Why the Phillips Curve

$$LS^{SR} = \Phi(\eta - \eta_e)$$

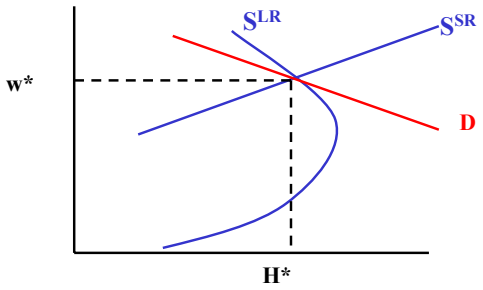
Conclusion

- No Long Run Phillips Curve
- Apparently a Short Run Phillips Curve, when inflation rate differs from expected rate.

Our Task

- How do we Explain these findings?
- And how do we incorporate them into the model?

Long Run and Short Run LS

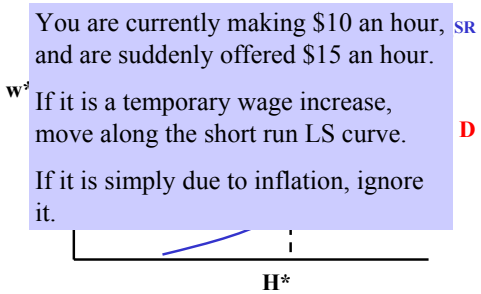


Long Run and Short Run LS

You are currently making $10 an hour, and are suddenly offered $15 an hour.

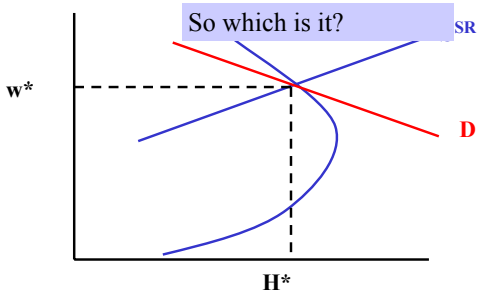
If it is a temporary wage increase, move along the short run LS curve.

If it is simply due to inflation, ignore it.



Long Run and Short Run LS

So which is it?



Imperfect Information

$$\Delta w_R = \omega \Delta w$$

$$0 \le \omega \le 1$$

Imperfect Information

$$\Delta w_R = \omega \Delta w$$

History will be the guide to the value of ω.

Imperfect Information

If you expect a lot of variability in inflation rates and little variability in real wage rates, set ω very low

$= \omega \Delta w$

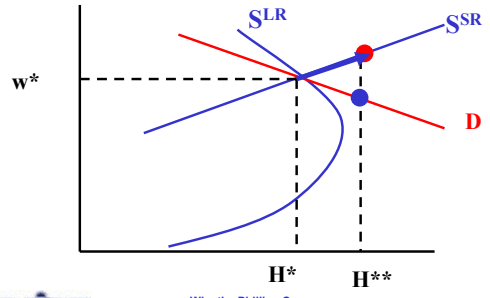
ne guide to the of ω.

Imperfect Information

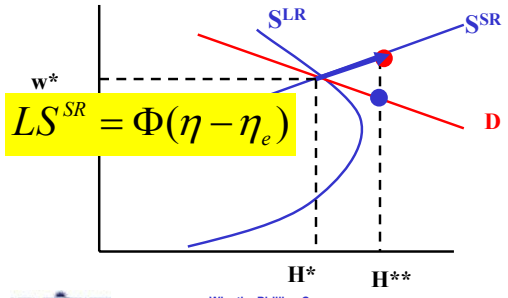
If you expect a lot of variability in inflation rates and little variability in real wage rates, set ω very low

If you expect little variability in inflation rates but a lot of variability in real wage rates, set ω high

The Response

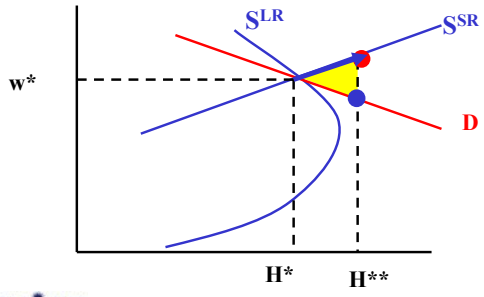


The Equation

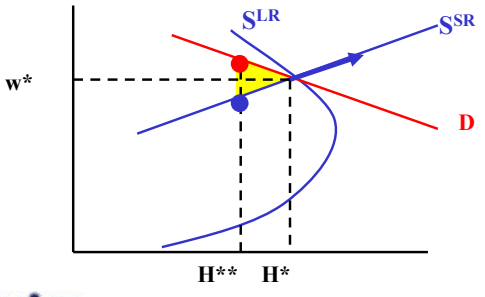


$$LS^{SR} = \Phi(\eta - \eta_e)$$

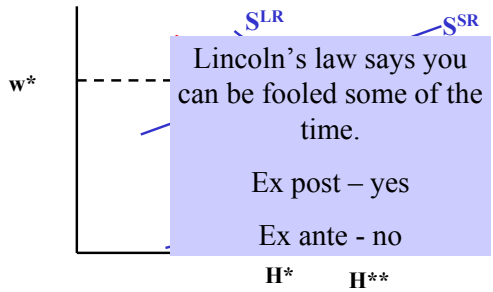
The Waste



The Waste II



Can You be Consistently Fooled?

