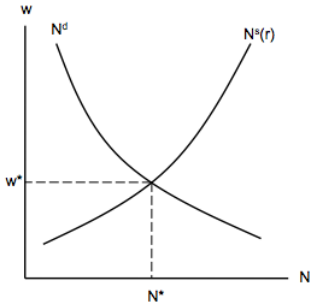


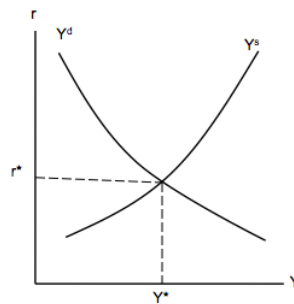
Chapter 6. A Real Intertemporal Model with Investment (Part 3 - Shocks Experiments)
A Short Note

Consumers: supply labour and consume, Firms : demand labour, produce and invest (Review)

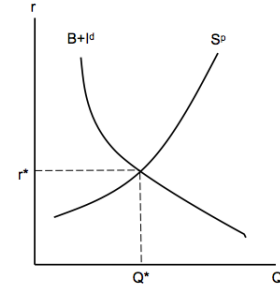
Labour Market



Output Market



Credit Market.



1 Current government purchases increase temporarily (G);

Keynesian(EE212)	Intertemporal model analysis
$G \uparrow \Rightarrow we, C ? \dots NO \dots$	$G \uparrow \Rightarrow we, C ? \dots YES \dots$
Balance budget Multiplier .. = .. 1	Balance budget Multiplier ... > ... 1
Increases in C and Y come as a free lunch! Each dollar spent by the government increases GDP by more than one dollar. We would let the government grow infinitely large, which would make everyone infinitely wealthy.	Higher government spending and larger output come at a cost — no free lunch! Government expenditure crowds out private investment. Lower future productive capacity. Consumer consumes less and takes less leisure and he or she faces a lower real wage rate.

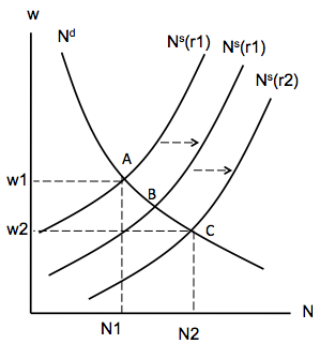
ΔBal = change in balance budget, $\frac{\Delta Y}{\Delta Bal}$ = balance budget multiplier

Intertemporal model analysis

Step 2:

$r \uparrow \Rightarrow N^S$ shifts (.right..) $\Rightarrow w \downarrow \dots$
 $r \uparrow \Rightarrow I^d \dots \downarrow \dots$ and $C^d \dots \downarrow \dots$

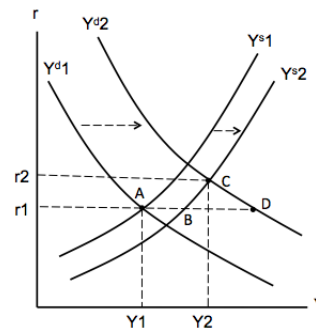
Labour Market



Step 1 :

$Y^S : T \uparrow \Rightarrow N^S$ shifts (.right...) $\Rightarrow Y^S$ shifts (.right..)
 $G \uparrow \Rightarrow Y^d$ shifts (.right... by the amount .. ΔG ..)
 Y^d shifts more than $Y^S : r \dots \uparrow \dots$

Output Market



2 A decrease in current capital stock (K)

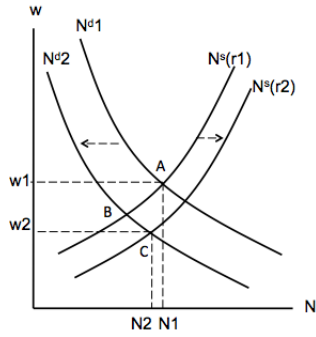
Step 2: $K \downarrow \Rightarrow r \dots \uparrow \dots$

