

Aggregates - GDP

Definition of GDP: the total value of final goods produced and services provided on a given territory during a given period at the market prices.

Aggregates - GNP

Definition of GNP: the total value of final goods produced and services provided by citizens of a given nation during a given period at market prices.

Aggregates - dichotomies

Flux:	Stock:
An amount of change in a quantity during a given period. Example: GDP.	A quantity that accumulates over time. A definite quantity. Example: The national debt.

Gross:	Net:
Gross refers to a total amount made but doesn't account for expenses, losses, etc. Ex: GDP includes depreciation	A quantity including deductions. Ex: NDP = GDP - depreciation. Net income = revenue - costs, taxes, interest, etc.

Real:	Nominal:
The real value of a figure is its value in terms of some other good, service or bundle of goods. Ex: Real GDP is current GDP relative to the prices of some base year.	The value of a good in terms of money. Ex: 2012 U.S GDP was \$16 trillion.

Aggregates - Measurements of GDP

GDP:
 $f(K_t, N_t, A_t)$
 $w_t N_t + (r_t + d) K_t + P_t I_t$
 $C_t + G_t + X_t + I_t$
 K_t = capital. Machines, factories, etc.
 N_t = labor, hours people work
 A_t = Productivity. How productive is this territory
 w_t = wages, employee compensation
 r_t = rate of interest
 d = depreciation
 $P_t I_t$ = profits
 C_t = consumption
 I_t = Gross investment = $K_{t+1} - K_t(1-d)$. Net Investment = $K_{t+1} - K_t$
 G_t = Government expenditure
 X_t = net exports = exp - imports

A - How do we detrend a variable and why?
 So that we can better observe the cyclical component of the data. Example: GDP is constantly growing but if we detrend we can better observe the cyclical component of the data. We can use techniques such as an HP filter to detrend.

A - Populations and Unemployment

Population: Includes labor force and everyone else.
Labor force: Includes unemployed and employed.
employed: Currently working
Unemployed: - Of working age

Aggregates - Inflation

Inflation: The rate at which the general level of prices for goods and services is rising, and, subsequently, purchasing power is falling. Can be approximated using:
 gdp deflator = nominal gdp/real gdp * 100.
 and