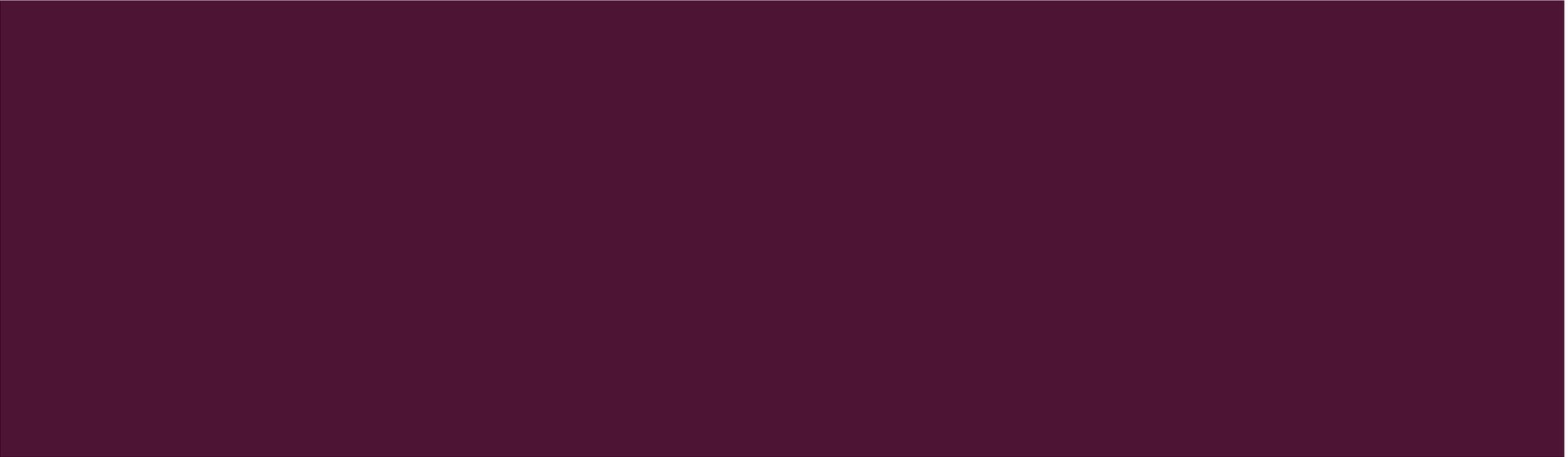


OPPORTUNITY COSTS

5 PRINCIPLES OF ECONOMICS



OPPORTUNITY COST

- **Every choice** has an opportunity cost
- **Opportunity Cost (n.):** What is given up in order to get something else
- Generally, it is the *second best choice*
- Time, activities, money, and goods may be opportunity costs
- Differences from trade offs:
 - Opportunity cost is the good or service given up in a decision while the action of deciding is the trade off.

YOU CAN DO ANYTHING,
BUT NOT EVERYTHING.

-DAVID ALLEN



EXAMPLE

- **SCENARIO:**

- You have saved \$2,000 in your savings account

- **QUESTION:**

- Spend \$2,000 on a used car or keep the \$2,000 in the bank

- **The opportunity costs would be**

1. The possible interest from the savings account or
2. Not owning a car and having your own source of transportation



THE ECONOMIST'S BRAIN

“Could I have made *more* profit doing something differently?”

Economists know that there is no certainty to the limits of economic trade-offs.

Models and theories are never absolute.

It is *impossible* to know “what might have been.”

ECONOMICS: APPLIED SCENARIOS

- Why might visits to the E.R. be reduced in Boston when the Red Sox play?
- A 2005 study found that *part* of this was due to residents watching the game at home
 - Risk for injury was reduced
- Part of the percentage was determined to be people would rather watch the game if not feeling well and wait to go to the hospital after the game was finished!

1. What is the trade-off?
2. What are the opportunity costs?



ECONOMICS: APPLIED SCENARIOS

You have a ticket to see your favorite musician in concert. You need to decide whether you will take an airplane or the bus to the show. You must pay for the transportation yourself.

The bus trip will take you five hours. It will only take one hour if you fly.

Assume the airfare is \$150 and the bus fare is \$50.

- *If you could earn **six** dollars per hour when not on the bus or airplane, which mode of transportation would be cheaper based on the opportunity cost and trade off of not working while travelling?*

POSSIBLE MODE OF TRANSPORTATION	TICKET PRICE	HOURS TRAVELLED x WAGE	TOTAL COST (column b+c)
PLANE	\$150	1 x \$6.00 = \$6.00	\$156.00
BUS	\$50	5 x \$6.00 = \$30.00	\$80.00

Money **lost** for taking this type of transportation

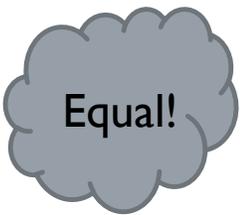
The opportunity cost is the price of the opposite transportation option **AND** the money you could have made if you worked.

ECONOMICS: APPLIED SCENARIOS

What is the highest hourly wage rate you can make and still be willing to take the bus (assuming you are not afraid to fly)?

The opportunity cost to fly is the five hour bus ride times X (hourly wage), plus the \$50 bus fare: $5X + 50$

MODE OF TRANSPORTATION	TICKET PRICE	HOURS TRAVELLED x WAGE	TOTAL COST (column b+c)
PLANE	\$150	$1 \times \$15.00 = \15.00	\$165.00
BUS	\$50	$5 \times \$15.00 = \75.00	\$125.00
PLANE	\$150	$1 \times \$25.00 = \25.00	\$175.00
BUS	\$50	$5 \times \$25.00 = \125.00	\$175.00
PLANE	\$150	$1 \times \$26.00 = \26.00	\$176.00
BUS	\$50	$5 \times \$26.00 = \130.00	\$180.00



At \$26/hr it becomes cheaper to take the plane

In a very complex scenario, economists and legislators could manipulate market factors (wages and prices) to purposefully help an industry such as bus companies, airlines, railroads, or rental cars to encourage a specific mode of transportation!