Chapter 6 : Real Intertemporal Model

EE312

Macroeconomics, Stephen Wiliamson, Chapter 9

March 2014

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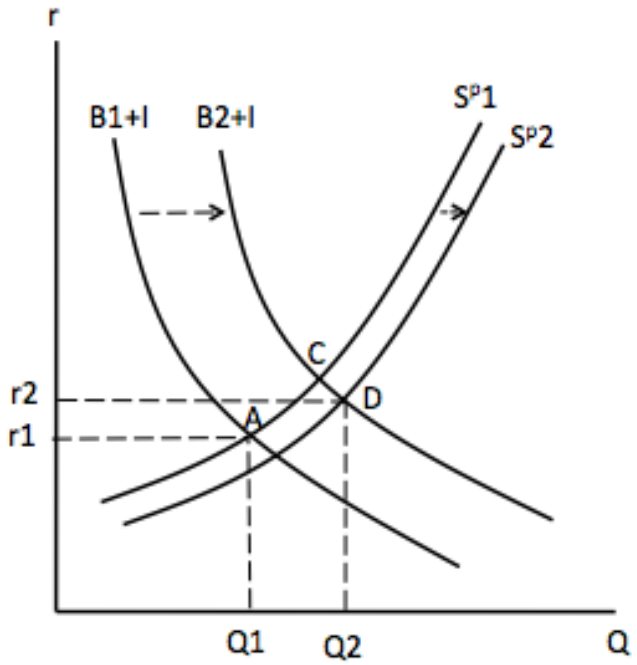
Rising r and the credit market P 18

- The government increases current borrowing (B).
- Saving increases from higher r (AC) and larger Y (CD).
- The real interest rate increases.



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

Labour Market

Output Market

Keynesian(EE212)	**Intertemporal model analysis**
$G \uparrow \Rightarrow$ *we*, *C* ?	$G \uparrow \Rightarrow$ *we*, *C* ? .....
Balance budget Multiplier 1	Balance budget Multiplier 1

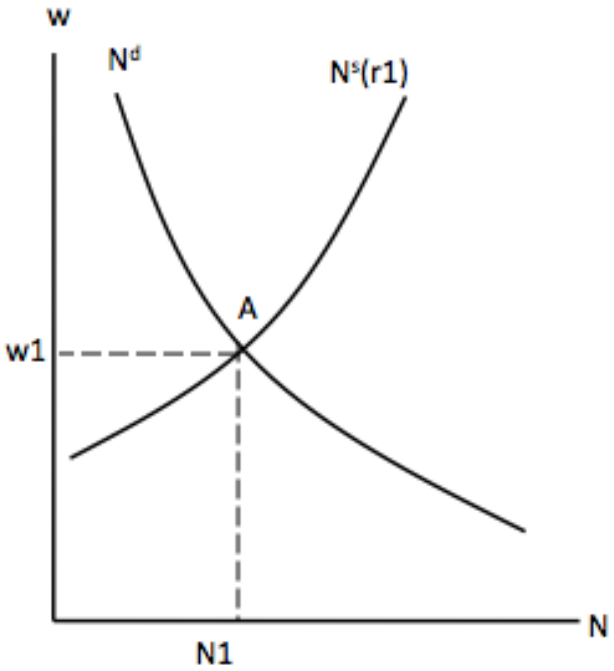
Temporary increase in G

Step 2:

$r \uparrow \Rightarrow N^S$shifts (.....)$\Rightarrow w$....

$r \uparrow \Rightarrow I^d$.....and C^d.....

Labour Market



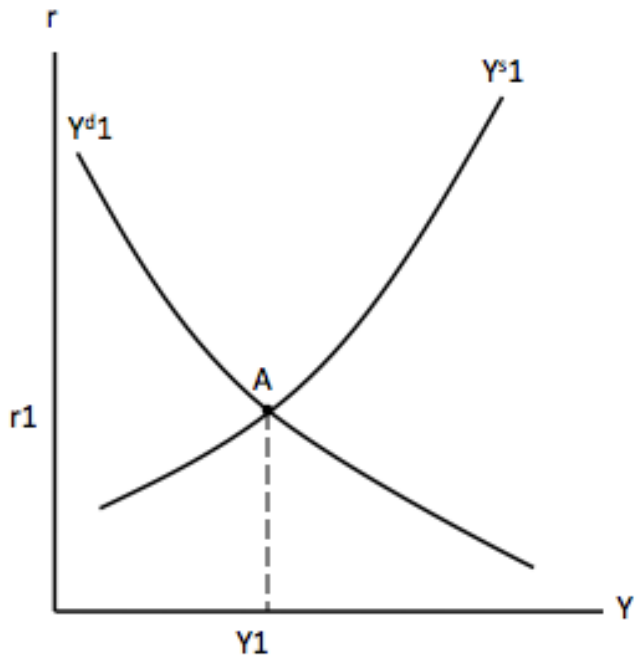
Step 1 :

Y^s : $T \uparrow \Rightarrow$ N^Sshifts (.....) $\Rightarrow$ Y^Sshifts (.....)

