

Problem Set 5

UCLA - Econ 102 - Fall 2018

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1 Mankiw

This exercise is based on the following *New York Times* article, which is available through UCLA on ProQuest:

Mankiw, N. Gregory. What would Keynes have done? *New York Times*, November 30, 2008

1. Interpret Gregory Mankiw's article in terms of c_0 .
- 2.

2 Automatic Stabilizers in practice

3 Keynesian Multiplier with endogenous G

1. Assume that G is also endogenous

3.1 Procyclical Government spending

Assume that the government systematically spends more when GDP is higher (it builds new roads, hires new teachers, etc.), and conversely when GDP is lower (it then stops construction projects, fires teachers, etc.) – this was the exercise for the midterm:

$$G = g_0 + g_1 Y$$

Therefore:

$$Y = Z = C + \bar{I} + G$$

$$Y = c_0 + c_1 (Y - T) + g_0 + g_1 Y + G$$

$$Y = (c_0 - c_1 T + g_0 + \bar{I}) + (c_1 + g_1) Y.$$

Income is equal to demand and therefore, if $c_1 + g_1 < 1$:

$$Y = \underbrace{\frac{1}{1 - (c_1 + g_1)}}_{\text{Multiplier}} \underbrace{(c_0 - c_1 T + \bar{I} + g_0)}_{\text{Autonomous Spending}}$$

If instead $c_1 + g_1 \geq 1$, then the multiplier is infinite.