

We measure the *tradeoff* between

- The increase in consumer benefits from providing greater access to the stock of prescription drugs now available, and
- The loss of consumer benefits due to the reductions in efforts to develop and market new prescription drugs.

Bottom-line on the tradeoff

For every dollar in consumer benefit realized from providing greater access, other consumers would be harmed at a rate of three dollars from reduced innovation.

Bottom-line on the tradeoff, *cont.*

This 3 to 1 ratio of harm to benefit indicates that consumers would not be served by policy changes that would reduce patent protection or accelerate generic entry.

U.S. Consumer Expenditures

Currently U.S. consumers spend \$206 B annually on prescription drugs, nearly 3% of total consumer spending.

U.S. Consumer Expenditures, *cont.*

- a. **U.S. consumers spend approximately \$150 B on branded pharmaceuticals that are patent-protected.**
- b. **U.S. consumers spend the balance of \$56 B on generics and branded pharmaceuticals that have gone off patent.**

Annual U.S. Consumer Surplus from Prescription Drugs Expenditures

The gains to U.S. consumers from their purchases of prescription drugs now on the market sum to \$180 B per year.

a. Consumers gain \$64.5 B in consumer surplus from prescription drugs that are patent-protected.

Annual U.S. Consumer Surplus from Prescription Drugs Expenditures, *cont.*

- b. Consumers gain \$115.5 B in surplus from the purchase of prescription drugs that are not patent protected: \$103 B from generic drugs and \$12.5 B from branded prescription drugs that are off patent.**

Valuing Health Improvements

William Nordhaus (2001) frames the issue in terms of a choice concerning the second half of the 20th Century: Which of the following combinations would a typical American prefer?

Valuing Health Improvements, cont.

- 1. The combination of life expectancy and quality of life in 1950 along with the goods and services in the year 2000, *or***
- 2. The combination of life expectancy and quality of life in 2000 along with the goods and services in the year 1950.**

Murphy and Topel (2002) finding

U.S. consumers would be willing to give up nearly \$10 T in other goods and services for 10% reductions in cancer-related deaths and heart-related deaths.

Discounted Present Value of U.S. Consumer Surplus from the Stock of Prescription Drugs now on the Market

The present value of current and future consumer surplus from the stock of drugs now on the market is in the range of \$ 6 to 10 T.

This figure is based on three components.

Discounted Present Value, *cont.*

- a. Consumers will continue to benefit from patented drugs during the remaining period of patent life.
- b. Consumers will continue to benefit from prescription drugs already off patent.
- c. Consumers will benefit as patents now in force expire.

One side of the tradeoff – “static efficiency” gains

The present value of the consumer gains over time from making the current stock of patented prescription drugs “immediately accessible” is in the range of \$540 B to \$620B.

The other side of the tradeoff – “dynamic” losses

The present value of the consumer losses from reduced innovation associated with eliminating patents is in the range of \$1.3 T to \$1.6 T.

Access and Innovation – Effects on Consumers

For every dollar in consumer benefit realized from providing greater access, other consumers would be harmed at a rate of three dollars from reduced innovation.

Access and Innovation – Effects on Consumers, *cont.*

This 3 to 1 ratio of harm to benefit indicates that consumers on net would not be served by policy changes that margin would reduce patent protection or accelerate generic entry.