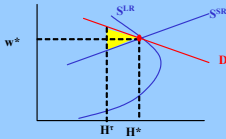
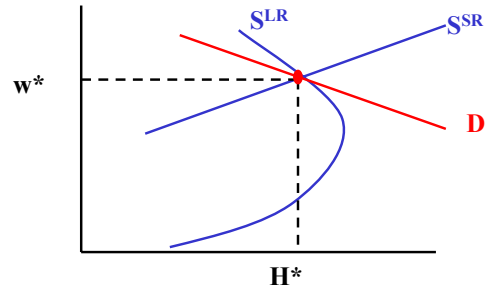


Wage Taxes and Labor Supply

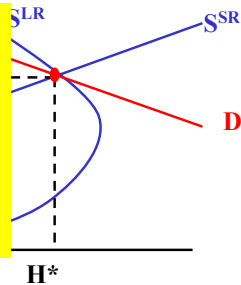


SR and LR Labor Supply



Our Agenda

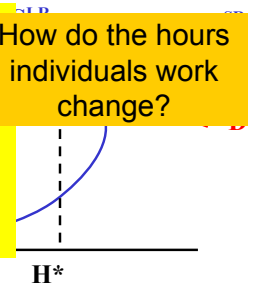
Suppose the government imposes a tax τ_w on wage income. That is, your after tax wage rate is now $(1 - \tau_w)w$



Our Agenda

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How do the hours individuals work change?

