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**2018** HIGHER SCHOOL CERTIFICATE  
COURSE MATERIALS

# HSC Economics

## The Global Economy

### Term 4 – Week 3

Name .....

Class day and time .....

Teacher name .....

# Term 4 – Week 3 – Theory

## Globalisation and economic development

- differences between economic growth and economic development
- distribution of income and wealth
- income and quality of life indicators
- developing economies, emerging economies, advanced economies

## DIFFERENCES IN INCOME AND WEALTH

There is a significant difference in the standard of living between countries, despite progress in the last century. 1.4 billion people currently live in absolute poverty (i.e. under US\$1.25 a day) and the richest 5% of people earn 165 times that of the poorest 5%.

However, even though the gap is still large, there have been improvements in the living standards in all countries. Between 1981 and 2005 those living on under \$1.25 a day fell from 52% to 25% in developing countries. Life expectancy has also increased for developing countries from 56 to 67 years over the same period while infant mortality fell from 1/10 children to 1/15. The primary education completion rate in developing countries also increased from 78% to 87%.

This highlights the concept of **international convergence**. While there is still a large gap between the living standards of richer and poorer countries, this gap appears to be closing over time.

*The Economist* provides a good summary of the trends in living standards:

The “great divergence” between the West and the rest lasted for two centuries. A “great convergence” in living standards is under way as poorer countries speedily adopt the technology, know-how and policies that made the West rich. China and India are the biggest and fastest-growing of the catch-up countries, but the emerging-market boom has spread to embrace Latin America and Africa, too.

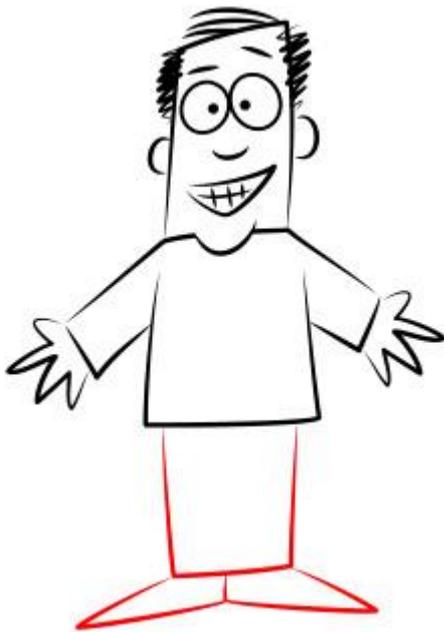
The share of the developing world’s population living on less than \$1.25 a day (the international definition of poverty) has fallen from 30% in 2000 to below 10%, according to an estimate by the Centre for Global Development, based on new data published by the World Bank in April. Such progress nurtured hopes of more to come. Were the emerging world able to maintain a 4.5-percentage-point growth advantage over the rich world, then other things being equal its average income per person would converge with that in America in just over 30 years: scarcely a generation.

And the pace of convergence is increasing. Debt-ridden rich countries such as America have seen scant growth since the financial crisis. The emerging economies, having escaped the carnage with only a few cuts and grazes, have spent much of the past year trying to check their economic booms. The IMF forecasts that emerging economies as a whole will grow by around four percentage points more than the rich world both this year and next. If the fund is proved right, by 2013 emerging markets (on the IMF's definition) will produce more than half of global output, measured at purchasing-power parity (PPP).

The paragraphs above provide an interesting conclusion about global living standards; however they also raise a pertinent question. How do we actually measure differences living standards? There are many ways we could measure someone's quality of life. We could measure how much food is on their dinner plate every night, how much time they spend in leisure as opposed to working or even.

A common method that is used is to compare the differences in income between individuals in two countries. This makes some logical sense as the higher a person's income is the more goods and services they can buy and hence the higher the level of utility they can derive. Gross National Income (GNI) is the sum of value added by all resident producers in an economy plus primary income from secondary sources and hence GNI per capita gives the average income per person. This suggests that we can create a list of countries, ranked in order of GNI per capita and observe the countries with the highest livings standard to the lowest.

