

Disequilibrium Macroeconomics: Quantity Adjustment Models

It is obvious that if prices and wages are not flexible enough to clear markets instantaneously, then **variations in output and employment quantities** will bear that brunt of adjustment to disturbances (whether of internal or external origin).

Wage and price rigidity: two rationales:

- (1) Sociological or political factors: "jealousy" in a decentralized economy results in **downward inflexibility** of nominal wage. A general decline is implausible because each party fears that as his nominal wage declines, others' might not, resulting in a decline in his relative income in real terms. So it is like a game of prisoner's dilemma.
- (2) Aversion to uncertainty and preference for security: widespread existence of explicit as well as implicit **contracts** on wages and prices.

Wages → unions, collective bargaining, learning by doing (quality of labour)

Prices → transaction costs of changing prices

→ *market share considerations: goodwill and reputations, particularly relevant in oligopoly with no collusion.

Fixed-Price Models: A first approximation

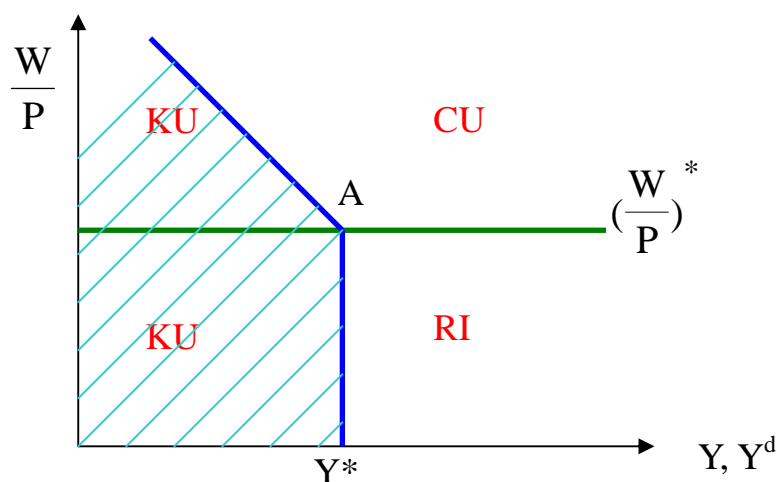
Assumptions:

- (1) Suppose **the "auctioneer" did it wrongly** and prices and wages are at disequilibrium levels (non-market clearing levels) but they cannot be changed.
- (2) Recall the **dual-decision hypothesis** (i.e. the buying and selling decisions are separate in a monetary economy, unlike the situations in a barter economy). Assume two sectors:

households and firms. They form expectations on the basis of the disequilibrium wages and prices and the implied consequences.

The system can then be locked into a state of prolonged/permanent disequilibrium.

Three basic regimes (Artis, p.219)



KU – Keynesian unemployment

CU – Classical unemployment

RI – Repressed inflation

$\left(\frac{W}{P}\right)^*$ – equilibrium real wage (clearing the labour market)

Y^* – output

Point A is the “bliss” point: both the labour and the goods markets clear. It is a Walrasian equilibrium. All the other regions are disequilibrium regimes.

KU – caused by autonomous decline in demand

CU – caused by too high a real wage level $\left(\frac{W}{P}\right)$

RI – caused by too low a real wage level $\left(\frac{W}{P}\right)$

1. **KU** – an exogenous decline of demand may be rationalized using the dual-decision hypothesis:

(1) Households: feel constrained in the labour market ($\bar{L} < L^s$) and hence reduce demand ($Y^d < Y^*$).

(2) Firms: feel constrained in the goods market ($Y^d < Y^*$) and hence reduce demand for labour ($L^d < L^s$).

Mutually reinforcing and the economy would be locked into a state of under-employment. So it is just like of case of "self-fulfilling prophecy".

Because of unemployment, $\frac{W}{P} > R \bullet MPP_L$, but $\frac{W}{P} > \left(\frac{W}{P}\right)^*$ a point

we will elaborate later.

2. **CU** – caused by $\left(\frac{W}{P}\right) > \left(\frac{W}{P}\right)^*$

In that case $Y^d > Y$ (Y , not Y^* !) because households, having a great amount of purchasing powers, look for more goods, but firms do not find it profitable to produce those goods to satisfy households' demand.

Hence CU exists whether actual $Y \begin{matrix} > \\ = \\ < \end{matrix} Y^*$.