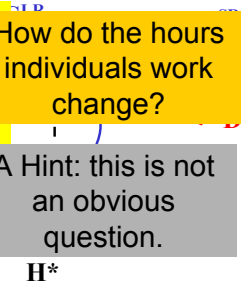


Our Agenda

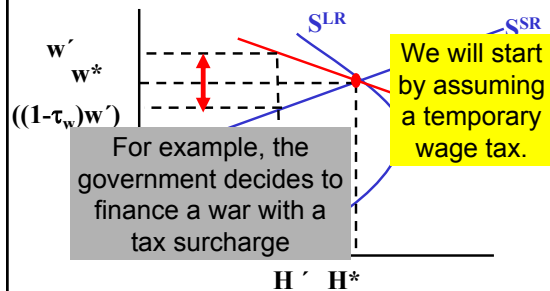
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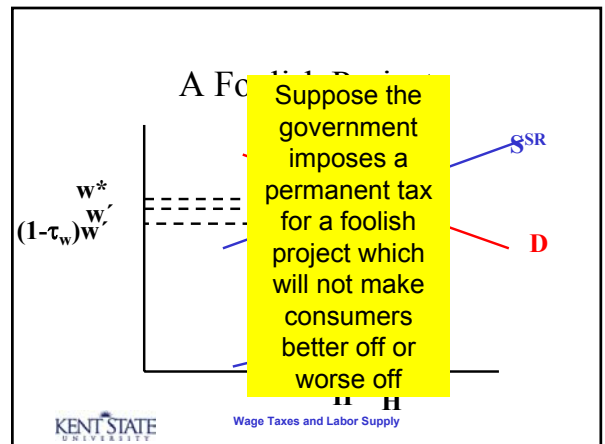
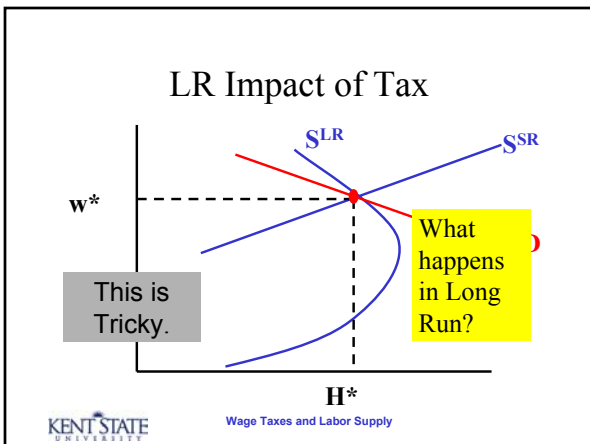
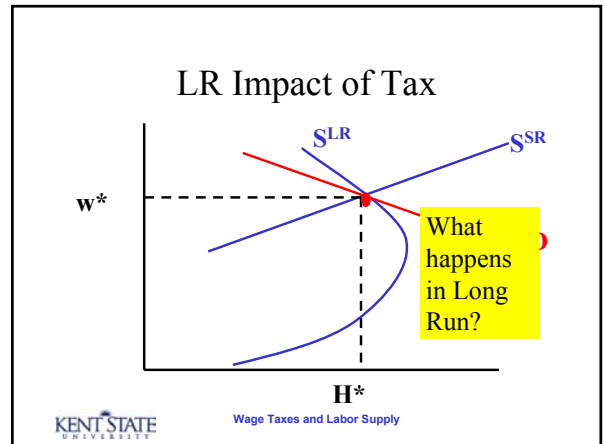
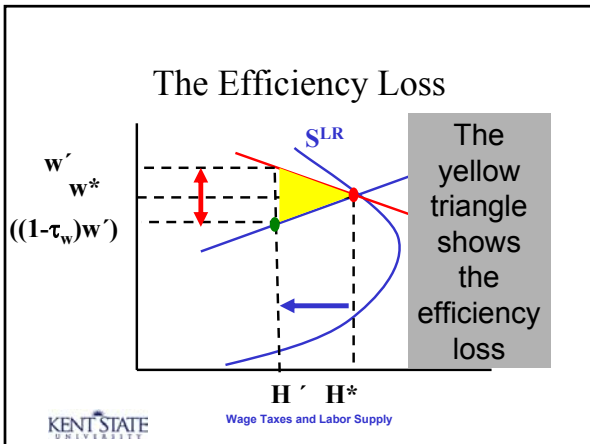
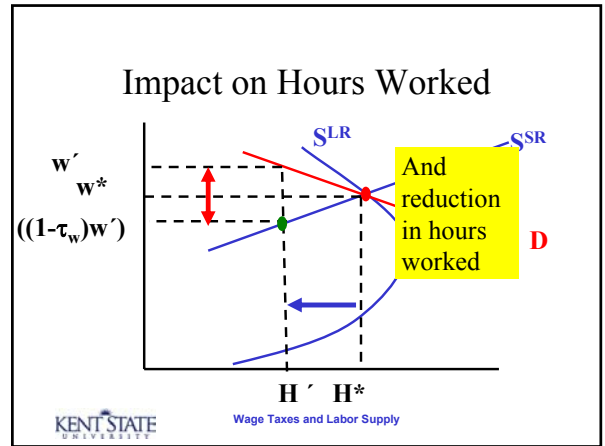
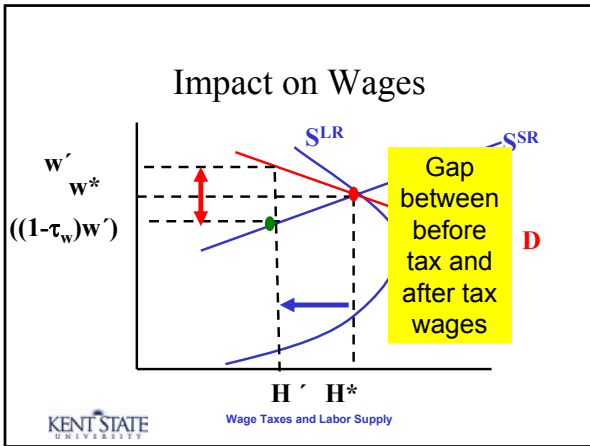
How do the hours individuals work change?

A Hint: this is not an obvious question.

