ECON 442

Review of Piketty's "Capital"

Winter 2015

The Big Question

What is the relationship between economic growth and the distribution of gains in society?

- use historical data to understand the correlation
- use basic theoretical insights to uncover the driving force behind the correlation
- discuss policy options

Data sources:

1) Continental Europe – mainly France

2) Anglo-Saxon countries – mainly US & UK

What are the "facts"?

Fact #1: Slow growth until the industrial revolution and again after 1980.

Fact #2: Stable share of income for top 10% until the Great Depression.

Fact #3: Sharp fall in top incomes until 1980 mainly driven by the top 1%.

Fact #4: Moves in inequality mainly driven by capital/income ratio with capital income mainly accruing to the top of the income distribution.

Critique:

- France and the US look *very different* with only the later showing a sharp increase in inequality.
- This increase is mainly driven by *increase in wage income* for the top earners.

Main Point for Discussion

Two forces of inequality within countries and across countries.

Diffusion of knowledge and investment in education tend to reduce inequality/increase mobility.

Fluctuations in the importance of capital as a source of income coupled with bequests tend to increase inequality/decrease mobility.

Piketty:

Build case for capital/income ratio driving things rather than skill-biased technological change.

Theoretical Underpinning

Accounting identity:

- GDP - deprecitation = NDP = National Income = Capital Income + Labour Income

Capital is only physical capital (traded on some market) and not human capital.

Think of national income being determined by an aggregate production function. Then capital income is given by

$$\alpha = r \times \frac{K}{Y}$$

For Cobb-Douglas, α is a constant, but for a modern economy it could be increasing in the K/Y ("robots building robots").

Second Fundamental Law of Capitalism:

In the long-run the capital to income ratio β is driven by the savings vs. the growth rate

$$\frac{K}{Y} = \beta = \frac{s}{g}$$

Example: if 12% of income is saved and the growth rate in the economy is 2%, the ratio of capital to income is 6.

Key argument:

When $r >> g$, one needs to save only a relatively small proportion of capital income to keep capital growing at a rate equal or higher than output.

Inequality will tend to increase and be persistent if

- savings rates are high
- rate of returns are high (especially for top wealth)
- inheritance matters

How does Piketty explain the data?

High inequality was hsitorically driven by the capital/income ratio.

The fall in this ratio and the concurrent reduction in inequality is due to two factors:

1) Capital got destroyed in the great depression and the two world wars. There also was some nationalization of assets.

2) The growth rate in the economy was very high relative to the rate of return on capital which was unusually low.

Over the last few decades, growth rates have fallen (and will fall further) while returns on capital have reverted back historical levels.

Contributing factors for the increase in inequality have been falling marginal taxes at the top end, deregulation in financial markets and higher savings rates due to an aging population.

Policy Options

1) Wealth taxes or tax on capital

- hard to implement
- needs to be global

2) Tax on inheritance

- needs to be progressive
- incentive issues abound at the top end

3) Role of the state and public assets

- public health care and public pensions
- foster education