*The Circular Flow of Income:*

Total output in the economy equals total income earned from the production of that output equals the total expenditure on that output. Firms sell goods and services (GAS) to household in exchange for their expenditures, as the bottom arrows show. The top arrows show that households sell factors of production to firms in exchange for wages, rent, interest, and proSource: Economic Course Companion

In a complete model, with financial, government and foreign sectors all included, the equilibrium national income is where leakages=injections.

*There are three different ways of measuring economic performance* ***(GDP):***

1. Output method: Final GAS are separated from intermediate goods (goods sold by one firm to another to make other goods). Add up the value each firm contributes to the production of final GAS; aka value-added method. Make sure to avoid double counting. **Value added = value of production - value of intermediate goods**
2. Income method: Add up the income that is paid out to those who supply the factors of production.
3. Expenditure method: Add up all of firms’, individuals’, governments’ and foreigners’ expenditures on final GAS.

GDP = C + I + G + (X-M)

* <https://www.bea.gov/data/gdp/gdp-industry>
* <https://data.worldbank.org/indicator/NV.SRV.TOTL.ZS>
* <https://stats.oecd.org/index.aspx?queryid=77>
* <https://tradingeconomics.com/guyana/manufacturing-value-added-percent-of-gdp-wb-data.html>
* <https://www.google.com/publicdata/explore?ds=d5bncppjof8f9_&ctype=l&met_y=gdp_production_of_gdp>
* <http://data.imf.org/regular.aspx?key=61545852>

**GDP and GNP**

GDP includes only value of domestically produced GAS

It excludes income earned abroad by domestic factors

GNP = GDP + net foreign factor income

**GDP per capita**

= GDP/ population

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **GDP (current US dollars) 2009** |  | **GDP per Capita 2009** |  | **GNI per Capita 2009** | **Annual Inflation 2009** |
| **USA** | 14,119,000,000,000 | 1 | 50,070 | 1.0 | 46,360 | -0.4 |
| **UK** | 2,174,529,808,278 | 6 | 35,165 | 1.4 | 41,370 | -0.6 |
| **China** | 4,985,461,200,586 | 3 | 3,744 | 13.4 | 3,650 | -0.7 |
| **India** | 1,377,264,718,251 | 10 | 1,192 | 42.0 | 1,220 | 10.9 |
| **Nepal** | 12,531,144,759 | 1127 | 427 | 117.3 | 440 | 11.6 |

Source: The World Bank (old data)

**Nominal GDP and real GDP**

Real GDP = Nominal GDP adjusted for inflation

Real GDP = (Nominal GDP/GDP deflator)\*100

**Is real GDP per capita a good measure of standard of living?? (average, income, income inequality, negative externalities, Green GDP, military expenditure, war, illegal activities, legal but not marketed, unpaid output, quality of output, composition of GDP, community activities, purchasing power).**

 Source: <http://www.lawfulrebel.com/thinking-important/>