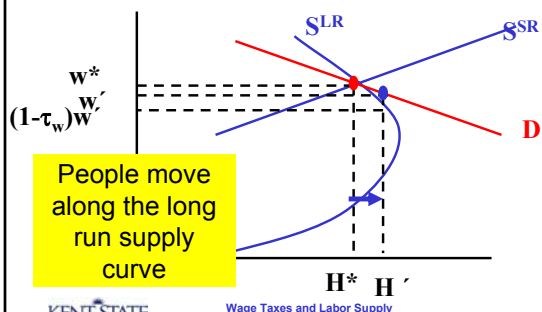


SR Impact of Tax



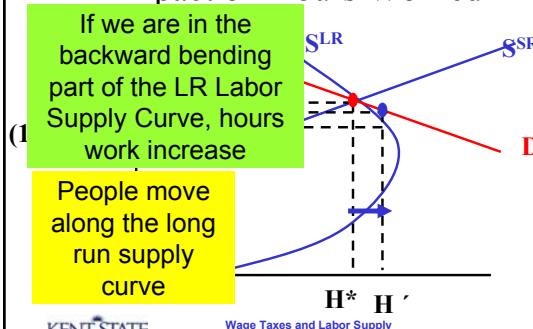


A Foolish Project



People move along the long run supply curve

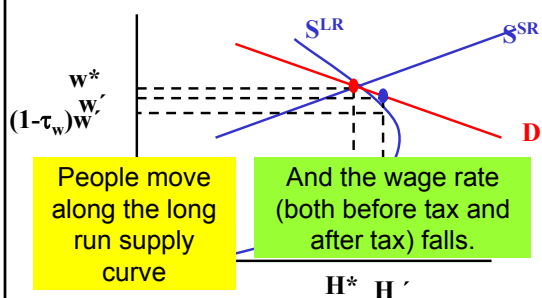
Impact on Hours Worked



If we are in the backward bending part of the LR Labor Supply Curve, hours work increase

People move along the long run supply curve

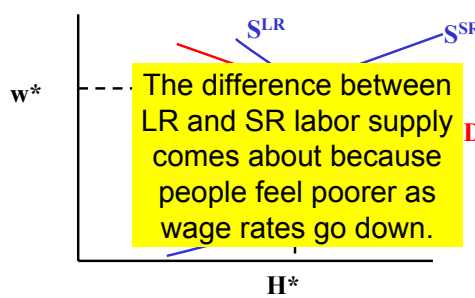
Impact on Wages



People move along the long run supply curve

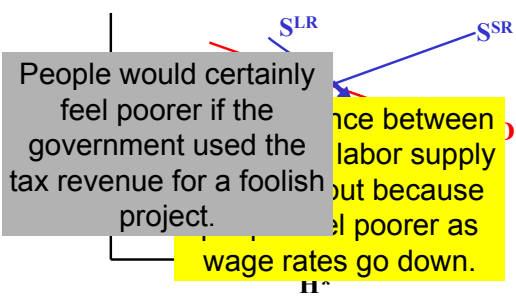
And the wage rate (both before tax and after tax) falls.

The Crucial Exception



The difference between LR and SR labor supply comes about because people feel poorer as wage rates go down.

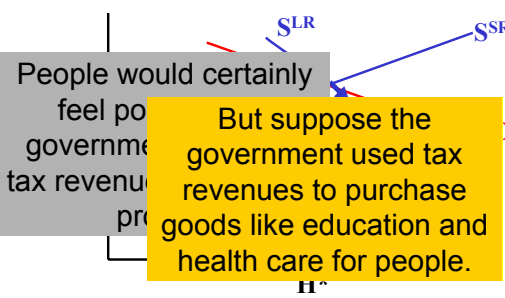
The Crucial Exception



People would certainly feel poorer if the government used the tax revenue for a foolish project.

The difference between LR and SR labor supply comes about because people feel poorer as wage rates go down.

Taxing for Social Services



People would certainly feel poorer if the government used tax revenue for a foolish project.

But suppose the government used tax revenues to purchase goods like education and health care for people.

Taxing for Social Services

And suppose it was as efficient as the private sector in providing those goods.

People would feel poorer because the government used tax revenues to purchase goods like education and health care for people.

KENT STATE UNIVERSITY Wage Taxes and Labor Supply

Taxing for Social Services

And suppose it was as efficient as the private sector in providing those goods.

Just as efficient. Not more efficient. Not less efficient.

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Wealth Impact

Then people would not feel any poorer because of the new taxes. They would only see that, on the margin, working brought them less.

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An Example

Joe Smith works 2,000 hours a year and earns \$20 an hour.

$\tau_w = 0$.

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The Cost of Leisure

Joe knows if he works an hour less, he has \$20 less to spend.

Joe Smith works 2,000 hours a year and earns \$20 an hour.

$\tau_w = 0$.

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Taxing for the Welfare State

The government now makes education and health care free, and pays for them by setting $\tau_w = 40\%$.

Joe knows if he works an hour less, he has \$20 less to spend.

