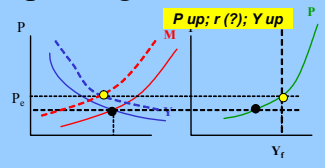
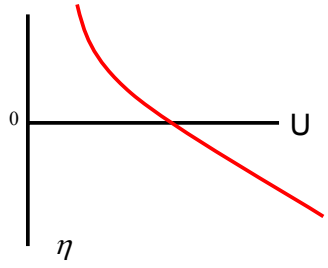
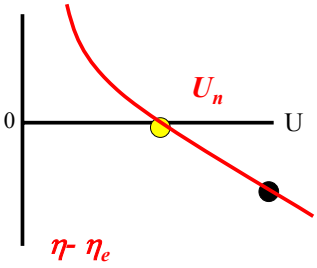
Updating the Model



The Raw Phillips Curve



The Correct Phillips Curve



Applying Okun's Law

$$U - U_n \approx \eta_e - \eta$$

$$\frac{Y_P - Y_A}{Y_A} \cong \left(\frac{1}{2}\right)(U - U_n)$$

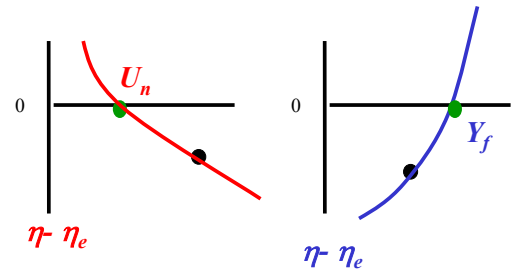
Restating Okun's Law

$$\frac{Y_P - Y_A}{Y_A} = \theta(\eta_e - \eta)$$

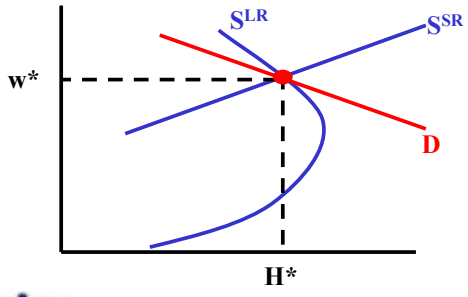
Restating Okun's Law

$$\frac{Y_f - Y_A}{Y_A} = \theta(\eta_e - \eta)$$

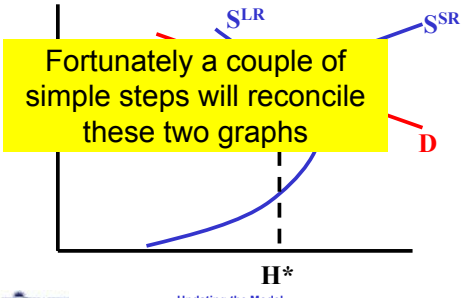
Graphing the Function



Our Starting Point

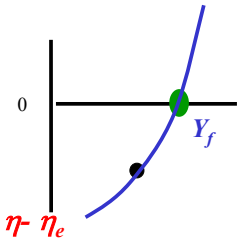


Our Starting Point



Fortunately a couple of simple steps will reconcile these two graphs

Restating the Graph



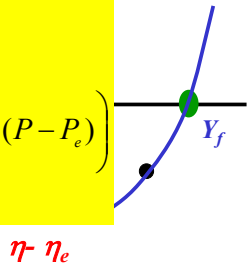
- P_o= Price Level last year (or period)
- P = $P_o(1+\eta)$
- P_e= $P_o(1+\eta^e)$

Restating the Graph

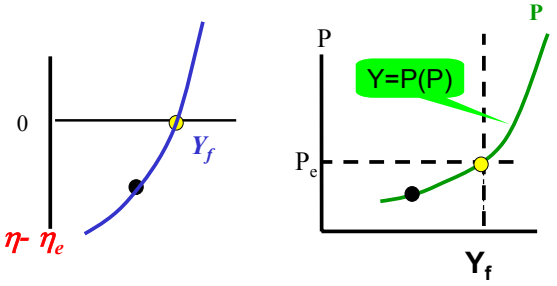
$$\eta - \eta_e = \frac{1}{P_o}(P - P_e)$$