Unfortunately it is not that simple and there is still one major consideration to take into account. Study the scenario below where we compare Josh and Jenny:



Josh is an accountant living in Australia. He earns the equivalent of US\$100 a day. With this money he can afford all his food, rent for a 2 bedroom apartment and a new t-shirt every day.



Jenny is a professional artist living in Thailand. She also makes the equivalent of US\$100 a day. With this money she can afford all her food, rent for a 3 bedroom house and buys 2 new t-shirts and 1 pair of shoes every day.

Can you see the issue with using income to rank peoples standard of living? Josh and Jenny both earn the same amount of money, but who has a higher living standard?

Clearly, prices of goods and services are not the same across all countries and hence GNI per capita does not show how much utility a certain amount of income can bring. This is why we first adjust GNI statistics to Purchasing Power Parity (PPP) where exchange rates are equalized so that different currencies reflect the prices of identical goods and services. Hence GNI per capita (PPP) is the most accurate measure of income.

Advanced economies take over 1/2 the worlds income on a PPP basis for only 1/7<sup>th</sup> of the world's population. The average GNI per capita (PPP) for an advanced economy is US\$38000 while the average GNI per capita (PPP) is only US\$6000 in poorer economies.

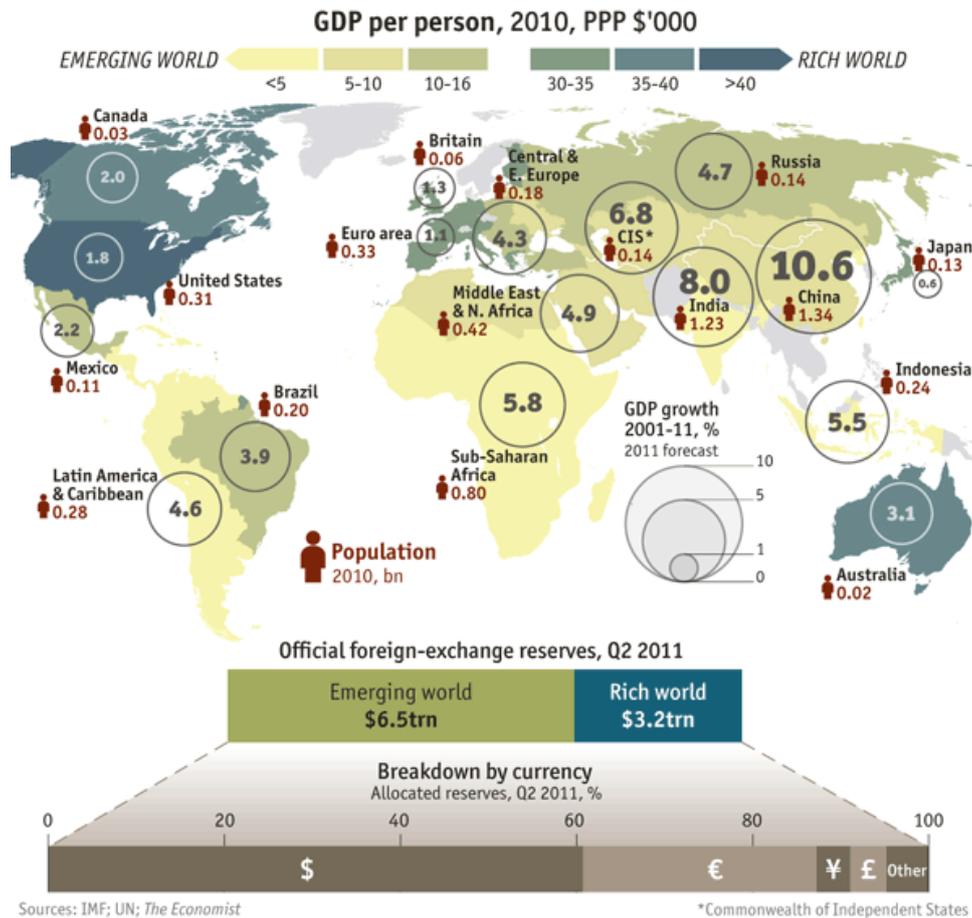
Another dimension of global inequality is the distribution of wealth. Remember, income is a stream of money earned from providing factors of production to the production process whereas wealth is a store of money or assets generated over time. Households in North America (34%), Europe (30%) and richer Asia-Pacific countries (24%) dominate ownership of global wealth while the remaining countries are left to share a little over 10% of global wealth. Wealth is important as it provides a safety net for people and can be used to generate more income, hence this inequality of wealth distribution is one of the major reasons why inequality of living standards is entrenched in the global economy.