Joe Smith works 2,000 hours a year and earns \$20 an hour.

$\tau_w = 0$.

KENT STATE UNIVERSITY Wage Taxes and Labor Supply

The government now makes education and health care free for them but pays for them by increasing the wage tax. $\tau_w = 40\%$

If Joe works an hour less, he gets \$20 less to spend. But if he continues to work the same number of hours as before, he is neither richer nor poorer.

Joe knows if he works an hour less, he is \$20 less to spend.

KENT STATE UNIVERSITY Wage Taxes and Labor Supply

The government now makes education and health care free for them but pays for them by increasing the wage tax. $\tau_w = 40\%$

If Joe works an hour less, he only sees the \$12 cut (as opposed to a \$20 cut w/o taxes). He knows that how much he works will not impact his health care or his kid's education.

KENT STATE UNIVERSITY Wage Taxes and Labor Supply

The government now makes education and health care free for them but pays for them by increasing the wage tax. $\tau_w = 40\%$

If he works an hour less, he only sees the \$12 cut (as opposed to a \$20 cut w/o taxes). He knows that how much he works will not impact his health care or his kid's education.

They're free remember? But if he works an hour less, he is \$12 less to spend. But if he continues to work the same number of hours as before, he is neither richer nor poorer.

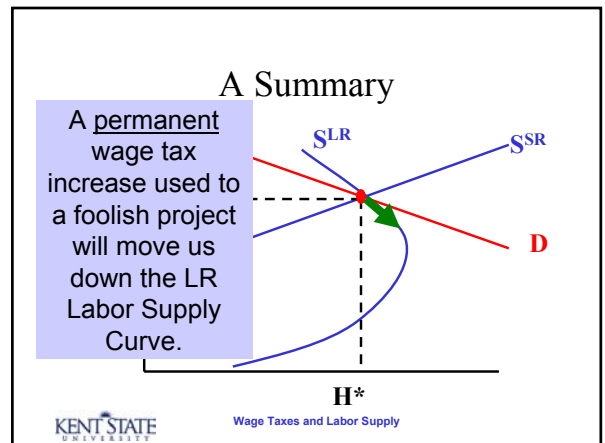
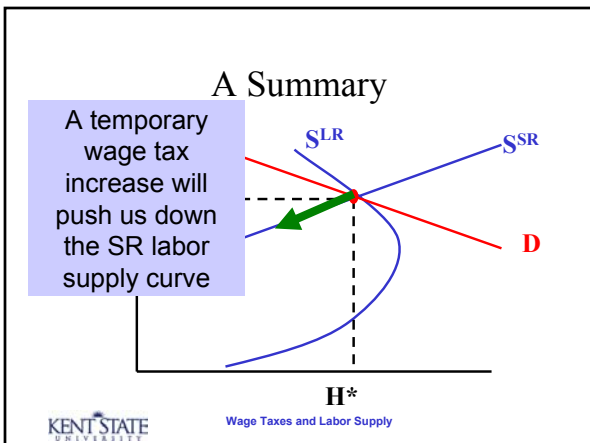
KENT STATE UNIVERSITY Wage Taxes and Labor Supply

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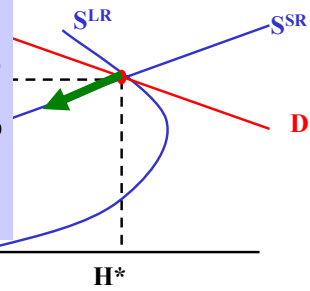
In short, Joe is likely to respond to the higher taxes by working less.

KENT STATE UNIVERSITY Wage Taxes and Labor Supply

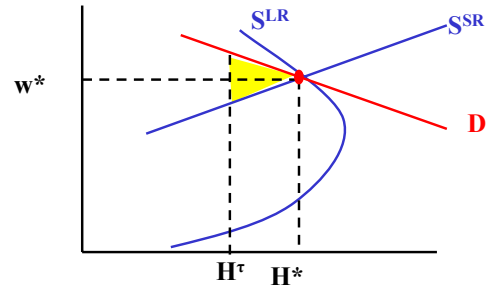


A Summary

A permanent wage tax increase used to fund social services will also push us down the SR labor supply curve



Efficiency Loss



End

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