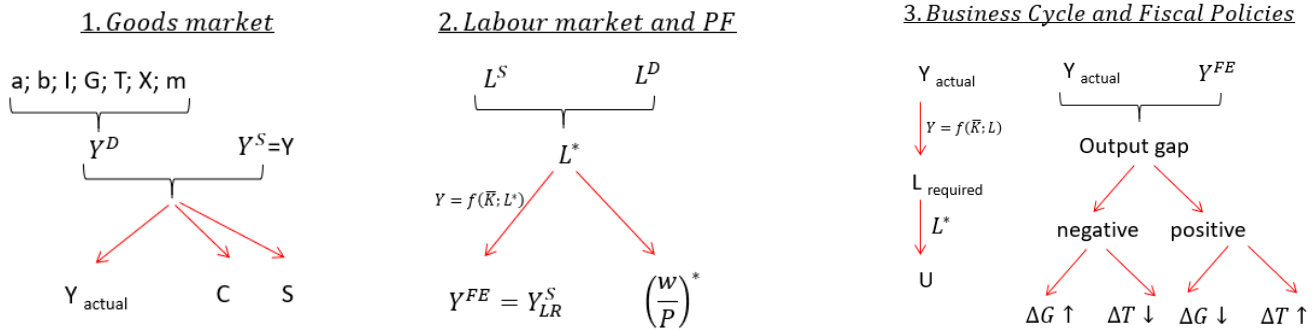


Business Cycle Model

Goods Market (Keynesian Cross), Production Function, Labour Market

Operating Mode



Core Functions

Goods demand Y^D :

Goods supply Y^S :

Production function (PF):

Labour demand L^D (1st part. derivative PF):

Labour supply L^S :

$$Y^D = a + b(Y - T) + I + G + (X - mY)$$

$$Y^S = Y$$

$$Y = f(\bar{K}; L) = AK^\alpha L^{1-\alpha}$$

$$L^D \text{ from } \frac{\partial Y}{\partial L}: \frac{\partial Y}{\partial L} = \frac{w}{P} = (1 - \alpha)AK^\alpha L^{-\alpha}$$

$$L^S = z \frac{w}{P}$$

Variables and Symbols

Y	Output or GDP	a	Autonomous consumption	X	Export
A	Productivity	b	Marginal consumption rate	m	Marginal import rate
K	Capital stock	T	Public revenue (taxes)	w	Nominal wage
L	Labour quantity	I	Investment	P	Price level
α	$0 < \alpha < 1$	G	Government expenditures	w/P	Real wage
C	Consumption	Y^S_{SR}	Short-run goods supply	z	Slope of L^S (inverse)
S	Savings	Y^{FE}	Full employment output =	U	Unemployment
L^*	Full employment quantity	$= Y^A_{LR}$	Long-run goods supply	$(\frac{w}{P})^*$	Full employment real wage

Relevance

The model is demand-oriented and explains the existence of stable imbalances which may exist simultaneously in the goods and labour market. Since they are stable, there are no market forces which can automatically lead the economy towards full employment equilibrium. The close connection between macroeconomic markets is being illustrated.

From the results of the goods market on the one hand and the labour market and production function on the other, the economic situation (possible unemployment, negative or positive output gaps) can be derived. The recurrent theme of economic policy around the world is the Keynesian *deficit spending* (typically increasing government spending in a negative output gap), by which the state tries to push the economy towards equilibrium. This economic policy evergreen is motivated by this model. The online program also calculates the required ΔG or ΔT values.

Limitations

The main problems arise from the improper application of the model: a) confusion of business cycle and growth; b) confusion of business cycle and structural problems; (c) overestimation of the possibilities of debt financed government expenditure, d) underestimation of the risk of debt accumulation, e) neglect of the difference between government expenditure for investment and consumption purposes in the long-run, f) confusion of the short- and long-run, g) general omnipotence fantasies of the state, h) neglect of the institutional framework, which could also be responsible for the predicament situation, and its reformation.