RAFFLES INSTITUTION
YEAR 5 H1 ECONOMICS
LECTURE NOTES
Theme 3: The National Economy

ECONOMICS

KEY ECONOMIC INDICATORS

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- 4.2 Singapore's Standard of Living

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(References in bold are recommended resources for the A Level Economics student.)

***At the end of this lecture, candidates should be able to*:**

- Understand the meaning of standard of living and explain how the quantitative and qualitative aspects may be measured
- Compare economic performance and living standards over time and over space (between countries)
- Understand the key economic indicators of Singapore

1 INTRODUCTION TO MACROECONOMICS

Economics is traditionally divided into 2 parts: microeconomics and macroeconomics.

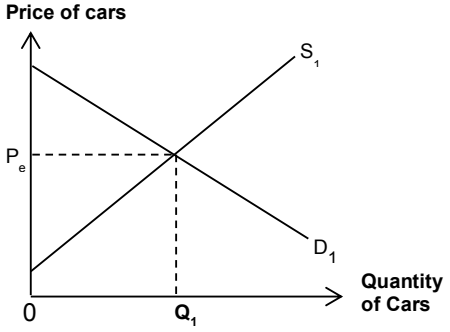
Microeconomics considers **individuals, households and firms' behavior** in **decision making and allocation of resources**. It generally applies to particular markets of goods and services and deals with individual and economic issues. For instance, how taste & preferences increase demand for a good such as apples; causing price and quantity to increase.

Macroeconomics is, however, on the ***aggregate*** economy as it considers the **economy as a whole.** For instance, how pessimism in the economy causes firms to reduce workers, leading to rise in unemployment levels.

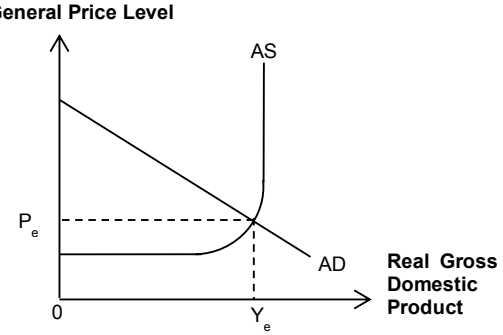
Macroeconomics also studies **relationships** and **connections** between one country and another. For example, how a slowdown in China's economy can affect Singaporean businesses or how Brexit will affect Singapore based firms exporting to UK.

Recall: In *Theme 1: The Central Economic Problem*, we studied how the problem of scarcity affects economies. Because of scarcity, limited resources must be efficiently allocated to different markets to **maximise society's welfare**. The aim of every society is maximisation of societal welfare. From a macroeconomic perspective, this is referred to as a rise in **living standards**, which can result from an improvement in the **economic performance** of the country.

In *Theme 2: Markets*, we dealt with the production and consumption of goods and services in isolated markets, for example, the market for oil, food, cars etc. Models of resource allocation were used to determine the equilibrium prices and output levels of specific goods/services. In macroeconomics, we are concerned with the **aggregation of prices and output levels** of **ALL goods and services** produced in **all markets** in an economy. For instance, instead of determining the price and quantity of cars traded in Singapore, we are concerned with the **general price level** (GPL) of all goods and services in an economy, as well as the **total production** of all goods and services in an economy.



Market for cars in Singapore



Singapore's economy

Also, in *Theme 2: Markets*, resource allocation in the free market is the result of consumers and producers acting as individual self-interested economic agents, whose demand and supply give rise to market outcomes. Governments intervene to influence market outcomes only when specific markets fail. However, in macroeconomics, **governments are the key economic agents** that intervene with **macroeconomic policies** in order to achieve **macroeconomic aims** such as economic growth, price stability and low rate of unemployment.

In *Theme 3: The National Economy*, we will study the **macroeconomic aims, issues and policies** relating to growth, income distribution, inflation and unemployment, with particular reference to the Singapore context. We will also study the impact of **global (external) trends and developments** on the national, regional and international economies, and their implications for policy choices and governmental decisions.

