The General Theory and Victoria Chick at 80: A Celebration
University College London, 11 July 2016

A 'static model of a dynamic process'

Underemployment equilibrium with flexible wages and prices

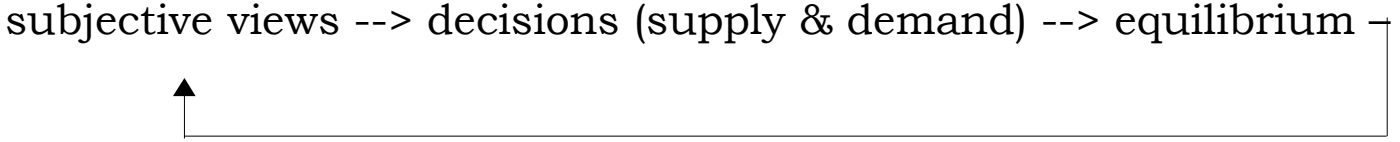
Angel Asensio

CEPN, Université Paris 13, Sorbonne-Paris-Cité

Introduction

"A monetary economy, we shall find, is essentially one in which changing views about the future are capable of influencing the quantity of employment" [Keynes 1936, *GT,* p xvi].

Fundamental uncertainty --> equilibrium intrinsically dynamic:



Victoria Chick's '*Macroeconomics after Keynes*' (1983) pinpointed the essence of the method of *The General Theory* (notably chap. 2 & 13).

The method consists in taking the 'changing views about the future' as given at a point in time --> allows to analyse the outcome of the individual decisions at any point in time by means of a static equilibrium model ('static model of a dynamic process').

Introduction

Conventional IS-LM ignores the nature of Keynes's equilibrium pinpointed by V. Chick. Needs to be amended in two essential directions:

- 'unanchored' subjective views about the future matter.
- flexible-wages negative feedback on effective demand (*GT* Chap. 19)

> "Keynes's system plainly does not assume that wages are fixed but rather gives reasons why they are unlikely to move and why (…) the unemployment may stabilise" (Chick 1983, p 247)

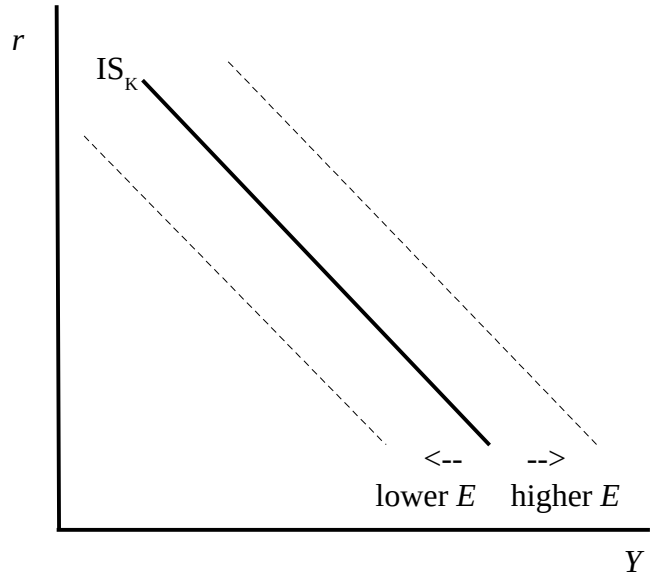
--> Existence of 'underemployment equilibrium' requires wages not fixed but 'unlikely to move' in spite of the market pressure. Contradiction? *No contradiction if institutional balancing forces are not overlooked.*

Accounting for the 'views about the future'

I determined by *mec* = *r* (*mec* reflects subjective views*)*

$Y = I(r, E) + C(Y) + \ldots$ --> IS_K $Y = \varphi(r, E, \ldots)$

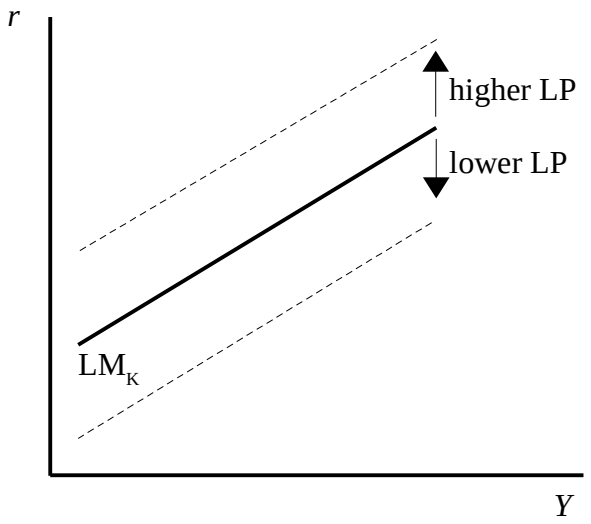
\- +



Accounting for the 'views about the future'