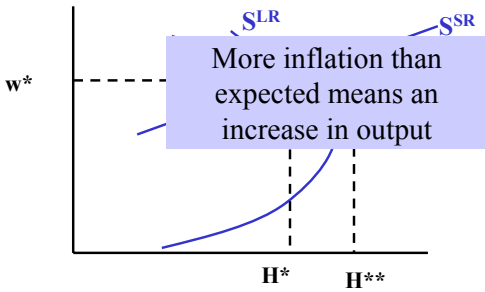


Lincoln's law says you can be fooled some of the time.

Ex post – yes

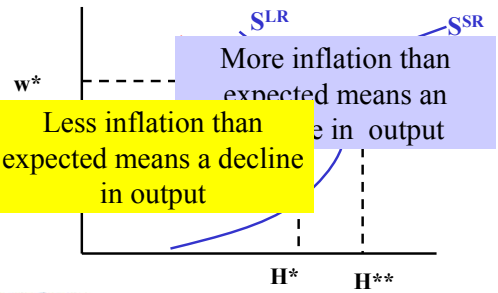
Ex ante - no

Implications



More inflation than expected means an increase in output

Implications

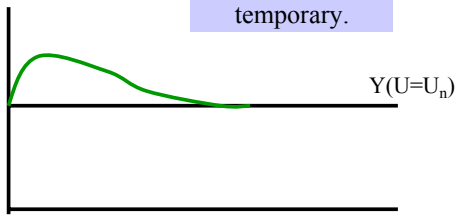


More inflation than expected means an ... in output

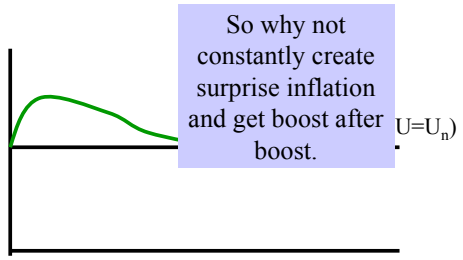
Less inflation than expected means a decline in output

Can We Exploit This?

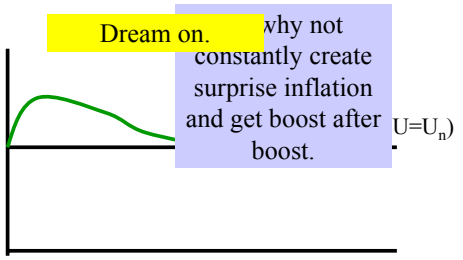
Any boost will be temporary.



Can We Exploit This?



Can We Exploit This?



Can We Mismanage This

- In Pleasantville, the inflation rate is always as expected. Information is always perfect

Can We Mismanage This

- In Pleasantville, the inflation rate is always as expected. Information is always perfect
  - No waste

Can We Mismanage This

- In Pleasantville, the inflation rate is always as expected. Information is always perfect
- In Mudville, monetary policies are quixotic, and the inflation rate is highly uncertain.

Can We Mismanage This

- In Pleasantville, the inflation rate is always as expected. Information is always perfect
- In Mudville, monetary policies are quixotic, and the inflation rate is highly uncertain.
  - A lot of business cycles due to a lot of imperfect information.

Can We Mismanage This

- In K[eynesian] always as e[xpectations] perfect
- In M[onetarist] quixotic, and tain.

Moral: Mudville should do a better job of monetary policy so as to reduce inflationary surprises.

An Important Caveat

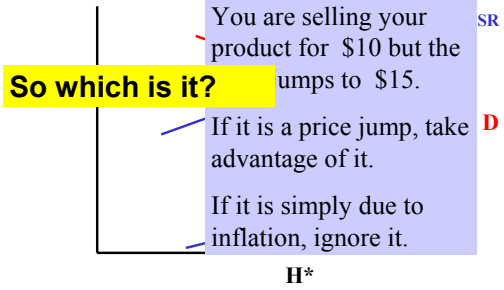
- We tell the story in terms of workers getting surprised.
- We could just as well tell it from the perspective of firms getting surprised.

An Important Caveat

- We tell the story in terms of workers getting surprised.
- We could just as well tell it from the perspective of firms getting surprised.

KENT STATE UNIVERSITY Why the Phillips Curve

Surprising Firms



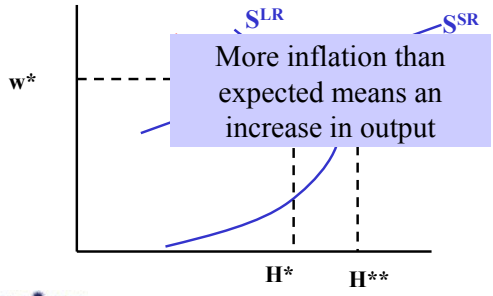
So which is it?

You are selling your product for $10 but the [price] umps to $15.

If it is a price jump, take advantage of it.

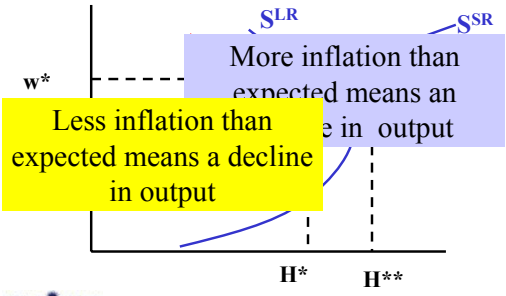
If it is simply due to inflation, ignore it.

Implications



More inflation than expected means an increase in output

Implications



More inflation than expected means an [increase] in output

Less inflation than expected means a decline in output

End