

The Tax Incidence and Budget Constraint

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- Budget constraint is an example of separating hyperplane which separates the commodity universe.

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- If it does not have a large enough market $q^* = p^* \times (1 + t)$

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- How will we show that the individuals utility could have stayed constant, or suffered less as a result of the rebate?

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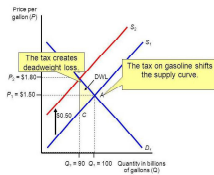
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- Feasible consumption bundle set $\Rightarrow$ Opportunity Set or Budget Set.

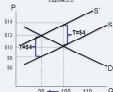
Tax Inefficiency



Tax Inefficiency with Supply and Demand

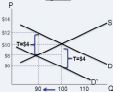
A tax levied on producers

Figure 1.2



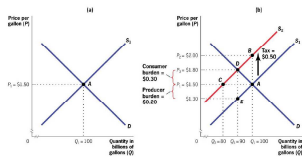
or a tax levied on consumer

Figure 1.3

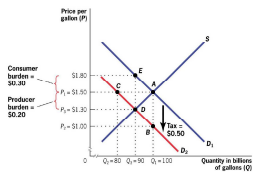


...produces the same effect.
A decrease in quantity.

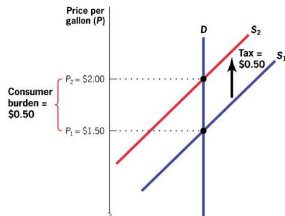
Tax Incidence with Supply Shifts



Tax Incidence with Demand Shifts



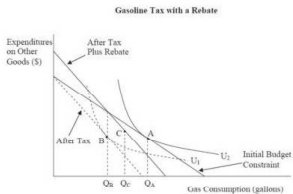
Tax Incidence in the Extremes of Distribution



Tax Incidence in the Extremes of Distribution-2



Tax and Rebates and the Resulting Budget Constraint



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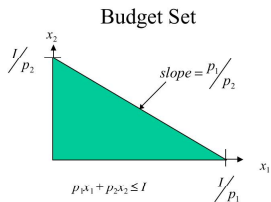
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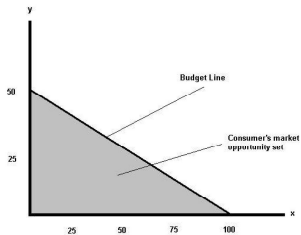
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- The case of maximum consumption bundles.
- How do we represent the case of a gas-tax rebate. What does this government policy plan to achieve?

Budget Constraint & Budget Set

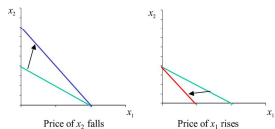


Budget Constraint & Price Changes



Budget Constraint & Price Changes

The Effect of a Price Change on the Budget Line



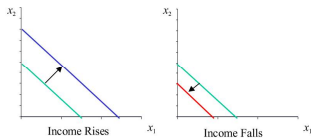
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10

Budget Constraint & Income Changes

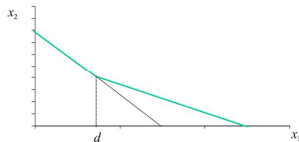
The Effect of a Change in Income on the Budget Line



Budget Constraint & Non-Continuities

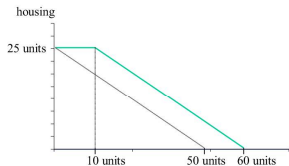
Volume Discounts

- The first d units of x_1 cost p_1
- Any units after d cost $p_1/2$



Budget Constraint & Non-Continuities with Food Stamps

Food Stamps Budget Constraint



Budget Constraint & Non-Continuities with Preferences

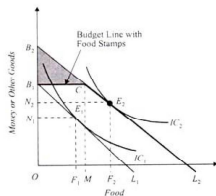
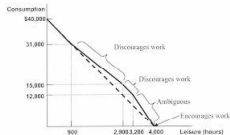
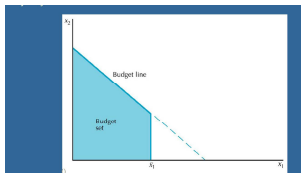


Fig. 11.3. Effects of Food Stamp Programme on Consumption

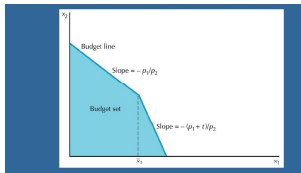
Budget Constraint Non-Continuities with Leisure and Labor



Budget Curve With Rationing



Budget Curve With Taxes



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- Transitivity is the the third important characteristic.
- Which is associated with: $(x_1, x_2) \succsim (y_1, y_2)$
- $(y_1, y_2) \succsim (z_1, z_2)$
- In this case $(x_1, x_2) \succsim (z_1, z_2)$

Preference Relationship-Main Characteristics

- Completeness is the main characteristic we have discussed.
- Reflexivity is the second important characteristic.
- The general form of this equation is $(x_1, x_2) \succsim (x_1, x_2)$
- Transitivity is the the third important characteristic.
- Which is associated with: $(x_1, x_2) \succsim (y_1, y_2)$
- $(y_1, y_2) \succsim (z_1, z_2)$
- In this case $(x_1, x_2) \succsim (z_1, z_2)$
- What does this relationship ensure?

