**Measurement methods**

**Section 4: Development economies**

4.2 Measuring development

**Syllabus item: 168 Weight: 3**

*168. Single indicators*

**Key terms**

**Single indicators**

* Solitary measures to asses development
* i.e. GDP and GNI

**Net property income from abroad**

* The difference between incomes earned and incomes paid abroad.

**IB Question**

* Distinguish between GDP per capita figures and GNI per capita figures.
* **Gross Domestic Product (GDP) per capita**
* Total of all economic activity in a country ÷ population
* Income of foreign companies producing within a country would also be included
* Excluding net property income from abroad
* **Gross National Income (GNI) per capita**
* The total income that is earned by a country’s f.o.p. ÷ population
* Equivalent to GDP plus net income received from abroad or paid abroad
* The activity of its own companies producing outside of the country would

**IB Question**

* Compare and contrast the GDP per capita figures and the GNI per capita figures for economically more developed countries and economically less developed countries.

|  |  |  |  |
| --- | --- | --- | --- |
| Country | GDP per capita(current US dollar) 2008 | GNI per capita(current US dollar) 2008 | GNI – GDP (percentage of GDP) |
| **USA** | 46350 | 47930 | **3.4** |
| **France** | 44508 | 42000 | **-5.6** |
| **Cameroon** | 1226 | 1150 | **-6.2** |
| **India** | 1017 | 1040 | **2.3** |
| **Indonesia** | 2246 | 1880 | **-16.3** |

Source: World Bank, GDP per capita and GNI per capita figures

**Developed countries**

* GDP < GNI
* They have significant earnings from assets owned abroad

**Developing countries**

* GDP > GNI
* There is a significant movement of earnings from assets leaving the countries to go abroad

**Exceptions**

\***-France:** developed country but has a **negative figure** 🡪 have a negative flow of net property income from abroad

\***-India:** developed country but has a **positive value** 🡪 have a positive net property income from abroad

**IB Question**

* Distinguish between GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates.

**Big Mac Index**

* Invented by *The Economist* in 1986 as a lighthearted guide to whether currencies are at their “correct” level.
* Based on the theory of purchasing-power parity (PPP), the notion that in the long run exchange rates should move towards the rate that would equalise the prices of an identical basket of goods and services (in this case, a burger) in any two countries.

E.g.)

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Big Mac Price in local currency | Big Mac price ($) | Under(-)/Over(+) valuation against $ |
| USA | 4.45 | 4.45 $ | 0 % |
| Thailand | 70.00 | 2.36 $ | -47 % |
| Sweden | 4.60 | 3.65 $ | 66 % |
| Singapore | 16.37 | 2.60 $ | -18 % |

**Purchasing power parity (PPP) exchange rate**

* It attempts to equate the purchasing power of currencies in different countries
* Calculated by comparing the prices of identical goods and services in different countries

\*Labor is cheaper in thailand

Overvalued 🡪 tend to be richer countries

Undervalued 🡪 tend to be poorer countries

Nontradable goods tend to be cheeper in poorer countries

**IB Question**

* Compare and contrast GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates for economically more developed countries and economically less developed countries.

|  |  |  |
| --- | --- | --- |
| Country  | GDP per capita(current US $) 2008 | GDP per capita at PPP(current US dollar) 2008 |
| **USA** | 46350 | 36062 |
| **France** | 44508 | 34041 |
| **Cameroon** | 1226 | 2114 |
| **India** | 1017 | 2901 |
| **Indonesia** | 2246 | 3887 |

Source: World Bank, GDP per capita and GDP per capita at PPP

**Developed countries**

* GDP > GDP per capita at PPP

**Developing countries**

* GDP < GNI per capita at PPP

**IB Question**

* Compare and contrast two health indicators for economically more developed countries and economically less developed countries.

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**Health measures**

1. Life expectancy at birth
* The average number of years that a person may expect to live from the time that they are born
* Human development index
1. Infant mortality rate
* Number of deaths of babies under the age of one year per thousand live births in a given year

For a low infant mortality rate…

For a high life expectancy rate…

✓A good level of health care and health services

✓The provision of clean water supplies and adequate sanitation

✓The provision of nationwide education

✓Reasonable supplies of food

✓Healthy diets and lifestyles

✓Low levels of poverty

✓Lack of conflict (i.e. civil war)