$\Rightarrow N^S$ shifts (.right...) $\Rightarrow w \dots \downarrow$
 (A movement on the Y^S curve)

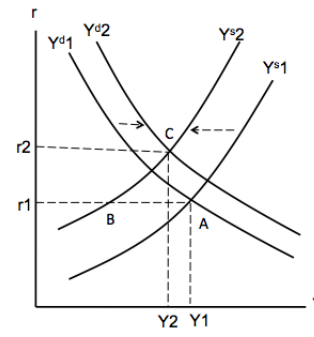
Step 1 :

$K \downarrow \Rightarrow MP_N \dots \downarrow \dots \Rightarrow N^d$ shifts (.left.....) $\Rightarrow Y^S$ shifts (.left...)
 $K \downarrow \Rightarrow K' \dots \downarrow \dots, MPK' \dots \uparrow \dots, I^d \dots \uparrow \dots$ (shift..right....) $\Rightarrow Y^d$ shifts (.right..)

Labour Market



Output Market



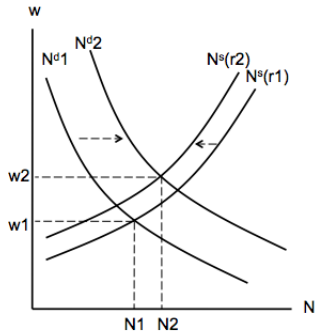
- $K \downarrow \Rightarrow MPK' \dots \uparrow \dots \Rightarrow I \dots \uparrow \dots \Rightarrow r \dots \uparrow \dots \Rightarrow I \dots \downarrow \dots \Rightarrow$ If $I \downarrow, K' \downarrow$ — impossible. $K \downarrow \Rightarrow MPK \uparrow \Rightarrow I \uparrow$
- A decrease in current $K \Rightarrow r \uparrow, I \uparrow \dots, w \downarrow \dots$, Employment and output ..uncertain.. (C and ℓ tends to \downarrow because $r \uparrow$)

3 An increase in Current Total Factor Productiviy (Z)

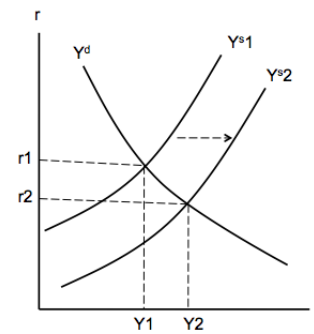
Step 2: $r \dots \downarrow \dots N^s$ shifts ..left....

Step 1 : $z \uparrow \Rightarrow MP_N \dots \uparrow \dots N^d$ shifts ..(right).. Y^s shifts ..right.. , $r \downarrow$.

Labour Market



Output Market

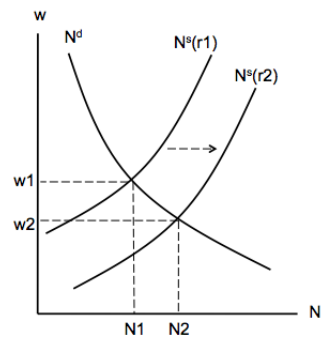


4 An increase in future Total Factor Productivity (Z')

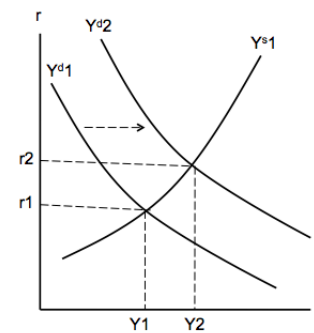
Step 2: $r \dots \uparrow \dots N^s$ shifts ..(right)....

Step 1 : $z' \uparrow \Rightarrow MP'_K \dots \uparrow \dots I^d \dots \uparrow \dots; Y^d$ shifts ..(right).... $r \dots \uparrow \dots$.

Labour Market



Output Market



- $I \uparrow \Leftarrow MP'_K$, partly offset by $r \uparrow$. $K' \uparrow \Leftarrow$ expected z' . r and Y increases. C may rise or fall due to higher Y but higher r . Employment increases with falling real wage.