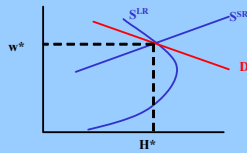
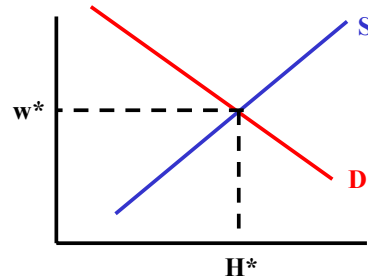


Extending the Model



Labor Supply and Demand



Backward Bending Supply

- People value both money and the things it can buy and the time to enjoy the things money can buy.
- At some point, people decide to spend less time working.

Evidence on Backward Bending

Gross Domestic Product and Hours Worked in the United States, 1820-1989		
Year	Per Capita GDP	Hours Worked
1870	2,254	2,964
1890	3,115	2,789
1913	4,868	2,605
1929	6,336	2,342
1938	5,568	2,062
1950	8,611	1,867
1960	9,995	1,795
1973	14,103	1,717
1987	17,340	1,608
1989	18,317	1,604

Evidence on Backward Bending

Year	Per Capita GDP	Hours Worked	"Wage Rate"
1870	2,254	2,964	\$0.76
		2,789	\$1.12
		2,605	\$1.87
		2,342	\$2.71
		2,062	\$2.70
		1,867	\$4.61
		1,795	\$5.57
		1,717	\$8.21
1987	17,340	1,608	\$10.78
1989	18,317	1,604	\$11.42

Define the "wage rate" as Per Capita GDP/Hours worked.

Evidence on Backward Bending

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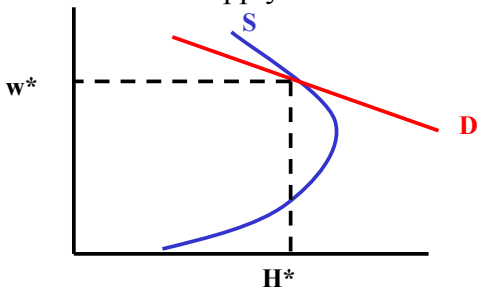
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Evidence on Backward Bending

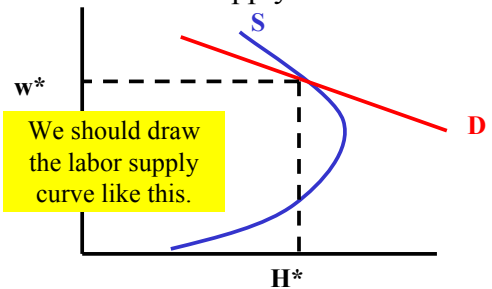
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Over time, wages have risen and hours worked have fallen. We seem to be in the backward bending portion.

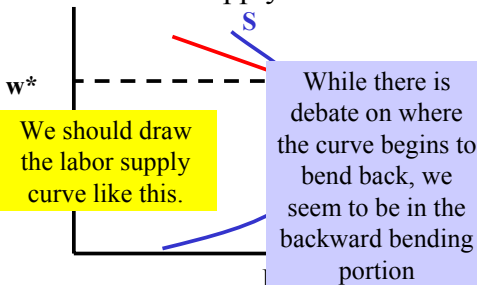
The Backward-Bending Labor Supply Curve



The Backward-Bending Labor Supply Curve



The Backward-Bending Labor Supply Curve



But there is more to the story.....

A Simple Experiment

- Miller's Pizzeria offers you \$1,000 an hour. The owner promises – and you believe – that you can earn that rate for the rest of your life.

A Simple Experiment

- Miller's Pizzeria offers you \$1,000 an hour. The owner promises – and you believe – that you can earn that rate for the rest of your life.
 - No doubt you will work fewer hours, using the leisure, to spend your extra income (wisely?)

