

Short Run Fluctuations

Fluctuations in Aggregate Spending main source of recessionary and expansionary gaps.

Planned vs Actual Spending

C, G, NX: actual = planned

Investment Spending= I^P

planned

Inventory investment
Business Fixed investment

$$I \neq I^P$$

$I > I^P$: actual > planned
sales low

$I < I^P$ actual < planned
sales high

Consumption

$$C = \bar{C} + c(Y - T)$$

— not function of income

- wealth
- real interest rate (more in lec 11)
- consumer confidence

c & Y-T

Disposable income

Incomes - Net Tax

$0 < c < 1$ MPC marginal propensity to consume

Economic Naturalist 26.2

What effect did 2000 to 2002 decline in stock market have on consumption spending?

13.3 T to 6.5T

\$1 fall mean fall in C 3 to 7 cents

Other factors counteract stock market wealth effect

Spending depends on Income

$PAE = C + I_p + G + NX$
 $C = 620 + 0.8(Y - T)$
 $G = 300$
 $NX = 20$
 $T = 250$
 $I_p = 220$
 $PAE = 960 + 0.8Y = \text{autonomous} + \text{induced}$

Output depends on Spending

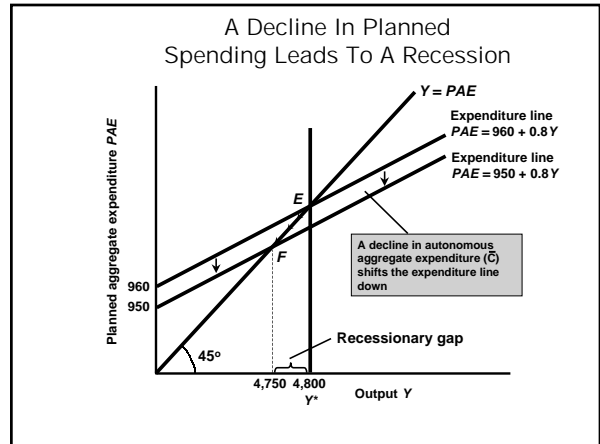
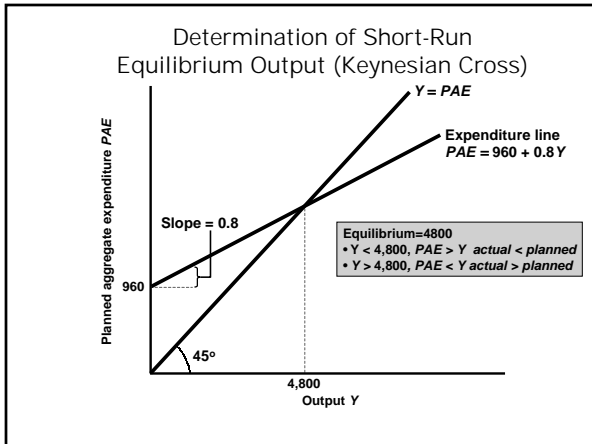
Meeting demand at set prices
 Production = PAE (demand)
 $Y = PAE$

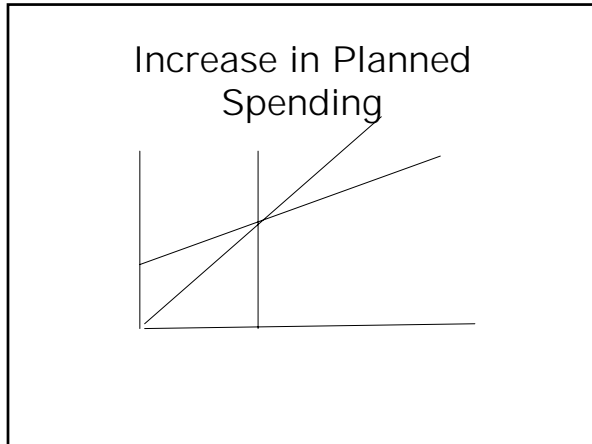
Short-Run Equilibrium Output

(1) Output Y	(2) Planned aggregate expenditure $PAE = 960 + 0.8Y$	(3) Y - PAE	(4) Y = PAE?
4,000	4,160	-160	No
4,200	4,320	-120	No
4,400	4,480	-80	No
4,600	4,640	-40	No
4,800	4,800	0	Yes
5,000	4,960	40	No
5,200	5,120	80	No

$Y < \text{SR Equil } Y$

$I < I_p$
 inventory drawn down
 more sales than planned
 firms expand production to meet demand





Shifts in PAE

\bar{C} shifts
 I_p shifts
 G
 NX

Naturalist 26.3

Cause of 90-91 recession?
 Decline in consumer confidence —
 Credit crunch from 80s bank crises I_p

Naturalist 26.5

Cause of 2001 Recession (Mar 01)?
 C high
 I_p low

Multiplier

10 unit drop in aut expd
 50 unit fall SR output

Multiplier = $1 / 1 - 0.8 = 1 / .2 = 5$

Large means spending changes due to income change large.

Likewise for small multiplier

$C(\bar{c})$ falls 10

PAE falls 10

Producer's income (worker, firm owner) falls 10, spending falls 0.8×10

Other producers' income falls $.8(.8 \times 10)$

$10[1 + .8 + .8^2 + .8^3 + \dots] = 10[1 / 1 - .8]$

=

Closing Output Gaps

Stabilization Policy
Fiscal: G , T
Monetary: (next time)
Expansionary
Contractionary

Close Gap due to fall in I_p

I_p falls 10
PAE shifts down 10
Stabilize: Inc Aut exp by 10,
Fiscal Policy = Inc G by 10

Naturalist 26.7

Does military spending stimulate
economy?

Change in T to close gap

Change Y-T
means change C
Dec tax or Inc transfer

Recessionary Gap=50

Shift up PAE by 10 (since $10 \times \text{mult} = 50$)
Inc C by 10
 $10 = 0.8(\text{change in T})$
change in T = 12.5
Dec in tax
Inc in transfer

Naturalist 26.8

Why did govt send out rebates \$300-\$600 in
2001?
Total \$38B
dec tax
U Michigan survey: actually little effect

Fiscal Policy

1) Affects spending & potential output

Potential Output (if work & saving incentive)

2) Large deficit means low public saving

3) Legislative process: inflexible tool

4) Automatic Stabilizer: fall in GDP , get inc G,
inc transfer, dec T