$G \uparrow$ temporary $\Rightarrow$ Y^dshifts (.....by the amount .....)

Y^d **shifts more than** Y^s : r .....

Output Market

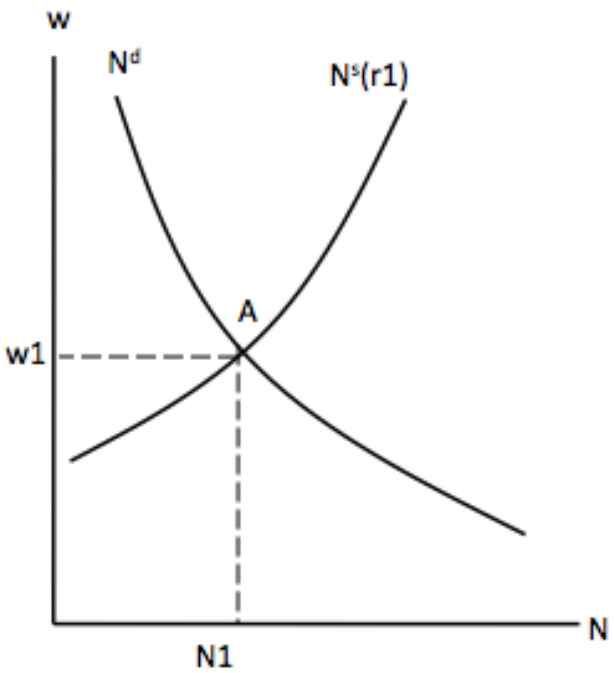


Decrease in K

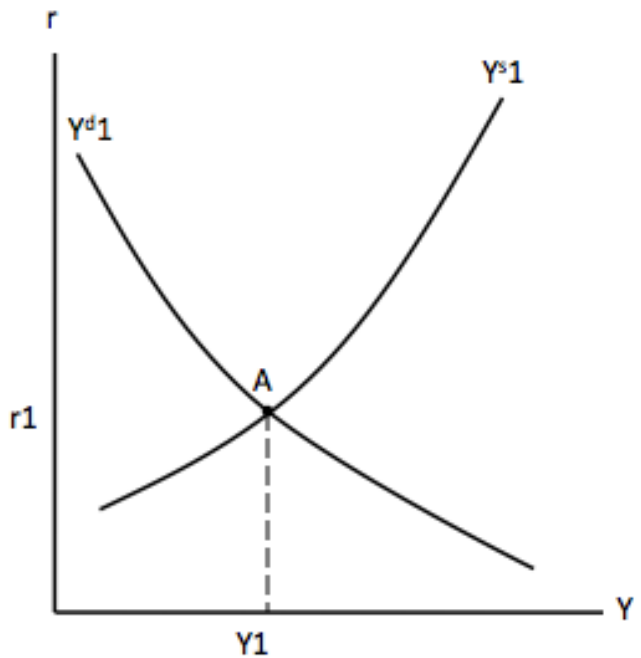
Step 2: $K \downarrow \Rightarrow r$.....
$\Rightarrow N^S$ shifts (.....) $\Rightarrow w$
.....
(A movement on the Y^s curve)

Step 1 :
$K \downarrow \Rightarrow MP_N$..... $\Rightarrow$ N^dshifts (.....)
$\Rightarrow Y^s$shifts (.....)
$K \downarrow \Rightarrow K'$..., MPK'...., I^d ...(shift.....

Labour Market



Output Market



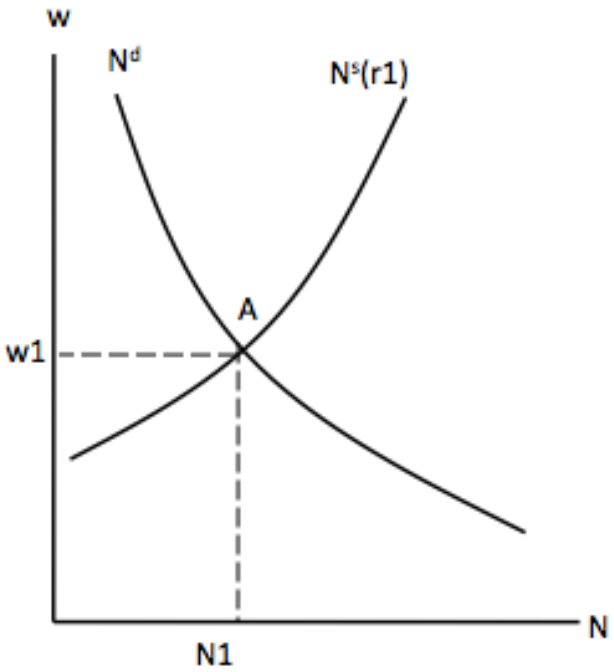
- $K \downarrow \Rightarrow MPK' \ldots. \Rightarrow I \ldots\ldots$
  $\Rightarrow r \ldots\ldots \Rightarrow I \ldots\ldots$
  $\Rightarrow$If $I \downarrow$, $K' \downarrow$ — impossible.
  $K \downarrow \Rightarrow MP_K \uparrow \Rightarrow I \uparrow$
- A decrease in current K $\Rightarrow$ r ...., I.... , w..... , Employment and output ..... (C and ℓ tends to $\downarrow$ because $r \uparrow$)
- "there appears to be empirical cases in which the output supply and output demand effects roughly cancel, for ecample during large natural disasters such as the Mississippi floods in 1993, and Hurrincane Katrina in 2005."