A Simple Experiment

- Miller's Pizzeria offers you \$1,000 an hour. The owner promises – and you believe – that you can earn that rate for the rest of your life.
- Miller's Pizzeria is desperate for your efforts *right now*. This bonanza will not continue for long.

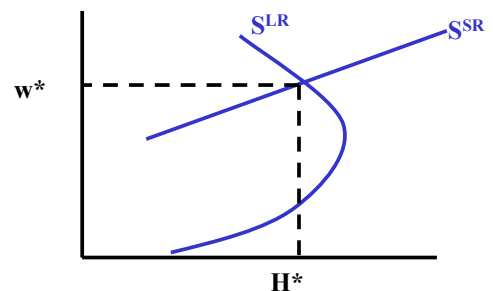
A Simple Experiment

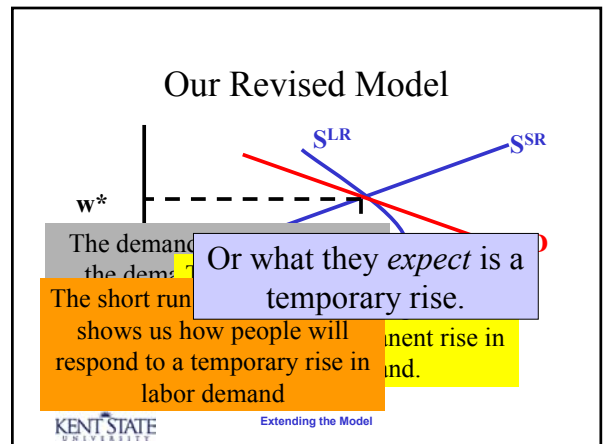
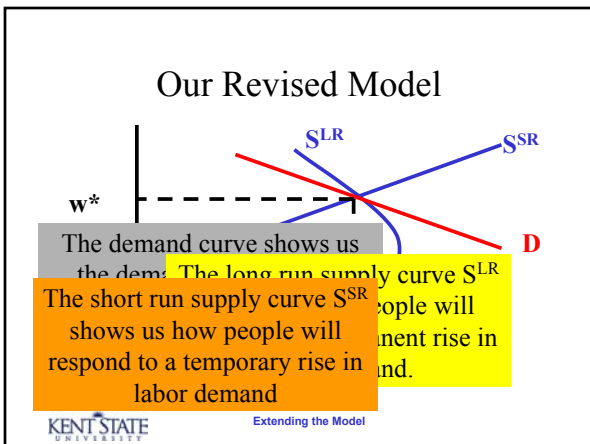
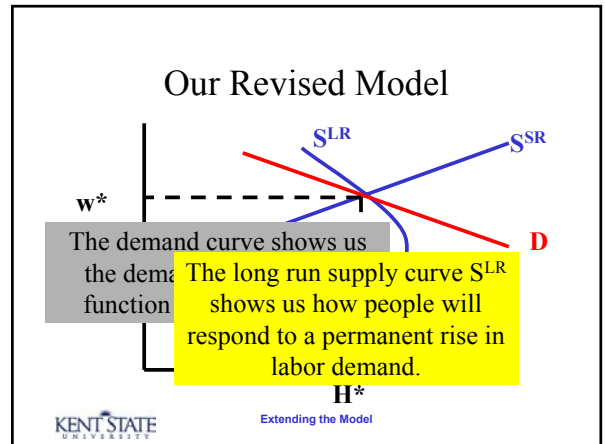
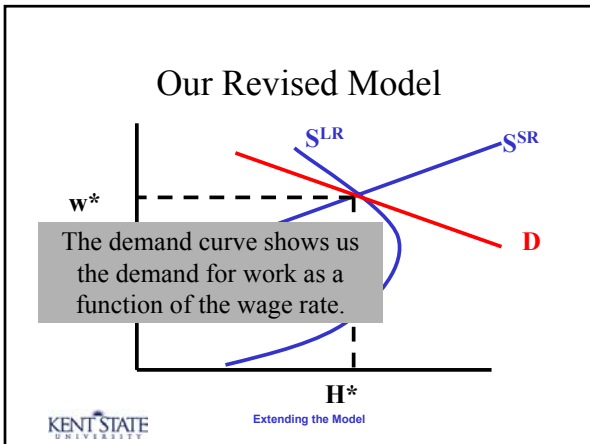
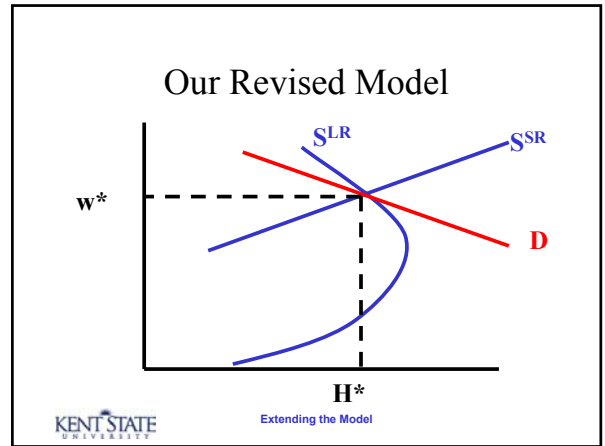
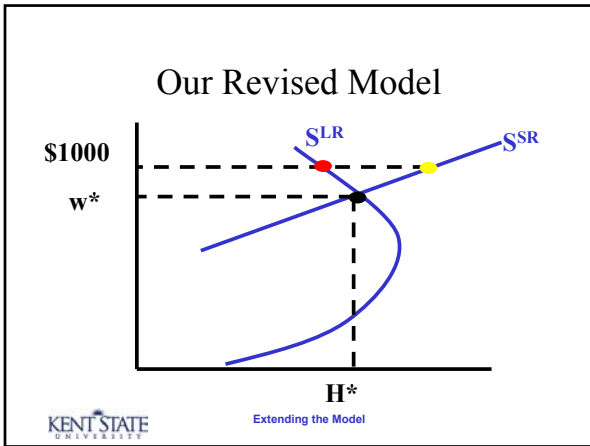
- Miller's Pizzeria offers you \$1,000 an hour. The owner promises – and you believe – that you will work like a dog and put money aside for the future. for the rest of your life.
- Miller's Pizzeria is desperate for your efforts *right now*. This bonanza will not continue for long.