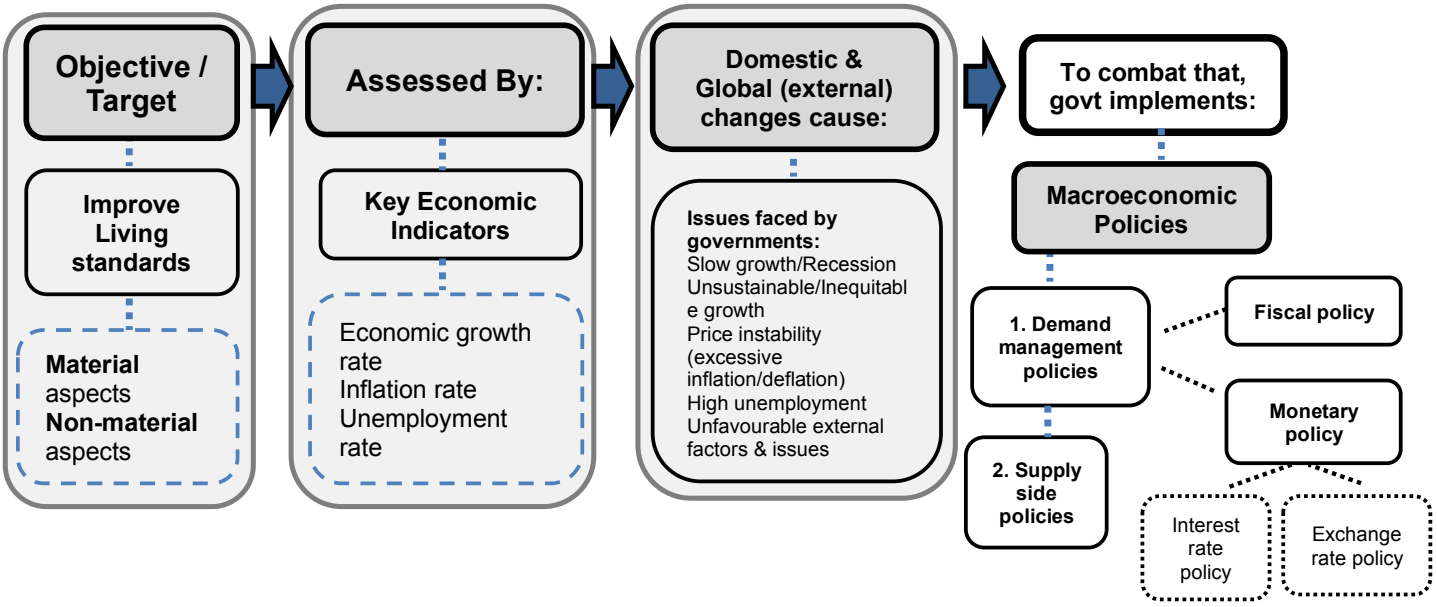


Figure 2: Overview of Theme 3: The National Economy

2 Living standards and its indicators

The ultimate goal of all economies is to raise living standards of its people to let them enjoy a higher level of welfare or well-being. Standard of living involves quantitative and qualitative aspects: **material** and **non-material** standard of living.

2.1 MATERIAL STANDARD OF LIVING

Material standard of living refers to the **quantity** of *goods and services available for consumption by the* **average** person in the economy in a given time period. It generally refers to the level of wealth, comfort, material goods and necessities available to the average person to satisfy as much of his material wants as possible.

2.1.1 Indicators of Material Standard of Living

Definition: Gross Domestic Product is the money value of all the final goods and services produced within the geographical boundary of a country during a given time period.

Why GDP is a measurement of the national income of a country?
The total value of all final goods and services produced should be equal to both the *total income earned by workers* in an economy as well as the *total expenditure spent by consumers* in an economy. Thus, GDP reflects the national income of the people in residing in the country.

Real GDP is a measurement of GDP (the total economic output of a country) **adjusted for price changes** (inflation or deflation). Using the real GDP helps to eliminate the effects of inflation where rising prices over-state the actual value of the good or service produced and enjoyed by consumers.

Real GDP per capita is average real GDP. It is a measure of the total economic output of a country that takes real gross domestic product (real GDP) and divides it by the number of people in the country. Dividing the real GPD by the population size gives us the average values for each person.

Real GDP per capita is **most commonly used** to assess the material standard of living of a person since real GDP per capita is *adjusted for inflation and population changes*. Hence, **a rise in real GDP per capita** reflects an increase in the (actual) amount of goods and services available for consumption for an average person in the economy, signalling a rise in material living standards. The methodology for calculating real GDP and per capita values will be covered in later lectures.

