emand analysis in health context.

Consumer choice and demand. Folland *et al* Chapter 9

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Chapter 9: Consumer choice and demand

Consumer choice and demand.

Demand analysis in a health context.

Econ 103 consumer theory with "doctor visits" instead of "apples."

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We will run through this quickly.

Bread or health

Consumer choice and demand.

- Recall our discussion of health capital.
- Sweeping a bunch of stuff under the rug, we can use simple analysis to determine how much health the person would choose.
- (graph: health vs bread PPF)
- How does the person allocate their resources to generate that health?
- (graph: consumer's equilibrium, other goods and doctor visits)

- Recall a demand schedule in (price, quantity) space gives the quantity demanded at every price, *holding all else equal.*
- Changes in anything that affects demand other than price *shift* the demand curve. Changes in price move us along the demand curve.

Demand analysis in a health context.

Price elasticity of demand:

Price elasticity =
$$\left(\frac{\Delta Q}{\Delta P}\right)\left(\frac{Y}{P}\right)$$
 (1)

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where Q is quantity and P is price.

(graph: deriving a demand curve for visits)

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Income elasticity of demand:

Income elasticity =
$$\left(\frac{\Delta Q}{\Delta Y}\right) \left(\frac{Y}{Q}\right)$$
 (2)

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where Q is quantity and Y is income. (graph: income expansion path)

Other demand shifters

Consumer choice and demand.

- Health status, e.g., demand more doctor visits when sick.
- Insurance: as we saw in Chapter 8, changing the price the consumer pays by changing the generosity of insurance generally changes the consumer's quantity demanded.

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 We can simply incorporate time into the analysis by converting time costs to dollar costs.

full price = money price + value of time
$$(3)$$

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 Notice price elasticities are larger (in magnitude) with respect to full price than to money price.

$$E_{Mp} = \frac{\Delta Q}{\Delta P} \frac{P_M}{Q} \tag{4}$$

$$E_{full} = \frac{\Delta Q}{\Delta P} \frac{P_{full}}{Q}$$
(5)

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Empirical evidence on demand

Consumer choice and demand.

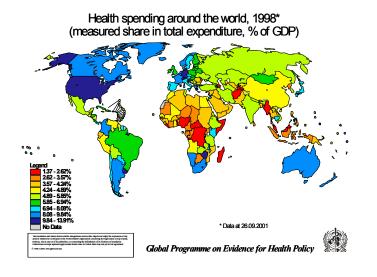
- Measurement issues: how do we define a unit of care?
- Usual problems in statistically estimating the causal effect of price or other determinants on care.
- Demand is usually estimated to be quite inelastic, ie, changes in price of care lead to relatively small changes in quantity of care demanded.

Income and demand

Consumer choice and demand.

- Across people (in the U.S.), income elasticities are quite small.
- Across countries, income elasticities are quite large: richer countries spend not just more, but a greater fraction of GDP, on health care.
- How do we reconcile these results?





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