A Simple Experiment

- Miller's Pizzeria offers you \$1,000 an hour. The owner promises – and you believe – that you will work like a dog and put money aside for the future. for the rest of your life.
- Miller's Pizzeria is desperate for your efforts *right now* – or pizzas – while the sun shines. This bonanza will not continue for long.

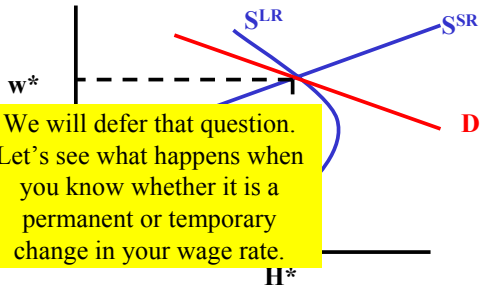
Our Revised Model



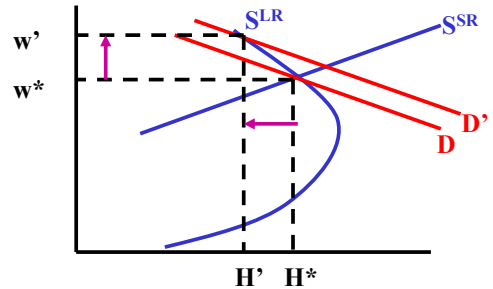


Permanent vs. Temporary

We will defer that question. Let's see what happens when you know whether it is a permanent or temporary change in your wage rate.