Ranking (based on WorldBank Data) on Real GDP per capita (US$), 2017

1	**LUXUMBERG**	**$107,865**
2	**NORWAY**	**$91,218**
3	**SWITZERLAND**	**$76,667**
4	**IRELAND**	**$74,433**
5	**QATAR**	**$65,696**
10	**SINGAPORE**	**$55,235**

Important:
When explaining how Real GDP per capita is used to reflect material SOL, there are 3 key issues to explain: **#1 -** GDP measures national income and thus reflect the goods and services produced in the country. **#2** - Real figures are important as inflation effects is taken into consideration. Thus the value of goods/services is based on actual quantity rather than price increments. And **#3** – per capita is necessary to calculate the average person's purchasing ability and not the whole country.

2.1.2 Problems with Real GDP per Capita as an Indicator

It is important to note that real GDP per capita best measures material welfare, although it may also be a proxy for assessing non-material welfare as the two can sometimes be related to each other since having more goods and services to enjoy will usually mean a better quality of life. Nonetheless, even purely as a measure of material welfare, its use is limited by problems arising from:

1. Income distribution
GDP measures the total quantity of goods and services produced in an economy but it conveys no information about **who gets to enjoy** those goods and services. If growth occurs in an unequal manner, the distribution of goods and services to consumers will also be unequal and inequitable. In this case, the use of average values like the real GDP per capita becomes a weak measure of the consumption of an average individual. Therefore, the higher the Gini coefficient[1], the less we can trust real GDP per capita as a measure of material welfare for the average person.

For instance, supposed Country A's real GDP per capita is $80,000. That would imply a rather high material standard of living for the average person. However, if Gini coefficient for the country is 0.8. This would therefore imply that the income generated in Country A is concentrated on a small minority group of people. Thus, the average citizen in Country A may not be living as comfortably as what the real GDP per capita suggest.

2. Composition of GDP
GDP does not account for the composition of an economy's output as **production does not always equal consumption**. GDP can be measured by

[1]Gini coefficient: a measure of income inequality that condenses the entire income distribution for a country into a single number between 0 and 1: the higher the number, the greater the degree of income inequality, which means the real GDP per capital is not a good measure of the average person's level of material welfare in that country .

expenditure from consumption, investment, government spending and net exports. If GDP rises because of investments, government spending or net exports, the rise may not be directly related with an increase in consumers' consumption levels.

Rising investment occurs when more factories and plants are produced. This will not raise consumers' material welfare in the current period. Nonetheless, because investment contributes to potential growth, consumers' welfare in future periods may be raised to higher levels when GDP rises because of investment.

How the growth in GDP attributed to government expenditure affects material welfare depends on what the government spends on. If the expenditure is on provision of public goods and merit goods, it would be related to improving material welfare. However, if it is spent on defence goods, it is unlikely to produce much tangible improvements in living standards or material well-being of its people.

If increasing net exports is the source of GDP growth, then the growth of production is not enjoyed by the domestic consumers, but by foreign consumers instead.

Therefore, since GDP measures production and not consumption, real GDP per capita is not a precise measure of the quantity of goods and services enjoyed by a person in the country.

2.2 NON-MATERIAL STANDARD OF LIVING

Non-material standard of living refers to the **qualitative** aspects of welfare. Non-material well-being is broad as welfare can be in terms of access to healthcare, education, safety, freedom, level of stress, depletion of non-renewable resources and pollution, among many other aspects.

2.2.1 Indicators of Non-material Standard of Living

Real GDP per capita may function as an indirect **proxy** for non-material welfare, as a rise in average income levels allows a person to enjoy more goods and services that enhance his non-material welfare. For instance, higher incomes allow a person to access better quality healthcare and education, or to enjoy more leisure activities.

However, there are also possible sources of tension between GDP growth and non-material welfare. If real GDP growth comes at the expense of working longer hours, less leisure time is available for family or for cultural and educational pursuits. This compromises non-material welfare. Furthermore, GDP could grow in an unsustainable manner as discussed under market failure, resulting in environmental problems that could affect the health and well-being of a person residing in the country.