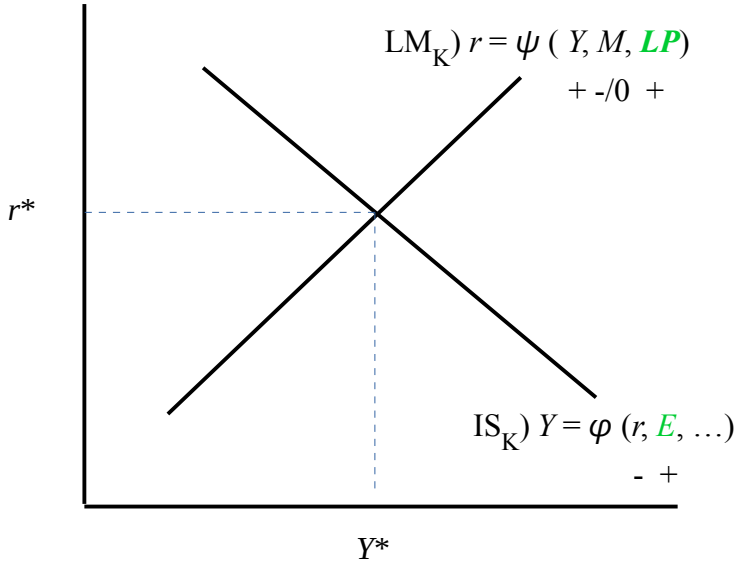
$M = L\,(Y,\ r,\ LP)$ --> $\mathrm{LM_K})$ $r = \psi\,(\ Y,\ M,\ LP)$

$+\ -/0\ \ +$



Accounting for the 'views about the future'

At a point in time (given the views about the future) we get:



Solving (substituting) yields:

$$Y^* = Y\ (M,\ LP,\ E,\ldots)$$
$$+/0\ \ -\ \ +$$
$$r^* = r\ (M,\ LP,\ E,\ldots)$$
$$-/0\ +\ \ +$$

→ r^* and Y^* depend and move according to *LP* and *E*

→ Effects of a change in *M* or any exogenous variable should not be analysed irrespective of the possible effects on *LP* and *E*.

Wage-price setting

Equilibrium prices at a point in time determined as the condition under which firms find it most profitable to produce Y:

$$\text{PS}_K)\ p = w / f'_N \equiv \underset{+\ \ +}{\phi\ (w, Y)}$$

Equilibrium wages at a point in time result from a balance of competitive & institutional forces (labour market equilibrium):

$$\text{WS}_K)\ w = \vartheta(\underset{-}{Y_f - Y}, \underset{+}{IC}),\ IC \geq 0,\ Y_f > Y > 0$$

> IC and ϑ'_1 reflect 'institutional' support (IC = 0 means unbalanced pressure on wages)

Substituting $w = \vartheta(\ldots)$ into price equation --> integrated 'wage-price setting' equation:

$$\text{WPS}_K)\ p = \theta\ (\underset{+}{Y}, \underset{-}{Y_f}, \underset{+}{IC})$$

Negative feedback effect

$IS_K)\ Y = \varphi\ (r, \hat{E}, p, A)$
$\qquad\qquad\quad -\ +\ +\ +$

$\hat{E}$ *:* reflects long-term subjective expectations net of the effect of p

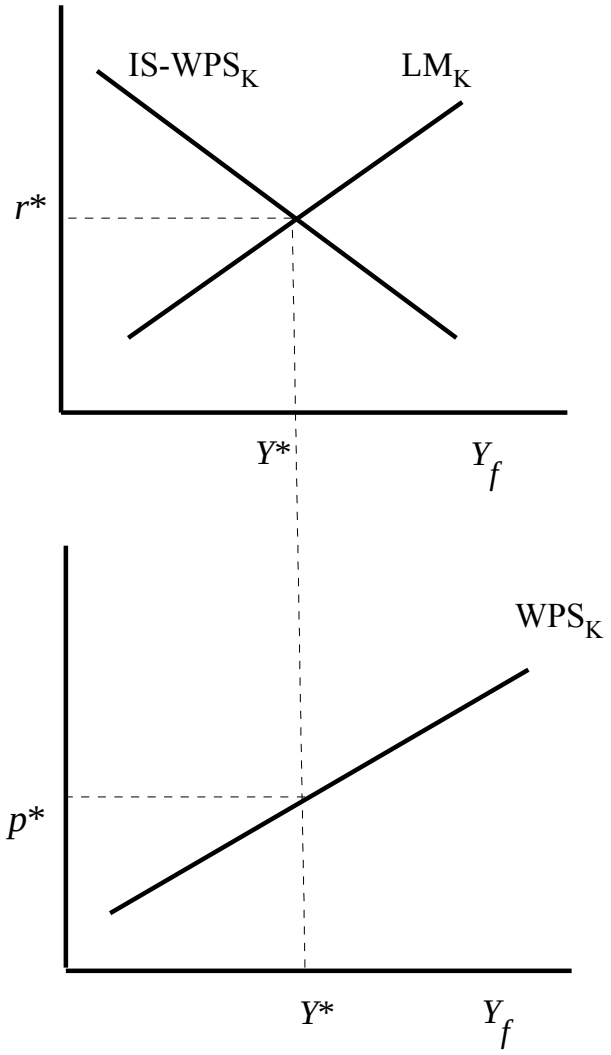
$\varphi'_p > 0$: lower wages and prices --> lower *mec* and *mpc* in aggregate (distributive effects) --> lower aggregate demand (*GT*, chap. 19)