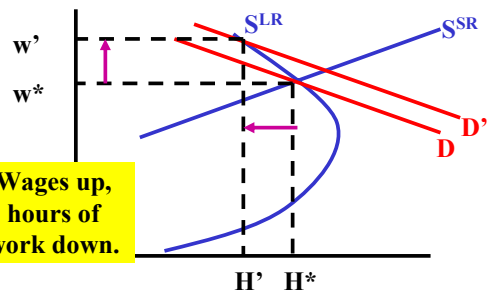


A Permanent Increase

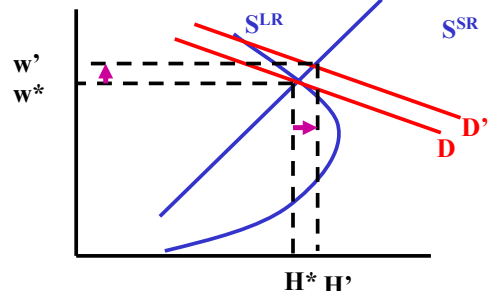


A Permanent Increase

Wages up, hours of work down.

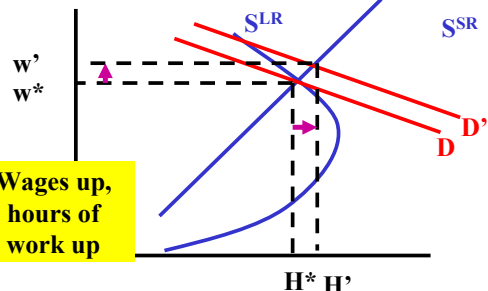


A Temporary Increase

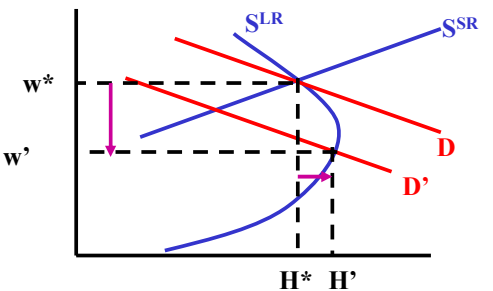


A Temporary Increase

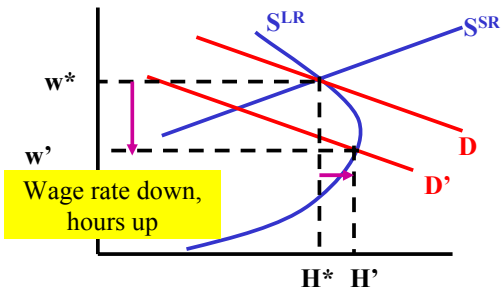
Wages up, hours of work up



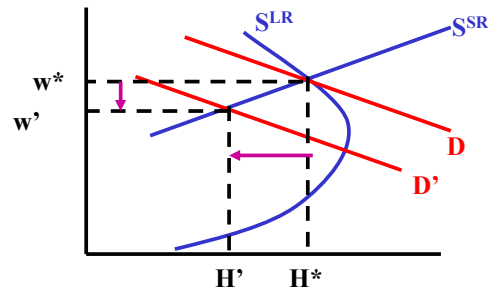
A Permanent Decrease



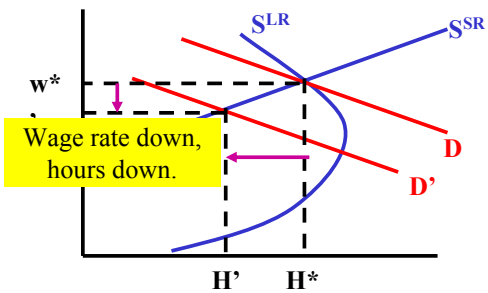
A Permanent Decrease



A Temporary Decrease



A Temporary Decrease



Summary

Demand for Labor	Wage Rate	Hours of Work
Permanent Increase in Demand for Labor	w+	H-
Temporary Increase in Demand for Labor	w+	H+
Permanent Decrease in Demand for Labor	w-	H+
Temporary Decrease in Demand for Labor	w-	H-

End

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