Indifference Curves-Exceptional Cases

- Perfect Substitutes

Indifference Curves-Exceptional Cases

- Perfect Substitutes
- Perfect Complements

Indifference Curves-Exceptional Cases

- Perfect Substitutes
- Perfect Complements
- Bads

Indifference Curves-Exceptional Cases

- Perfect Substitutes
- Perfect Complements
- Bads
- Neutrals

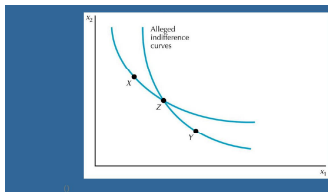
Indifference Curves-Exceptional Cases

- Perfect Substitutes
- Perfect Complements
- Bads
- Neutrals
- Satiated Preferences.

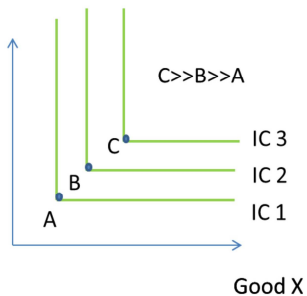
Indifference Curves-Exceptional Cases

- Perfect Substitutes
- Perfect Complements
- Bads
- Neutrals
- Satiated Preferences.
- Discrete Goods.

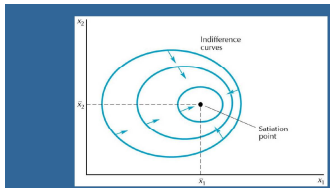
Transitivity Violations



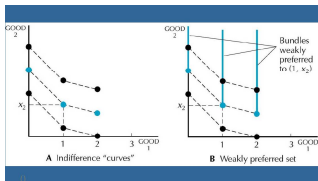
Monotonicity Assumption



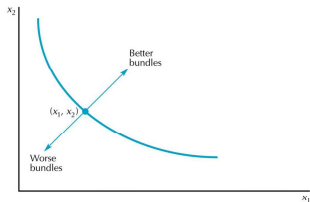
Non-Satiation Violations



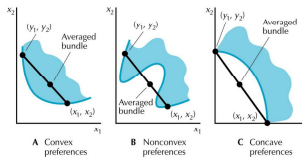
Discrete Good Argument



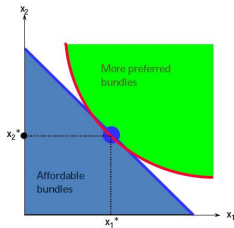
Ranking Bundles



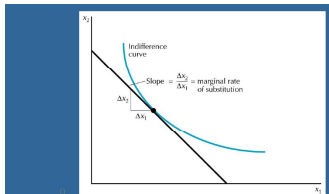
Convex and Concavity Relationship



Budget Set and Preferred Set Distinguished

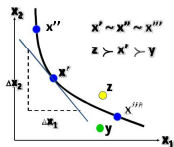


Convex and Concavity Relationship

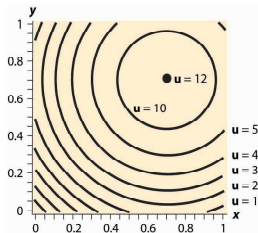


MRS Formula and Graphic Representation

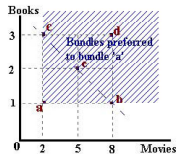
$$MRS(x') = \lim_{\Delta x_1 \rightarrow 0} \left(\frac{\Delta x_2}{\Delta x_1} \right) = \frac{dx_2}{dx_1}$$



The Visual Example of Local-Satiation

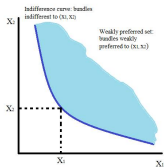


Characteristics of Indifference Curve



Characteristics of Indifference Curve

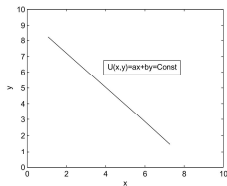
indifference-curve-weakly-preferred-on.png (PNG Image, 631 × 637 pix...) <https://consumersstudy.files.wordpress.com/2013/07/indifference-curve...>



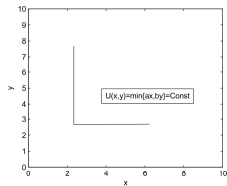
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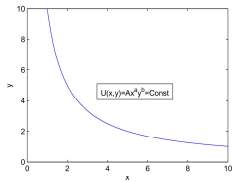
Indifference Curve for Perfect Substitutes



Indifference Curve for Perfect Complements



Indifference Curve/General Cobb Douglas



Indifference Curve with Bads

