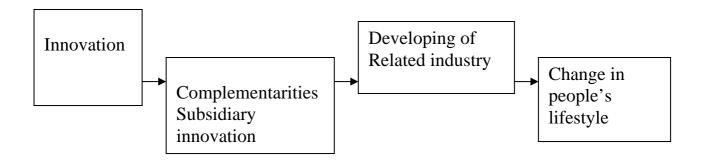
The COL index is the ratio it two situations (usually two time periods) of the minimum expenditure required to achieve the same level of well-being.

A meaningful CPI should approximate the true COL index. Real consumption expenditure should be calculated by deflating current-dollar consumer surplus expenditure by the same CPI.

Examples: Catalogue and the cost of light.

The official CPI in many countries makes no attempt to quantify the value of new products. Therefore, the CPI has been assumed to incorporate an upward bias, i.e. to overstate the rate of inflation.

#### The New-Goods Process



- Household production function of welfare
- Quality improvements
- Health improvements
- Decline in the COL and increase in real wages

## **Topic 1 Complementarities**

There are at least three different types of complements to new goods:

- 1. Market supply new goods
- 2. Public or external complements
- 3. Information capital or changes in practices comes from using the new goods



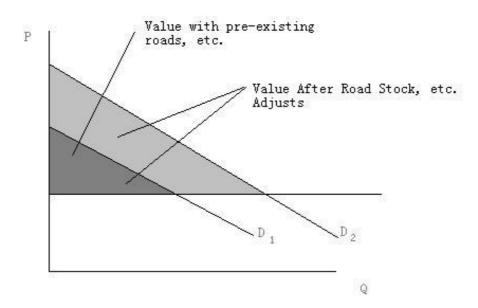


Fig. 1 Value of cars with and without complements

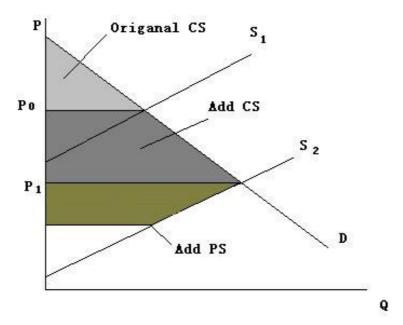


Fig. 2 Effects of a supply shift

# **Topic 2 Distinguish New Goods from New Varieties of Existing Goods**

## 1. Unstable taste for variety

### 2. Welfare Gains within Product Categories (Acetaminophen or aspirin)

- New Category
- How to measure?
  - COL measurement approaches
  - Tool-price indexes
  - Hedonic price indexes
  - Demand system measurement
- New goods have limitations

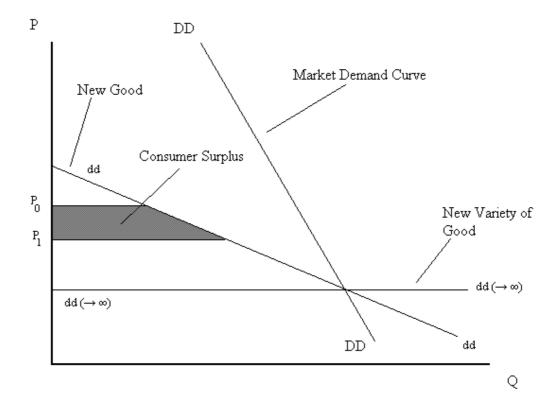
#### 3. Marginal Value VS Inframarginal Value

Many inframarginal uses are far more valuable than those at the margin. And the gain in consumer's surplus can be enormous.

Conclusion: The very process of long-term economic growth, and especially of changes in style of life and work contributes to these changes in values, taste, knowledge, and assumptions.

## The Measurement of Value

- Researchers analyze demand behaviour to reveal the true value of new goods for consumers.
  - o Price indexes
  - o Hedonic price indexes
  - o Demand-system measurement
- The economic importance of new goods lies in their contributions to consumer welfare.
- Embodying "characteristics" or a fundamental new good?



# "The world has run out of new ideas just as Texas has run out of oil." The depletion hypothesis by Nordhaus (1982)

•	Most new goods now, compared to a century ago, can not be characterised as truly new goods. This is because the product are not founding whole new product categories ("repacked products") or meeting whole new classes of needs.

• The marginal improvements in software are minor compared to the benefits of the invention of the original software programs i.e spreadsheet and word processing. This means that modern innovations are heading towards its limits in the availability of time and size of the human "stomach".

- Tastes for community, mobility and adventures changes over time.
- New goods are valued in our modern perspective. This result in an overestimating of the value of new goods to hypothetical observers from a century ago.

- New developments can be objectively negative i.e crime and pollution.
- New products produced to reduce crime and the fear of crime, can exaggerate the importance of new goods, because the investment in i.e "security services" increases the GDP without positively affecting consumer's welfare.

### **Main points:**

- The contribution of new goods to consumer welfare is linked to the Cost-of-Living (COL) index.
- CPI in many countries makes no attempt to quantify the value of new goods, which results in an overestimation of the inflation rate (rated in USA at about 3-4%).
- The new goods process result in lower costs, improved quality and performance, set off subsidiary innovation processes and permit new ways of life.
- The idea of the household production function is that the activities that produce consumer welfare are indirectly produced by combining household time and purchased market commodities.
- The existence of complementaries to new goods leads to two other concepts areas:
  - 1. Relationship between complementaries and consumer surplus.
  - 2. Price measurement and consumer value.
- If there is absence of complements it may slow the pace of social gain and the process of adopting may proceed slower then the process of invention.
- When measuring the value of new goods it is important to distinguish between goods that provide fundamentally different values to the consumer and goods that only provide different quantities of characteristics that are already present in old goods ("repacking").
- Researchers try to analyze demand behaviour to reveal the true value of new goods for consumer welfare.
- The productivity growth has slowed down, and can indicate that there are currently more innovations that are "repacked" instead of truly new goods on the market.
- New goods tend to be valued in modern perspectives and cause a overestimating of the value of new goods to hypothetical consumers.