Therefore, other measures are used to directly measure aspects of non-material welfare. Different indicators may aim to proxy the same intangible aspect of welfare. These indicators are usually measured through a population census. The list is not exhaustive, but common aspects of welfare measured include:

- *Healthcare*

Common measures of healthcare include **life expectancy** rates as well as **infant mortality rates**. These can indicate the quality of healthcare available in the country. The ratio of the **number of doctors, dentists and nurses** to the population may indicate the quantity of healthcare available too.

- *Education*

Literacy rates, mean **years of schooling** and the **highest qualification attained** by the population can also be measured to indicate the quantity and quality of education.

- *Pollution*

Different countries have different **air quality index** since their air may be polluted by different types of pollutants. In Singapore, the traditional **pollution standard index (PSI)** is used. During the haze period, the **$PM_{2.5}$ concentration** is also used as it better indicates the extent of the haze.

- *Stress Level*

Data on the **number of hours worked** per week or annually can be measured to proxy stress levels, although it is clear also that working longer hours may not necessarily mean greater stress levels. Alternatively, **job satisfaction surveys** can be used to qualify the level of stress.

- *Security*

Crime rates may give an indication on the physical safety felt by citizens of a country. The **corruption perception index** can be used to indicate the confidence a person will have in his government.

The relationship between real GDP per capita and non-material welfare is unclear because real GDP per capita may be positively related with certain aspects of non-material welfare, but negatively related with other aspects.

Direct relationship	**Inverse relationship**
Healthcare standards Education levels	Pollution levels Stress levels

2.2.2 Problems with Qualitative Indicators

Qualitative or welfare indicators are highly subjective because fundamentally ***welfare cannot be quantified***. Proxies are highly limited as collection of such data is costly and may not be accurate. For instance, it is almost impossible to measure security and happiness and measuring the number of doctors implies nothing about the quality of healthcare, or how accessible it is to those who need it. Therefore, welfare indicators need to be constantly reviewed and

refined in order to isolate the effect they mean to measure. Using various indicators to measure an aspect could also provide a better picture. If all indicators of healthcare suggest improvements, it is likely that the country is indeed experiencing better healthcare.

2.3 COMPOSITE INDICATORS

Given that both real GDP per capita and individual welfare indicators are limited in their ability to assess standard of living, composite indicators that **combine material and non-material measures** were developed to give a more complete picture of the level of human well-being.

- *Human Development Index*

The Human Development Index (HDI) is the most widely used indicator and it measures the average attainment of a **long and healthy life**, **knowledge** and a decent **material standard of living**. It includes measurements of life expectancy at birth, mean number of years of schooling for adults and expected years of schooling for students, and also the PPP-adjusted real GNI per capita (PPP or purchasing power parity is to be explained later)(GNI refers to Gross National Income).

- *Measure of Economic Welfare*

The Measure of Economic Welfare (MEW) adjusts measures of total national output such as GDP or GNI by adding the value of **leisure** and of transactions in the **underground economy**. It also deducts the **cost of environmental damage**. It involves the difficult task of assigning monetary values to non-marketed goods.

- *Index of Sustainable Economic Welfare*

The Index of Sustainable Economic Welfare (ISEW) balances the GDP with **income distribution**, costs related to **pollution**, **environmental damage** and **resource depletion**. It was developed with the intention to replace GDP in order to measure sustainable economic growth. It later developed into the **Genuine Progress Indicator**, which is increasingly accepted as a measure of sustainability.

- *OECD Your Better Life Index*

The Organization for Economic Cooperation and Development (OECD) has developed the 'Your Better Life' index which attempts to measure welfare based on what people perceived to be important to them. It measures the following 11 aspects: **income, employment, housing, health, social relationships, education, environment, the administration of institutions, security, general satisfaction and work-life balance**. The OECD has an interactive website which allows the indicator to be easily adjusted to reflect changes in the relative importance of different aspects. This is to account for different perspectives of what constitutes welfare.

Why composite indicators are not used more often for assessing SOL?

While composite indicators take into account both material and non-material aspects of standard of living, they may also be limited because of difficulties in determining the **weightage** of each aspect. For instance, a country may rank

lowly using the OECD Your Better Life Index because of a lack of social relationships. However, the residents in the country may not value social relationships as much as another country, and may enjoy more happiness if they had more privacy instead. The subjectivity of what aspects determine overall welfare limits the usefulness of composite indicators in measuring living standards.