A *:* other variables influencing aggregate demand (autonomous expenditures…)

The feedback effect of the wage-price setting is obtained by substituting $p = \theta\ (\ldots)$ into IS_K, which yields a *flexprice* IS_K *function*:

$$IS\text{-}WPS_K)\ Y = \kappa\ (r,\ Y_f,\ IC,\ \hat{E},\ A)$$
$$\qquad\qquad\qquad\qquad\qquad\quad -\ \ -\ \ +\ \ +\ \ +$$

Underemployment equilibrium



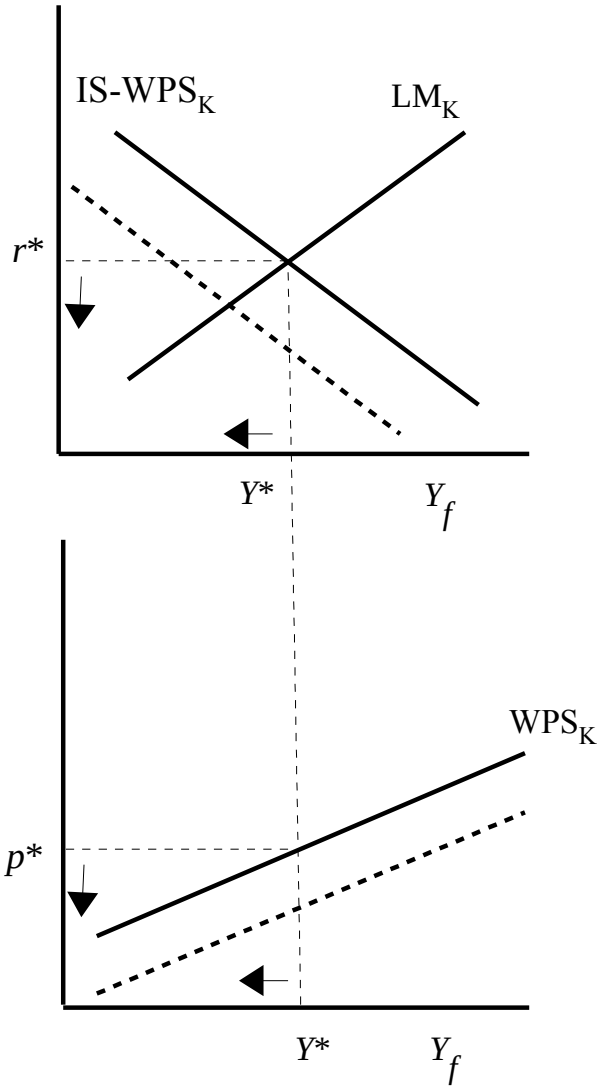
Solving (substituting) yields:

Y^* (LP, M, Y_f, IC, $\hat{E}$, A)
- +/0 - + + +

r* (LP, M, Y_f, IC, $\hat{E}$, A)
+ -/0 - + + +

p^* (LP, M, Y_f, IC, $\hat{E}$, A)
- +/0 - + + +

Weaker institutional support to wages (higher flexibility)



Solving (substituting) yields:

Y^* (LP, M, Y_f, IC, $\hat{E}$, A)
- +/0 - + + +

r* (LP, M, Y_f, IC, $\hat{E}$, A)
+ -/0 - + + +

p^* (LP, M, Y_f, IC, $\hat{E}$, A)
- +/0 - + + +

(assuming constant $\hat{E}$ & LP; open to further analysis…)

Conclusion

Keynes's underemployment equilibrium not a fixprice equilibrium. Accounts for the effect of unemployment on wages and prices and for the distabilising feedback effect on effective demand.

Walrasian economics incapable of making sense of the notion of a *competitive* equilibrium with unemployment: competitive forces essentially stabilising, remove all inefficiencies in a system with no fundamental uncertainty.

GT has 'underemployment competitive equilibrium' thanks to the *endogenous institutional stabilizers* (such as workers resistance, unions action, labour market regulation and policy support to aggregate demand) which compensate for the potentially destabilising market forces at any point in time (the “reasons why wages are unlikely to move” despite the competitive pressure).

Otherwise, no equilibrium:

"If … money- wages were to fall without limit whenever there was a tendency for less than full employment, … there would be no resting-place below full employment … In fact we must have some factor, the value of which in terms of money is, if not fixed, at least sticky, to give us any stability of values in a monetary system" (Keynes 1936, p 303-304).