#### **Returning To Globalisation and International Convergence**

So where does globalisation stand in all of this? At the start of this section we learned that differences in living standards and income look to be fading away, but why is this the case? It turns out that globalisation can be used to somewhat explain this trend.

Globalisation raises income for poor economies by reducing barriers to trade (especially useful when agriculture barriers are removed as this is the major production in developing economies) and increased FDI and TNC activity creates employment and production.

However, globalisation seems to increase income inequality within these countries. The Gini coefficient has increased by 0.45% a year for the last 30 years in developing nations. This suggests that while the overall level of income is increasing due to globalisation, these benefits are not being shared equally.



## DIFFERENCES IN ECONOMIC GROWTH AND DEVELOPMENT

In the previous section, we studied differences in income and ranked countries by GNI per capita (PPP) in order to compare living standards. Does that mean if we created a list of countries ordered by GNI per capita (PPP) that we could rank countries in terms of quality of life, seeing as we've now taken into account the fact that prices are different across economies?

Again, the answer is no. Apart from differences in price levels and purchasing power, there is a whole host of other factors that contribute to living standards in different countries and not all these factors can be measured by the GNI per capita (PPP). For example, even if you had the same income as someone else, you could still have a better standard of living because your country has a cleaner air to breathe, better education, better public infrastructure, more equitable income distribution and less disease. These factors clearly do contribute to quality of life but aren't necessarily reflected in the level of income.

This idea is captured by the concept of economic development. Economic development is a broad measure of welfare in a nation that includes indicators of health, education and environmental quality as well as the material living standard.

Economic Growth is an important indicator of the health of an economy. It is best defined as:

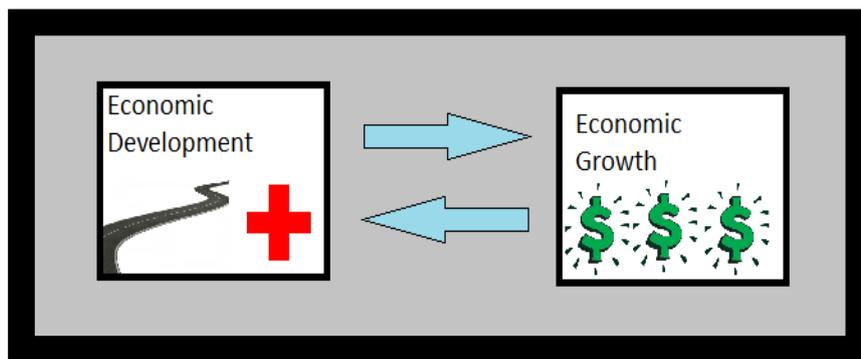
**Economic Growth:** Increases in the real GDP over a period of time.

Economic Growth is a quantitative measure of increases in the productive capacity of an economy which lead to increased income. Economic growth can occur through two mechanisms:

- Increased use of factors of production. This means using land, labour, capital and entrepreneurial resources which were idle or unutilised prior. It is an increase in the total inputs into the production process.
- Increased productivity of existing resource use. This means there aren't any more inputs, but the existing inputs are being used more efficiently to create more outputs.

Economic growth means more goods and services are being produced and therefore consumed. This translates into higher material welfare and higher standards of living. Economic growth means that an economy's production possibility frontier has shifted outwards.

Economic Development is a broader concept that economic growth or income and attempts to measure well-being and welfare rather than simply how much extra money people have.