3. **RI** caused by $\left(\frac{W}{P}\right) < \left(\frac{W}{P}\right)^*$ and $Y^d > Y^*$.

There is excess aggregate demand but $\frac{W}{P}$ is depressed (by

various factors such as government intervention in a socialist economy). Wage inflation is artificially held down. Hence the name "repressed inflation".

Diagrammatic summary (Levacic and Rebmann, Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies)

Figure 1 Walrasian general equilibrium

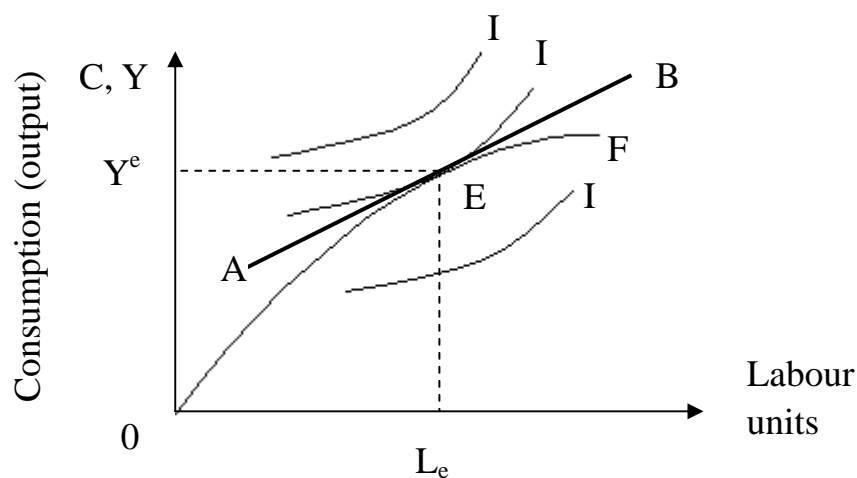


Figure 2 The labour market: classical unemployment

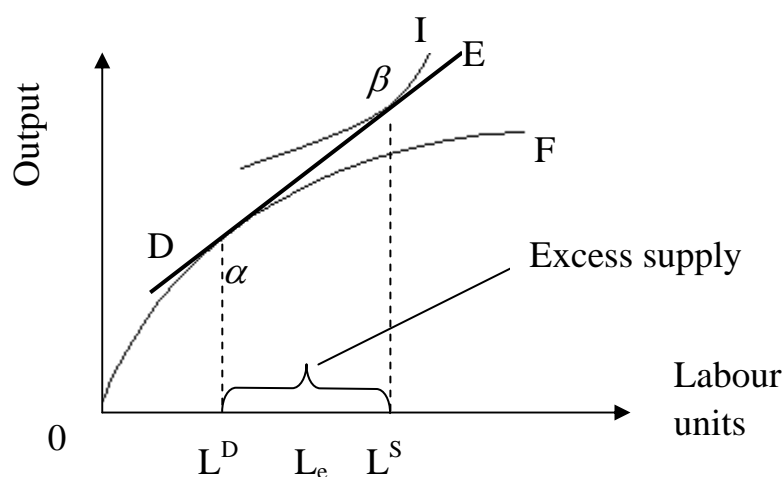


Figure 3 The labour market: repressed inflation

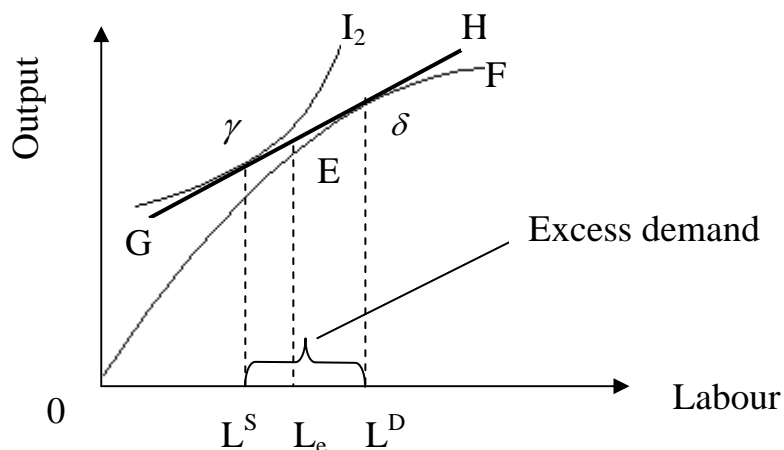


Figure 4 The labour market: Keynesian unemployment

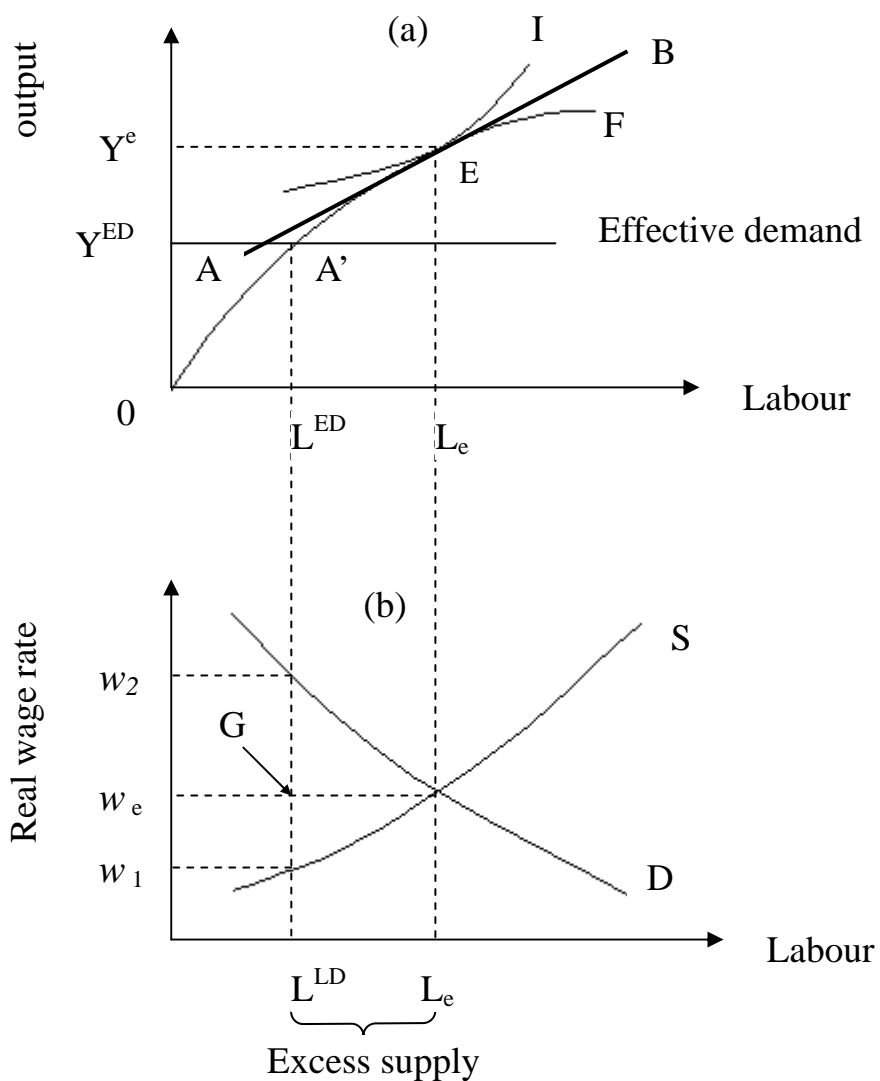


Table 1 General Classification of Excess S/D and Rationing

	Households	Firms
Rationed sellers	<u>Excess supply</u> in the labour market	<u>Excess supply</u> in the goods market
Rationed buyers	<u>Excess demand</u> in the goods market	<u>Excess demand</u> in the labour market

w : real wage

MPL: marginal product of labour

MVL: marginal value of leisure (non-labour)

Table 2 A taxonomy of non-market-clearing states

	<u>Excess supply</u> in goods market	<u>Excess demand</u> in goods market
<u>Excess supply</u> in labour market	<i>Keynesian unemployment</i>	<i>Classical unemployment</i>
	Households rationed in labour market. Firms rationed in goods market. ($w < \text{MPL}$) ($w > \text{MVL}$)	Households rationed in labour market. Households rationed in goods market. ($w = \text{MPL}$) ($w > \text{MVL}$)
<u>Excess demand</u> in labour market	Unlikely	<i>Repressed inflation</i>
		Households rationed in goods market. Firms rationed in labour market. ($w < \text{MPL}$) ($w = \text{MVL}$)