✓Good level of healthcare and health services

✓The availability of clean water and sanitation

✓Low levels of poverty

Single development indicators for a selection of countries

|  |  |  |  |
| --- | --- | --- | --- |
| Human Development Index band | Country | Life expectancy at birth (years) | Infant mortality rate (deaths per 1000 live births) |
| Very high human development (HDI >0.9) | Australia | 82 | 5 |
| Canada | 81 | 6 |
| High human development (0.9>HDI>0.5) | Argentina | 75 | 15 |
| Croatia | 76 | 5 |
| Medium human development (0.8>HDI>0.5) | Algeria | 72 | 36 |
| Belize | 76 | 17 |
| Low human development (0.5>HDI) | Afghanistan | 44 | 165 |
| Nigeria | 48 | 96 |

Sources: UNICEF Country Statistics

\*Life expectancy appears to be reduced as we move from the ‘very high human development’ to the ‘low human development’

\*Infant mortality rate figures increase as we move from the ‘very high human development’ to the ‘low human development’

**IB Question**

* Compare and contrast two education indicators for economically more developed countries and economically less developed countries.

**Education measures**

1. Net enrolment ratio in primary education
* Measure of the ration of the number of children of primary school age who are enrolled in primary school, to the number of children who are primary age in the country
1. Adult literacy rate
* Proportion of the adult population (aged 15 or over), which is literate expressed as a percentage of the whole adult population for a country
* “Literate”: capable of write and read a short statement relating to everyday life.

For a high adult literacy rate…

* Heavily influenced by the relative wealth of country, the distribution of income within the country, and poverty levels

✓A high level of education opportunities available in the country

* Heavily influenced by the relative wealth of country, the distribution of income within the country, and poverty levels

Single development indicators for a selection of countries

|  |  |  |  |
| --- | --- | --- | --- |
| Human Development Index band | Country | Adult literacy rate (% aged 15 and above) | Net enrolment ratio in primary education (%) |
| Very high human development (HDI >0.9) | Australia | 99 | 96 |
| Canada | 99 | 100 |
| High human development (0.9>HDI>0.5) | Argentina | 98 | 99 |
| Croatia | 99 | 90 |
| Medium human development (0.8>HDI>0.5) | Algeria | 75 | 95 |
| Belize | 75 | 97 |
| Low human development (0.5>HDI) | Afghanistan | 28 | 61 |
| Nigeria | 72 | 63 |

Sources: UNICEF Country Statistics

\*Adult literacy rate fall as we move from ‘very high human development’ to the ‘low human development’

\*Net enrolment ration in primary education figures fall as we move from the ‘very high human development’ to the ‘low human development’

*169. Composite indicators*

**Syllabus item: 169 Weight: 3**

🡪 Rather than using single indicators, institutions have started using composite indicators, which combine a number of single indicators with weighing, to give a single combined figure.

**IB Question**

* Explain that composite indicators include more than one measure and so are considered to be better indicators of economic development.
* Explain the measures that make up the Human Development Index (HDI).
* Compare and contrast the HDI figures for economically more developed countries and economically less developed countries.
* Explain why a country’s GDP/ GNI per capita global ranking may be lower, or higher, than its HDI global ranking.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Category | Country | HDI value | HDI rank | GDP per capita (PPP$US) | GDP per capita (PPP$US) rank | GDP per capita (PPP$US) rank – HDI rank |
| Very high human development | Norway | 0.971 | **1** | 53433 | **5** | 4 |
| Sweden | 0.963 | **7** | 36712 | **16** | 9 |
| High human development | Argentina | 0.866 | **49** | 13238 | **62** | 13 |
| Bahamas | 0.856 | **52** | 20253 | **44** | -8 |
| Medium human development | Georgia | 0.778 | **89** | 4662 | **110** | 21 |
| South Africa | 0.683 | **129** | 9757 | **78** | -51 |
| Low human development | Zambia | 0.481 | **164** | 1358 | **152** | -12 |
| Liberia | 0.442 | **169** | 362 | **179** | 10 |

Human Development Index (HDI)

* Composite index that brings together 3 variables:

Long and healthy life (life expectancy at birth), improved education (adult literacy rate combined with a measure of primary, secondary, and tertiary school enrolment), and a decent standard of living (GDP per capita at PPP US$)

GDP per capita and HDI for selected countries

A positive figure indicates that the HDI rank is higher than the GDP per capita (PPP$US) rank, a negative the opposite

\*As the HDI figure fall as we move from ‘very high human development’ to the ‘low human development’.

A country’s GDP/ GNI per capita global ranking may be lower, or higher, than its HDI global ranking because the fact that their national income is high/ low does not necessarily mean that their development is high/low.