences in purchasing power of one dollar.
- Despite using exchange rates to convert real GDP per capita into the same base currency, it is not sufficient to use it as a proxy comparison for differences in material SOL due to differences in purchasing power
- E.g., US\$100 can buy a different amount of a basket of goods and services in the US vs. in Mexico.
- To compensate for that, PPP adjusted real GDP per capita is used.
- PPP: the exchange rate that allows say \$100 of a country's currency to buy the same basket of goods and services in another country
- Therefore, using real GDP per capita, PPP adjusted, the year-on-year % change can be calculated for each country to be compared.
- The higher the % change, the more marked the improvement in material SOL in a country compared to another.

6. Unemployment rate

- Higher unemployment rate → smaller proportion of population working → lower income levels → lower mat SOL & lower income tax revenue paid. Lower consumption → lower corporate tax paid. → government tax revenue falls → unable to spend as much on provision of merit goods for public → lower non-material SOL
- Higher unemployment rate → higher amount of social unrest, inequality, instability, etc → lower non-material SOL

Level	Descriptors	Marks
3	For a well-developed explanation of how macroeconomic indicators can be used to compare changes in SOL across countries.	7-10
2	For an under-developed answer of how macroeconomic indicators can be used to compare changes in SOL across countries. For lack of consideration of comparison across countries For lack of consideration of changes in SOL	5-6
1	Smattering of points about the use of macroeconomic indicators in comparing changes in SOL across economies. Conceptual errors present	1-4

(b) Assess the extent to which an improvement in labour productivity is beneficial to the Standard of living in Singapore. [15]

Question requirements:

- Explain impact of improvement in labour productivity in SG on SOL positive and negative, material and non-material
- Weight impact

Explain improvement in labour productivity

Backdrop: Singapore economy faces tight labour market → to attain sustainable, non-inflationary growth, need to increase productive capacity. Since gvmt is unable to increase size of labour force much further (political, social instability; infrastructure unable to cope) the better alternative is to improve productivity of each worker.

Examples of measures: STEP, SPUR, CET, etc. Even PIC can help to improve labour

Examples of measures: STEP, SPUR, CET, etc. Even PIC can help to improve labour productivity though enabling workers to work with faster and more efficient equipment

T: Improvement in productivity in SG is beneficial to SOL

Impact on workers

- Improved material SOL through higher
- Wages ought to be paid according to productivity level of the worker (because demand for worker and his/her skills increases)
- Higher productivity → higher wage as fair payment
- Worker productivity can be enhanced not only through skills enhancement, but also through the use of better and more labour-efficient technology and machines
- If it is through the latter → fewer people needed to fulfil the same purpose and produce the same output
- E.g. pre-fabrication of housing units has decreased the amount of labour needed in the construction industry to piece together a house brick by brick, steel bar by steel bar.
- Those who are able to upgrade themselves & are sufficiently adaptable to handle the changes will remain employed and can enjoy higher compensation -> higher SOL

AT: Improvement in productivity in SG is not beneficial to SOL

- For workers who do not upgrade themselves → increase in no. of workers in that particular labour market → higher supply → depressed wages
- However there will be a significant amount of people who risk being laid off because technology has replaced them → structural unemployment.

Impact on firms

- LR: when labour productivity rises and translates into lower costs/higher revenue/higher profits for the firms, firms are able to pass these on to the workers in terms of higher pay
- SR: if firms bear the cost of the improvement in labour productivity (e.g. training courses) → higher cost of production incurred → might lower profits in the SR → might be unable to afford passing on pay increases immediately to worker until results are

	seen. ev: Especially so for SMEs with tight manpower numbers and budget constraints and lack of proper staff training programs
Impact on economy	
 With higher labour productivity → each worker can produce more if fully and efficiently employed → productive capacity increases → LRAS rises In face of rising AD in SG close to full cap., this allows SG to experience potential and sustainable actual growth → rise in real income levels across SG (give AD/AS analysis) In face of rising cost-push pressures from labour crunch shortages which has been translating into significantly higher prices (especially in the F&B industry, tourism industry, construction industry), this allows firms to have some respite from the rising costs of production and consumers from the rising costs of living 	
 With productivity improvement schemes specifically targeted at the lower-skilled groups (SPUR), this can also improve income mobility and lower income 	
disparity → improve SOL	

Level	Descriptors	Marks
3	For a well-developed discussion of whether and how improvements in labour productivity in Singapore can improve SOL.	9-11
2	For an under-developed / one-sided answer of whether and how improvements in labour productivity in Singapore can improve SOL. For lack of consideration of context of Singapore	6-8
1	Smattering of points about whether and how labour productivity improvements can improve standard of living. Conceptual errors present.	1-5
E2	For insightful evaluative comment well-substantiated by economic analysis	3-4
E1	For unsubstantiated evaluative comment	1-2