

Stylized Facts

Stylized facts refer to generalizations that hold approximately, but not exactly.

Listed below are some stylized facts about long-run economic growth.

Productivity

- Constant growth of real national income and product Y ;
- Constant growth of labor L ;
- Constant growth of productivity Y/L .

These three conditions are not independent—any two conditions imply the other. The growth rate of productivity is the growth rate of real national income and product minus the growth rate of labor.

Real national income and product grows faster than labor; consequently productivity rises.

Income

- Constant income shares for capital and labor;
- Constant real interest rate r ;
- Constant capital/output ratio K/Y .

These three conditions are not independent—any two conditions imply the other. The income share for capital is the product of the real interest rate and the capital/output ratio:

$$r \left(\frac{K}{Y} \right).$$

Real Wage

Together the income share for capital and the income share for labor add to one.

The income share of labor is

$$\frac{wL}{Y}.$$

That this income share is constant means that the real wage grows at the same rate as productivity.

Mathematical Models of Economic Growth

For a mathematical model of economic growth, one would like the model to be consistent with the stylized facts.