$$Y = f(\eta - \eta_e) = f\left(\frac{1}{P_o}(P - P_e)\right)$$

$$Y = P(P \mid P_e)$$

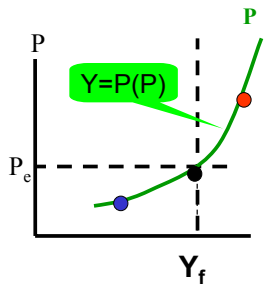


The P curve



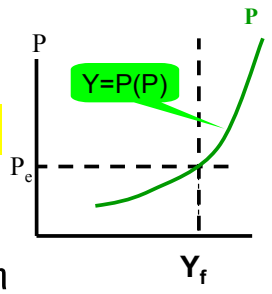
The P curve

- P > P_e: Y>Y_f.
- P <P_e: Y<Y_f.
- P = P_e, ***Y=Y(P_e)≡Y_f***

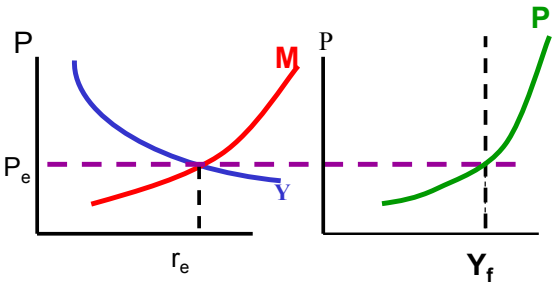


The Intuition

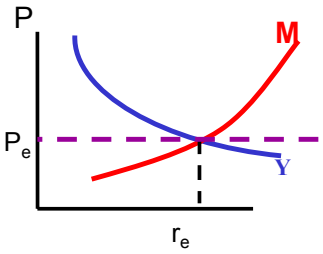
$$\Delta w_R = \omega \Delta w \approx \omega \Delta P$$



Our Basic Graph

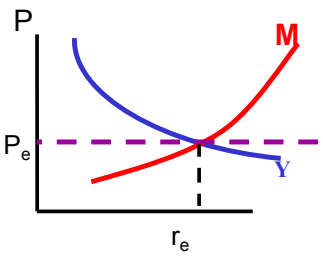


The Y and M Curves



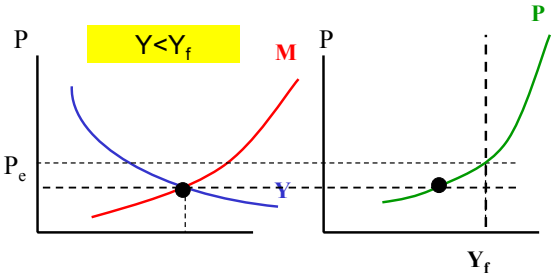
A familiar friend

The Y and M Curves

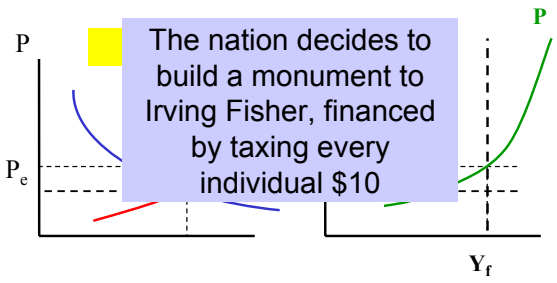


Because ***Y=P(P)***, the shapes of the Y and M curves are slightly altered.

A Problem

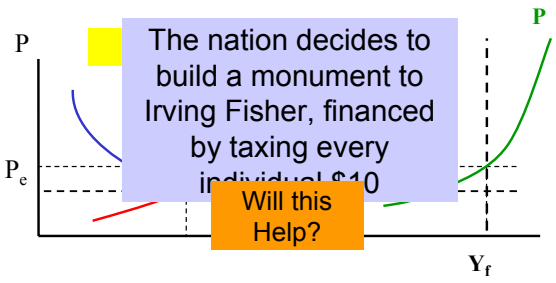


A Problem



The nation decides to build a monument to Irving Fisher, financed by taxing every individual $10

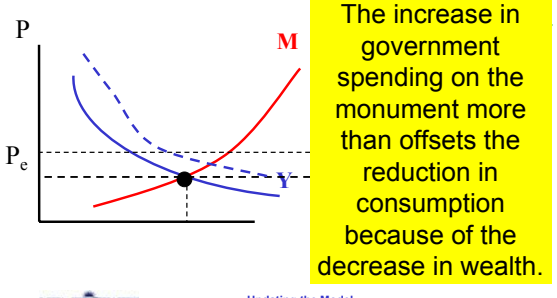
A Problem



The nation decides to build a monument to Irving Fisher, financed by taxing every individual $10

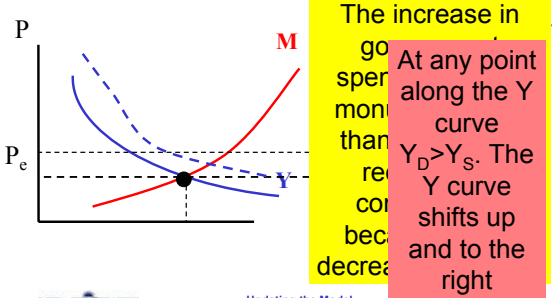
Will this Help?

The Auctioneer's View



The increase in government spending on the monument more than offsets the reduction in consumption because of the decrease in wealth.

