## Ec453 Theories of Growth and Development Homework 4

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Consider the following simple Kaldorian economy with no government and no trade: Total output (GNP) denoted by Y, is produced by capitalists and workers. The aggregate consumption function of the economy is

$$C = 0.9 * Y$$

Total desired investment, I, is 500 units.

- a) Calculate equilibrium level of income Y.
- b) Suppose that capitalists propensity to save, Sc, is 0.25; and that of workers, Sw, is 0.05.

Find the share of profits in income and the rate of profit under the Kaldorian equilibrium. Suppose that capital stock is 1000 units.

c) What are the total profit income of capitalists and total wage income of workers in this economy?

Using Sc and Sw out of respective incomes of capitalists and workers verify that total investment in this economy; i.e., that the economy is in Kaldorian equilibrium.

### More excitement

- d) Now consider the same model under Pasinetti's 1961 remark that "if workers save (Sw>0.0), then they must be obtaining a share of profits as additional income, as well". Using the same values for Sc and Sw calculate the capitalists' share of profits as a ratio of total income (Pc/Y).
- e) What will be the rate of profit and the share of total profits in income?

  Does the rate of profit (or the distribution of total profits and wages in income) depend on the workers' propensity to save? Explain.

In particular, which variable determines the distribution of income between wages and profits in the economy?

# **Even More Excitement**

f) Calculate the workers share of total profits, and the value of total wages.

Verify that in this "Pasinettian" economy, when workers save they receive an amount of profits (Pw) such that their total saving out of their total income will exactly be equal to the amount that capitalists would have saved out of workers profits if those profits had remained to them.

Hint: verify equation 17 in Pasinetti, 1961.

### **Ultimate Excitement**

g) In particular, observe that the total values of capitalists' and workers' income are equal to those of the Kaldorian economy. Can you explain this?