To measure economic development we have developed the Human Development Index (HDI). It is based on 3 main indicators:

1. Life expectancy at birth, which measure health and nutrition in a country
2. Level of educational attainment, including average years of education and the expected years of education. Education is important for the future of an economy.
3. GNI per capita (PPP) which represents the ability of households to access goods and services

In 2010 Norway was given the highest HDI reading of 0.938 whereas Zimbabwe had the lowest of only 0.140. Australia is second after Norway with a HDI of 0.937.

In some cases countries have similar HDI's but very different levels of income, showing how important some of these other factors can be in determining living standards. For example, France and Israel both have an HDI of 0.872 but France has a GNI per capita (PPP) of US\$34000 while Israel has only US\$2700.

Countries are categorised into three groups which reflect the problems and issues faced by that country and their level of economic development.

<b>Advanced Economies</b>	Advanced economies refer to high income, industrialised or developed economies. This includes 34 advanced economies. These are countries with high levels of economic development, close economic ties and established political and economic institutions. They have high income levels with GNI per capita above US\$12,276. Economic growth tends to be slow due to their already largely industrialised state. Services and advanced manufacturing are the main sectors contributing to GDP.
<b>Developing Economies</b>	Developing economies experience low standards of living and income. They are characterised by low levels of education, weak human resources and limited industrialisation. This has resulted in large numbers of people living in absolute poverty. Developing countries experience moderate levels of economic growth however they also have a high population growth rate. Production in these economies is heavily weighted towards agriculture and dependence on foreign aid is high.
<b>Emerging Economies</b>	Emerging economies are in the process of industrialisation and experience the highest rates of economic growth in the world. Income levels tend to vary however these countries are all experiencing strong growth in income levels. The industrialisation process means that these countries have large manufacturing sectors.

You should be careful when using categorisation systems like this as they have many limitations. Many dissimilar countries may end up being classed in the same group and some countries may not really fit into a group at all.

<b>Advanced Economies</b>			
Australia	Austria	Belgium	Canada
Cyprus	Czech Republic	Denmark	Estonia
Finland	France	Germany	Greece
Hong Kong SAR	Iceland	Ireland	Israel
Italy	Japan	Korea	Luxembourg
Malta	Netherlands	New Zealand	Norway
Portugal	Singapore	Slovak Republic	Slovenia
Spain	Sweden	Switzerland	Taiwan Province of China
United Kingdom	United States		

Emerging and Developing Economies			
Islamic Republic of Afghanistan	Albania	Algeria	Angola
Antigua and Barbuda	Argentina	Armenia	Azerbaijan
The Bahamas	Bahrain	Bangladesh	Barbados
Belarus	Belize	Benin	Bhutan
Bolivia	Bosnia and Herzegovina	Botswana	Brazil
Brunei Darussalam	Bulgaria	Burkina Faso	Burundi
Cambodia	Cameroon	Cape Verde	Central African Republic
Chad	Chile	China	Colombia
Comoros	Democratic Republic of Congo	Republic of Congo	Costa Rica
Côte d'Ivoire	Croatia	Djibouti	Dominica
Dominican Republic	Ecuador	Egypt	El Salvador
Equatorial Guinea	Eritrea	Ethiopia	Fiji
Gabon	The Gambia	Georgia	Ghana
Grenada	Guatemala	Guinea	Guinea-Bissau
Guyana	Haiti	Honduras	Hungary
India	Indonesia	Islamic Republic of Iran	Iraq
Jamaica	Jordan	Kazakhstan	Kenya
		Kuwait	

**Gloablisation and Economic Growth and Development**

Again, we come back to globalisation to attempt to explain the trends in economic growth and development over the last 30 years. Between 1980 and 2010 we have seen HDI levels converge between all countries. All countries experienced a rise in HDI over this period, with developing and emerging economies experiencing a much larger increase than advanced economies (except for Zimbabwe which was the only country who's HDI actually fell). Hence, as stated above, there is a convergence in living standards.