*Knowledge of composite indicators are useful in highlighting alternatives to Real GDP per capita as the tool for comparison. However, it is sufficient to be familiar with one or 2 more commonly used ones and able to explain what non-material indicators go into its computation.

Sectional Summary

- Standard of living comprises of both material and non-material standard of living.
- Material standard of living refers to the **quantity** of goods and services consumed by an average person in an economy, and can be measured using real GDP per capita.
- However, the use of real GDP per capita is limited due to its failure to account for income inequality and other aspects.
- Non-material standard of living refers to the **qualitative** aspects of welfare. Real GDP per capita is not a good measure of non-material standard of living. Thus, other indicators that can proxy welfare are used. These include life expectancy, literacy rates and air quality index.
- Composite indicators such as the HDI allow standard of living to be measured more holistically and comprehensively and are good supplements to national income statistics.

3 COMPARISONS OF ECONOMIC PERFORMANCE AND LIVING STANDARDS

Indicators of economic performance and living standards are already measured by indicators that have limitations. On top of these, **further limitations emerge** when performing comparative analysis of living standards of a country over time and between countries (over space).

3.1 COMPARISONS OVER TIME

1. Nominal and Real Concepts

Nominal values are monetary values measured at *current* prices, while **real** values are monetary values corrected to **eliminate the effects of inflation** by using *base year* prices. For instance, if the price of a lunch pack is $5 today, the nominal expenditure on 10 packs of rice is $50. If the price of a lunch pack is $2 in the base year, for instance in 2005, then the real expenditure on 10 packs of rice is $20.

	Price of lunch pack	Quantity	Total expenditure
2018	$5	10	$50
2005 (base year)	$2	10	$20

*In nominal terms, total expenditure has increased from $20 to $50, but in real terms, the same number of packets of lunch packs (10) are consumed. The increase was purely due to the increase in price.

The purpose of measuring GDP is to **measure production levels**. Typically, if GDP grows over time, it means that production levels are increasing. However, because of the way GDP is measured, changes in price that occur without any change in production could increase GDP as well. Therefore, nominal GDP cannot be used to compare production level over time – real GDP should be used to compare economic growth across time instead. This is because changes in nominal GDP reflect changes in both the price and volume of output produced, while changes in real GDP **eliminate the effects of inflation** and reflect **changes in the volume of output produced** only.

To obtain real values of GDP, the nominal GDP is divided by the current prices and multiplied by the base year prices. This is given as:

$$Real\ GDP = \frac{Nominal\ GDP}{CPI_{current\ year}} \times CPI_{base\ year}$$

GDP at Current Market Prices

Year	2010	2011	2012	2013	2014	2015	2016
GDP (S$m)	322,361.1	346,172.7	361,498.7	375,751	388,169.3	402,457.9	410,271.9

Singapore Department of Statistics

GDP at year 2010 Market Prices

Year	2010	2011	2012	2013	2014	2015	2016
GDP (S$m)	322,361.1	342,371.8	354,937.3	371,531.5	383,643.6	391,348.5	402,159.8

Singapore Department of Statistics

This would enable us to see how much real GDP had changed from one year to another. In other words, it would eliminate increases in nominal GDP that were merely due to an increase in prices. By removing the effect of inflation the real GDP tries to measure the **actual increase in goods and services produced**. Thus, changes in real GDP is used to gauge the standard of living over a period of time rather than nominal GDP.

2. Population Growth

Rising population is a growth factor, and increases in population naturally lead to greater production as more labour resources are available. Therefore, there is no need to eliminate the effects of population growth when we use GDP to assess aggregate economic performance over time.

However, growth in GDP attributed to increasing population does not translate to **increasing material welfare for the <u>average</u> person residing in the country**. If production levels rise with a larger rise in population, the share of goods and services available for consumption for an average person in the country is actually lower. This is why per capita values are used in the measurement of material standard of living in *Section 2.1 Indicators of Material Standard of Living*.

Real GDP per capita is measured in $ per capita, and is simply:

$$Real\ GDP\ per\ capita_{current\ year} = \frac{Real\ GDP_{current\ year}}{Population\ size_{current\ year}}$$

If real GDP of a country increases by 5% but its population increases by 10% for the year, then real GDP per capita decreases, since the numerator rises slower than the denominator. This indicates a fall in the standard of living of an average person in the country. It would be incorrect to say that the 5% economic growth resulted in greater welfare. Therefore, in comparing how material welfare changes over time, we must account for population changes as well.

