

Income and Substitution Effects

When p_x increases, the demand for x changes because:
(1) good x is now more expensive relative to good y , and
(2) the consumer's purchasing power has gone down.

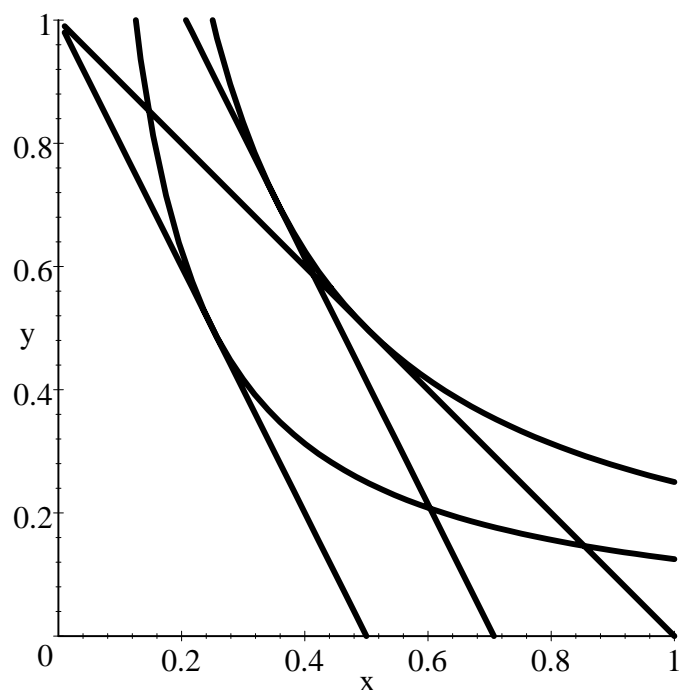
Substitution Effect—the change in demand resulting from a change in the price ratio, leaving utility unchanged.

Income Effect—the change in demand resulting from the change in purchasing power (movement from the initial indifference curve to the final indifference curve), leaving the price ratio unchanged.

total effect = substitution effect + income effect

The substitution effect is always negative, due to diminishing MRS

The income effect is negative for normal goods (reinforcing the substitution effect), and positive for inferior goods (counteracting the substitution effect)



Income and Substitution Effects (normal good)

When income is generated by selling resources like labor, income and substitution effects are different from the "textbook" case.

For an increase in the value of your leisure time (wage), now the price change affects the right side of the budget equation.

$$p_x x + p_y y = M = p_x \bar{x} + p_y \bar{y}$$

Now the income effect could conceivably dominate the substitution effect. Say you work a 40 hour week and your hourly wage jumps from \$10 to \$1000. You might work more, since an extra hour gets you an entertainment system instead of just a cd. On the other hand, you might work less, since you can have everything you want except time.

Because you are a net seller of leisure, the income effect of a wage increase is positive if leisure is a normal good.

Reagan's 1981 Tax Cut

Supply-Side Economics (Reaganomics):

A tax cut will increase employment, GDP, and economic growth.

Why? The *after-tax* wage increases, which makes leisure more expensive. People will substitute away from leisure (work more) and towards consumption.

Also, the after-tax return on savings goes up, so future consumption is cheaper relative to current consumption. More savings (investment and growth).

All substitution effect; income effect is negligible. It is not that people will save a chunk of money. Rather, changing prices provides the incentive to save more.