Globalisation has definitely had large role to play in this convergence, especially through its effect on economic growth. Overall there is no evidence that globalisation has actually caused GWP growth to increase, with annual GWP growth actually falling from 3.3% in the 1980's to 2.6% in the 2000's. However, growth in specific regions has increased, specifically in regions where developing and emerging economies are located. East Asia and the Pacific has averaged 8.7% annual economic growth and South Asia has averaged 6.4% economic growth. Even sub-Saharan Africa has seen economic growth increase to 3.6%. The faster growth in these regions means income for the people living in these countries are rising faster than those in advanced economies as well as there being more resources for healthcare and education infrastructure.

However, one way that globalisation has detracted from economic development has been through its effect on the environment. The increase in trade and production associated with emerging and developing economies has led to many environmental issues such as resource depletion, erosion, pollution and poisoning of water supplies. Emerging economies are especially guilty of environmental damage as in the pursuit of foreign investment and economic growth they often adopt policies that compromise the natural environment.

More recently, globalisation has forced environmental issues into the public eye and forced governments to own up to their environmental degradation. Globalisation also helps the spread of environmentally friendly technological innovations. Many environmental issues such as climate change are global issues and globalisation has allowed a coordinated international approach to minimizing such issues.

A study performed by the OECD efficiently categorises the main environmental effects of globalisation:

Globalisation, which is partly synonymous with rising international trade, has fostered the rapid production, trade and consumption of material goods in unprecedented quantities. This has weighted the ecological footprint of human activities around the world. While it's still difficult to assess the impact of globalisation on the environment, it's quite obvious in some areas.

- **Globalisation promotes CO2 emissions from transport.** As critical drivers of globalisation, transport systems have multiplied alongside international trade. Emissions from road transport (mainly cars and lorries) are of course very high, but more so within national borders. But the opening of some regional areas (such as the suppression of border controls among European Union countries) has given a strong boost to road freight transport.
- **Globalisation indirectly promotes CO2 emissions linked to industrial activity and consumption.** While the Industrial Revolution was a vector of globalisation (see Chapter 2), the growth in cross-border trade and investment in turn fostered industrial activity. This is often a major source of GHG emissions, as in the case of electricity generation, which still largely involves burning coal, oil and derivatives. The intensification of globalisation, then, accentuated the greenhouse effect and global warming. The very rapid development of emerging countries over the past several years has also led them to become major emitters of GHG. As we've seen, these countries developed largely thanks to globalisation, which fostered the industrialisation of the Asian giants – often at the expense of the environment.
- **Globalisation encourages deforestation.** Deforestation is an indirect but very significant cause of the greenhouse effect. Deforestation is mainly due to the conversion of forests into agricultural land, especially in developing countries. Take Brazil: for a little over a decade, much of its agriculture was export-oriented. Between 1996 and 2003, Brazilian soy exports to China rocketed from 15 000 to 6 million tonnes. This dynamism involved deforestation and converting part of the rainforest into farmland

# Term 4 – Week 3 – Homework

1) Explain the trend in global living standards over the last 30 years

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2) Explain how international organisations have contributed to the trend in living standards over the last 30 years

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3) Discuss the effectiveness of the Gross National Income (GNI) as a measure of living standards

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9) How has globalisation impacted economic inequality between nations

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10) Which of the following factors are considered in a countries HDI score?

- a. Life expectancy at birth, average and expected years of schooling, income per capita
- b. Life expectancy, Gross National Income, environmental factors
- c. Life expectancy, GDP and unemployment
- d. Life expectancy, educational attainment, development of institutions

11) Which of the following is NOT a cause of inequality between nations

- a. Agricultural Protection
- b. Trading Blocs
- c. The distribution of international investment flows
- d. Differing weather conditions across continents which affects the ability to produce crops and other agricultural goods required for basic living.

12) Which of the following is NOT a way that technology has accelerated globalisation

- a. Better freight technology allows goods to be transported further and faster
- b. Computer networks allows funds to flow instantaneously through markets around the world
- c. Medical advances have allowed better healthcare to be accessed around the world
- d. Social media like Facebook and Twitter has allowed information to flow between nations instantaneously

**End of homework**