3.2 COMPARISONS OVER SPACE

1. Purchasing Power Parity

Purchasing power parity (PPP) is a theory of exchange rates whereby **a unit of any given currency should be able to buy the same quantity of goods in all countries**. There is no purchasing power parity if 1SGD can be used to pay for a bus ride in Singapore but can pay for up to 4 bus rides in Malaysia. PPP-adjusted exchange rates will convert 1SGD to a value in Malaysia Ringgit (MYR) that allows it to pay for 1 bus ride in Malaysia too. Thus, purchasing power parity will need to take into account the prevailing exchange rate (or the **nominal exchange rate**), and adjust them for **differences in cost of living**.

Assuming 1SGD can exchange for 3MYR at the money changer, then the nominal exchange rate is 3MYR/SGD[2]. However, if the price of a bus ride is S$1 in Singapore, but cost RM2 in Malaysia, the PPP-exchange rate should instead reflect 2MYR/SGD so that when one S$1 is converted in Ringgit, it can buy the same amount of goods in Singapore as in Malaysia.

The rationale for using PPP-adjusted exchange rates to convert GDP figures lies in the need to **<u>account for differences in cost of living</u>** when comparing material welfare between countries. If the real GDP per capita in Singapore is higher than that of Malaysia's, an average person in Singapore may earn a higher income but may not necessarily have a better standard of living compared to an average person in Malaysia. This is because he may not be able to afford as many things despite a higher income since cost of living is higher in

[2] This exchange rate can also be expressed as 0.33SGD/MYR, which would be the price of Malaysia Ringgit measured in SGD.

Singapore. Therefore, welfare measurements concerning the purchasing power of incomes earned by individuals in a country require the use of PPP-adjustment to eliminate differences in cost of living between countries.

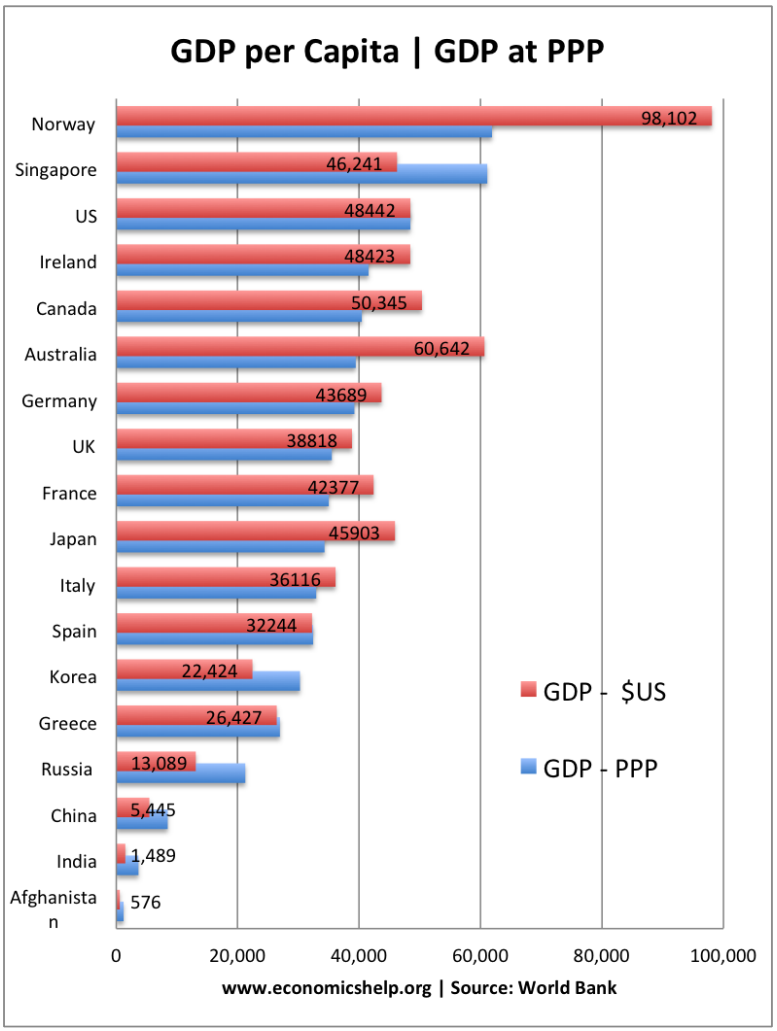


Figure 3: Comparing GDP per capita and GDP at PPP

Reference to Figure 3: For example, GDP per capita in Norway is $98,102. However, in Norway the cost of living is much higher (higher VAT, higher wages, higher rents). Therefore, even if you have a salary of $98,102 – it doesn't go as far as elsewhere in the world..