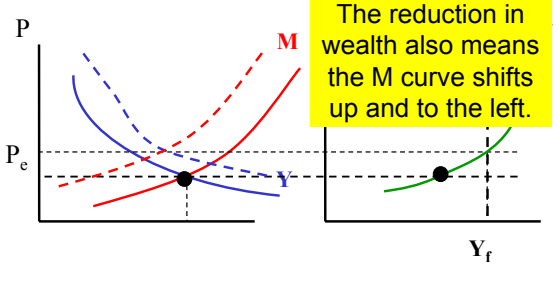
The Auctioneer's View



The increase in go… sper… mon… than… re… co… bec… decrea…

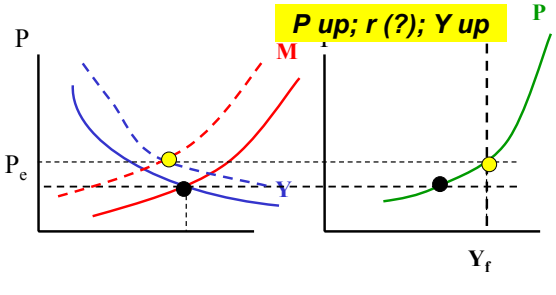
At any point along the Y curve $Y_D > Y_S$. The Y curve shifts up and to the right

The Auctioneer's View



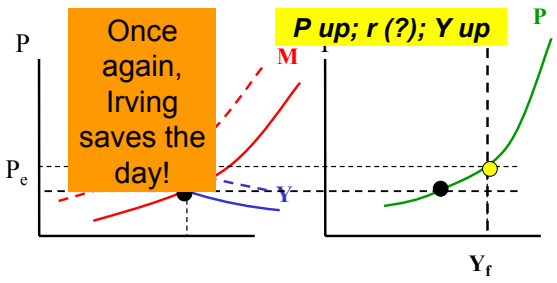
The reduction in wealth also means the M curve shifts up and to the left.

The Auctioneer's View

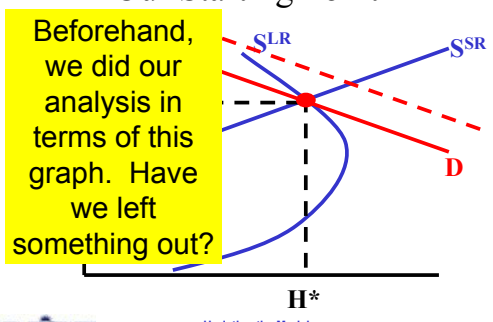


P up; r (?); Y up

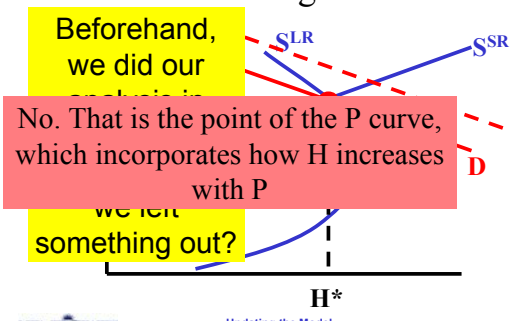
The Auctioneer's View



Our Starting Point



Our Starting Point



Another Objection

- Workers know the (well-deserved) monument is coming, and with it increased government purchases..

Another Objection

$$\Delta w_R = \omega \Delta w \approx \Delta P$$

Might we get a change in expectations?

- Workers know
- it increased government purchases..

Another Objection

$$\Delta w_R = \omega \Delta w \approx \Delta P$$

Might we get a change in ectations?

Perhaps, but lets keep this simple. No shift in P curve

- Workers know
- increased overnment urchases..

Another Objection

We return to this issue later

$$\Delta w_R = \omega \Delta w \approx \Delta P$$

Might we get a change in ectations?

Perhaps, but lets keep this simple. No shift in P curve

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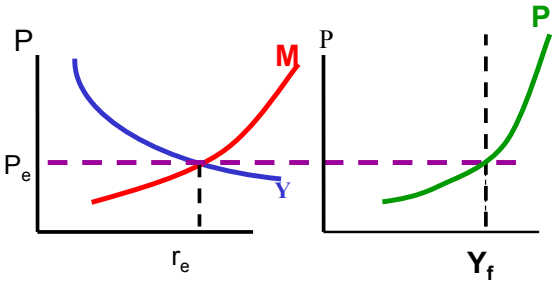
increased

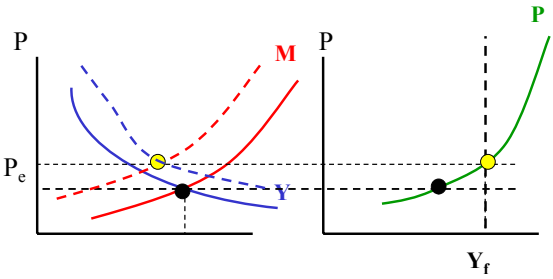
vernment

urchases..

The Basic Model



Summary



End

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