An increase in Current Total Factor Productiviy (Z)

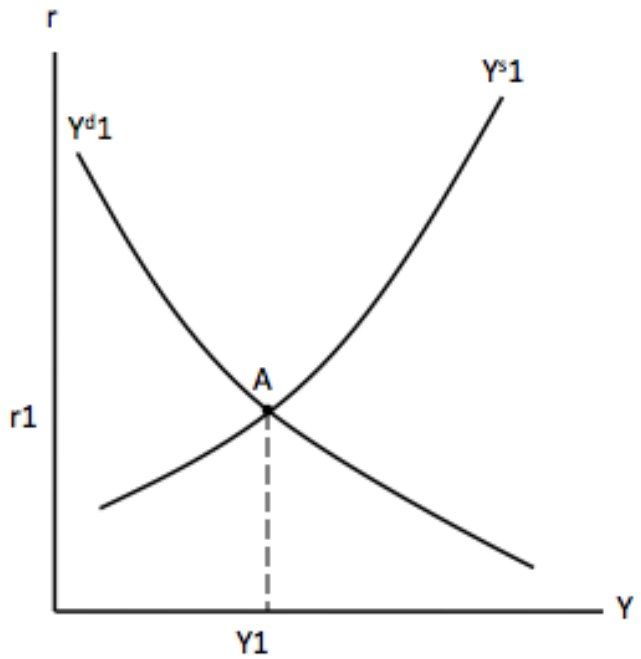
Step 2: r ..... N^s shifts (.....)

Step 1 : z $\uparrow \Rightarrow MP_N$..... . N^d shifts ..... . Y^s shifts ..... , r ....

Labour Market



Output Market

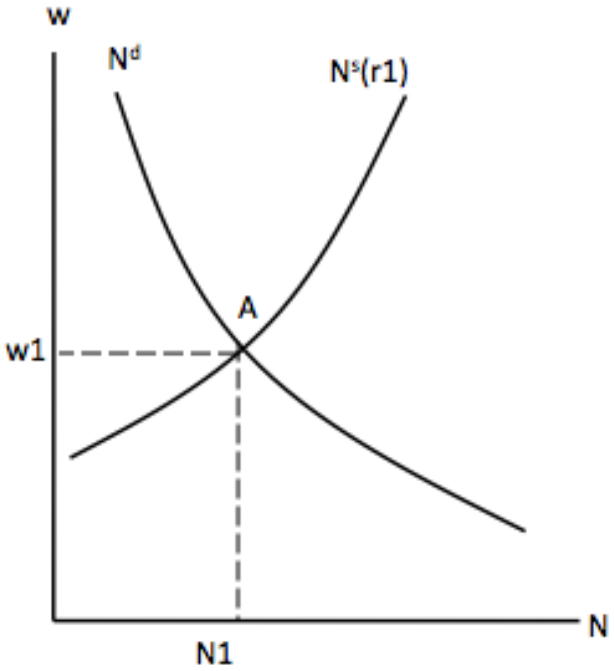


An increase in future Total Factor Productivity (Z')

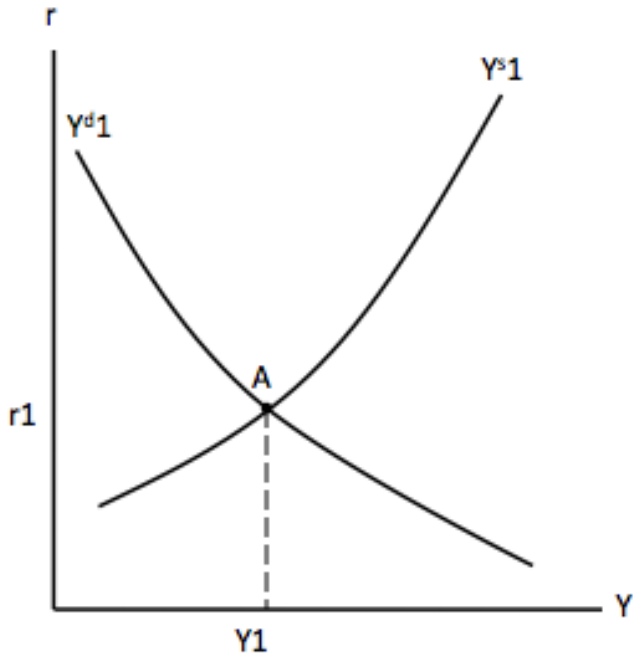
Step 2: r .....N^s shifts .....

Step 1 : $z' \uparrow \Rightarrow MP'_K$..... . I^d .....; Y^dshifts ..... r .....

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.