By comparison, in India, GDP per capita is $1,489 per year. However, in India, living costs are much lower and so that income goes much further. If we adjust for the relative cost of living in the different countries, the gap between India and Norway is much reduced.

Using GDP per Capita in $US, Norway's national income is 65 times higher than India.

Using GDP per Capita adjusted for PPP, Norway's national income is only 17 times higher than India.

When PPP-adjusted real GDP per capita is used, the differences in material standard of living between developed and developing economies tend to seem less stark since cost of living in developing countries is much lower.

The use of PPP-adjusted real GDP per capita in making comparisons about material welfare across space is limited because of the way it is derived. The idea is to compare the prices of the same basket of goods and services in two different countries, and use the ratio of the prices as the exchange rate.

Problems even with Purchasing Power Parity

However, **no two countries can produce the exact same basket**, which affects the accuracy of the comparisons. For example, if 1SGD allows a person in Singapore to pay for a bus ride either in Singapore or in Malaysia, we cannot say that 1SGD brings to consumers the same level of welfare regardless of country because the quality of the bus ride in Singapore and in Malaysia would be different. Having parity of purchasing power is largely a theoretical ideal. Furthermore, it is also difficult to determine the **composition of the basket**, since the basket should reflect consumption patterns of consumers. Yet, the consumption patterns are different across countries.

2. Difference in population

In making comparisons over space, differences in population must be accounted for. A country with a smaller population naturally has lower production levels. This does not mean that they enjoy less material welfare. The reasons are similar to why we take population changes into account when making comparisons over time.

3. **Difference in consumption patterns based on context of countries**

Goods consumed in any two countries may not be identical due to contextual differences, including climate. For instance, in temperate countries such as Germany, consumers spend more on woollen clothing and on heating during winters compared to consumers in tropical climates where consumers spend less on cheaper loin and cotton clothing, and do not experience winters. Therefore, Germany's greater expenditure will be reflected in its higher GDP. However, this does not imply that its residents are better off compared to residents in tropical countries. In practice, it is almost impossible to adjust national income figures for these sorts of differences.

4. Difference in accounting procedures

There is no internationally agreed method of measuring national income so not every country uses the same basis for their figures. Accuracy in data collection also varies. Thus, not the same variables are measured from country to country, and even the same variables may be measured to different degrees of accuracy.

Sectional Summary

- When comparisons are made, further limitations arise on top of the limitations that indicators already experience.
- When making comparisons over time, it is important to use real values of GDP in order to eliminate the effects of inflation.
- When making comparisons regarding welfare between countries over space, the GDP should be adjusted with the PPP-adjusted exchange rate in order to account for differences in costs of living.
- Other differences such as population size and context also create limitations for comparative analyses.

4 OVERVIEW OF THE SINGAPORE ECONOMY

Singapore is among the 'Four Asian Tigers' praised for its rapid economic growth and improvements in standard of living. Most studies attribute this to the **industrialisation** from the 1960s to 1980s, and the restructuring of the economy to focus on **human capital and value-added sectors** from the 1990s onwards. While economic progress is evident, new issues surrounding **sustainability**, **inclusiveness**, and **welfare** have arisen too. It is difficult to make a general statement about how our standard of living changed. Thus, attempts to analyse Singapore's economy must be comprehensive.

