

DEFINITIONS

alpha: capital share in national income
 beta: total capital / annual income
 C: capital (wealth)
 CD: capital, domestic
 CF: capital, foreign
 CI: capital, immaterial (patents, etc)
 CN: capital, national (wealth)
 CP: capital, physical
 FLI: flow of inheritance (b-sub-y)
 IC: income, capital
 ID: income, domestic
 IG: income, global
 IF: income, foreign
 IL: income, labor
 IN: income, national
 g: growth rate
 OD: output, domestic
 OG: output, global
 GDP: gross domestic product
 m: mortality rate
 mu: wealth at death / average wealth
 NDP: net domestic product
 PD: product, domestic
 r: return on capital
 s: savings rate

RELATIONSHIPS

alpha = $r * \beta$
 beta = CN / IN
 beta = s / g (asymptote)
 C = $CP + CI$
 CN = $CD + CF$
 DP = NDP
 DP = $.90 * GDP$
 GI = GO
 FLI = $\mu * m * \beta$
 ID = DO
 ID = $IC + IL$
 IN = $ID + IF$

REFERENCES

simon kuznets 1901-1985
 - "economic growth and income inequality" 1955
 - in early stages of economic development, income inequality increases, but as the economy grows it decreases

thomas malthus 1766-1834
 - "an essay on the principle of population" 1798
 - population growth generally expands in times and in regions of plenty until the size of the population relative to the primary resources caused distress

karl marx 1818-1883
 - "communist manifesto" 1848
 - "das kapital" 1867 (vol 1)
 - the principal of infinite accumulation (of industrial capital)

david ricardo 1712-1823
 - "principals of political economy and taxation" 1817
 - the principal of scarcity (of land)
 - as population and output grow, land will become increasingly scarce, and rents will increase accordingly so that land barons will own everything, unless ...

adam smith 1723-1790
 - "the theory of moral sentiments" 1759
 - "an inquiry into the nature and causes of the wealth of nations" 1776
 - he directs his industry in such a manner as its produce may be of the greatest value, and intends only his own gain, but is led by an invisible hand to promote an end which was no part of his intention; by pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it