4.1 SINGPORE'S KEY ECONOMIC PERFORMANCE

Key Economic Indicators	2005	2010	2015	2016
Real GDP, $million (2010 prices)	232, 772.5	322, 361.1	391, 348.5	402,159.8
GDP growth, % (year-on-year)	7.5	15.2	2.0	1.9
CPI (2014 Base year)	77.3	87.8	99.5	98.5
Inflation rate %	0.5	2.8	-0.5	-0.5
Unemployment rate, %	3.1	2.2	1.9	2.1
Balance of Payments, $million	20,396.7	57,480.5	1,500.7	-2,455.3

In 2016, production and income levels increased from the previous year by about 1.9%, suggesting an expansion of the economy. It is likely that the increase in GDP is accompanied by rising employment levels, but absolute

employment levels are not reflected in these indicators. Nonetheless, unemployment rate remained relatively low, likely close to the non-accelerating inflationary rate of unemployment (NAIRU). Singapore continued to experience deflation, where prices generally fell by about 0.5%. This may be a cause of concern for the Singaporean government. Finally, the Balance Of Payments[3] recorded a deficit, which means that on the whole, Singapore bought more from the foreign economy than it sold to it. There would have been net currency outflow.

4.2 SINGAPORE'S STANDARD OF LIVING

Singapore's **Human Development Index** value for 2016 is 0.925, out of a maximum of 1. This puts Singapore at a position of 5 out of 188 countries, similar to her position in 2015. Much of the improvement of the HDI from 1990 to 2016 is attributed to improvements in material welfare, as the GDP increased by about 10 times during this period. Other notable improvements in welfare include the increase in life expectancy at birth by 11 years, and an increase in mean years of schooling by about 7 years.

The Singapore government also started to document the trend of **air quality indices** since 2007 in light of growing concerns over air pollution. While the total greenhouse emissions had increased by about 20% between 2007 and 2014, there was a dip in the annual mean of PM2.5 particles from 19 microgram per cubic metre the same period, to 15 microgram per cubic metre in 2016.

According to statistics from the Ministry of Manpower, the total paid **hours worked** per employee per week has dipped from 46.2 hours in 2010 to 45.5 hours in 2016. The paid overtime hours is approximately 3.3 hours weekly. This makes up an average of about 9-10 hours a day given a five-day work week. Concerns over our long work hours and high stress levels are not new, and are growing as our economy progresses. Such long work hours could greatly reduce our standard of living.

Sectional Summary

- Singapore has been doing well materially since its independence, quickly attaining the status of a developed country within 50 years.
- Singapore's desirable economic performance was a key factor influencing the improvements in standard of living. However, there are now growing concerns of sustainability, inclusiveness and other non-material aspects of welfare.

[3] The Balance of Payments (BOP) is a record of a country's international transactions between its residents and those of the rest of the world over a period of time.

Source:http://hdr.undp.org/

Human development index (HDI) of Selected Countries								
HDI Rank (2015)	**Country**	**1990**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
2	Australia	0.866	0.927	0.93	0.933	0.936	0.937	0.939
10	Canada	0.849	0.903	0.907	0.909	0.912	0.919	0.92
5	Denmark	0.799	0.91	0.922	0.924	0.926	0.923	0.925
21	France	0.779	0.882	0.885	0.887	0.89	0.894	0.897
4	Germany	0.801	0.912	0.916	0.919	0.92	0.924	0.926
12	Hong Kong, China (SAR)	0.781	0.898	0.905	0.907	0.913	0.916	0.917
9	Iceland	0.797	0.894	0.901	0.907	0.915	0.919	0.921
131	India	0.428	0.58	0.59	0.599	0.607	0.615	0.624
113	Indonesia	0.528	0.662	0.669	0.677	0.682	0.686	0.689
17	Japan	0.814	0.884	0.889	0.894	0.899	0.902	0.903
59	Malaysia	0.643	0.774	0.776	0.779	0.783	0.787	0.789
7	Netherlands	0.83	0.911	0.921	0.922	0.923	0.923	0.924
13	New Zealand	0.818	0.901	0.904	0.908	0.91	0.913	0.915
1	Norway	0.849	0.939	0.941	0.942	0.945	0.948	0.949
5	**Singapore**	**0.718**	**0.911**	**0.917**	**0.92**	**0.922**	**0.924**	**0.925**
2	Switzerland	0.831	0.932	0.932	0.934	0.936	0.938	0.939
16	UK	0.775	0.902	0.898	0.899	0.904	0.908	0.91
10	United States	0.86	0.91	0.913	0.915	0.916	0.918	0.92
115	Viet Nam	0.477	0.655	0.662	0.668	0.675	0.678	0.683
154	Zimbabwe	0.499	0.452	0.464	0.488	0.498	0.507	0.516