FIRMS AND MARKETS I

MPA 612: Economy, Society, and Public Policy

February 25, 2019

Fill out your reading report on Learning Suite

PLAN FOR TODAY

Demand and WTP

XYZ Frames

Scale, location, networks, and time

DEMAND AND WTP

WILLINGNESS TO PAY

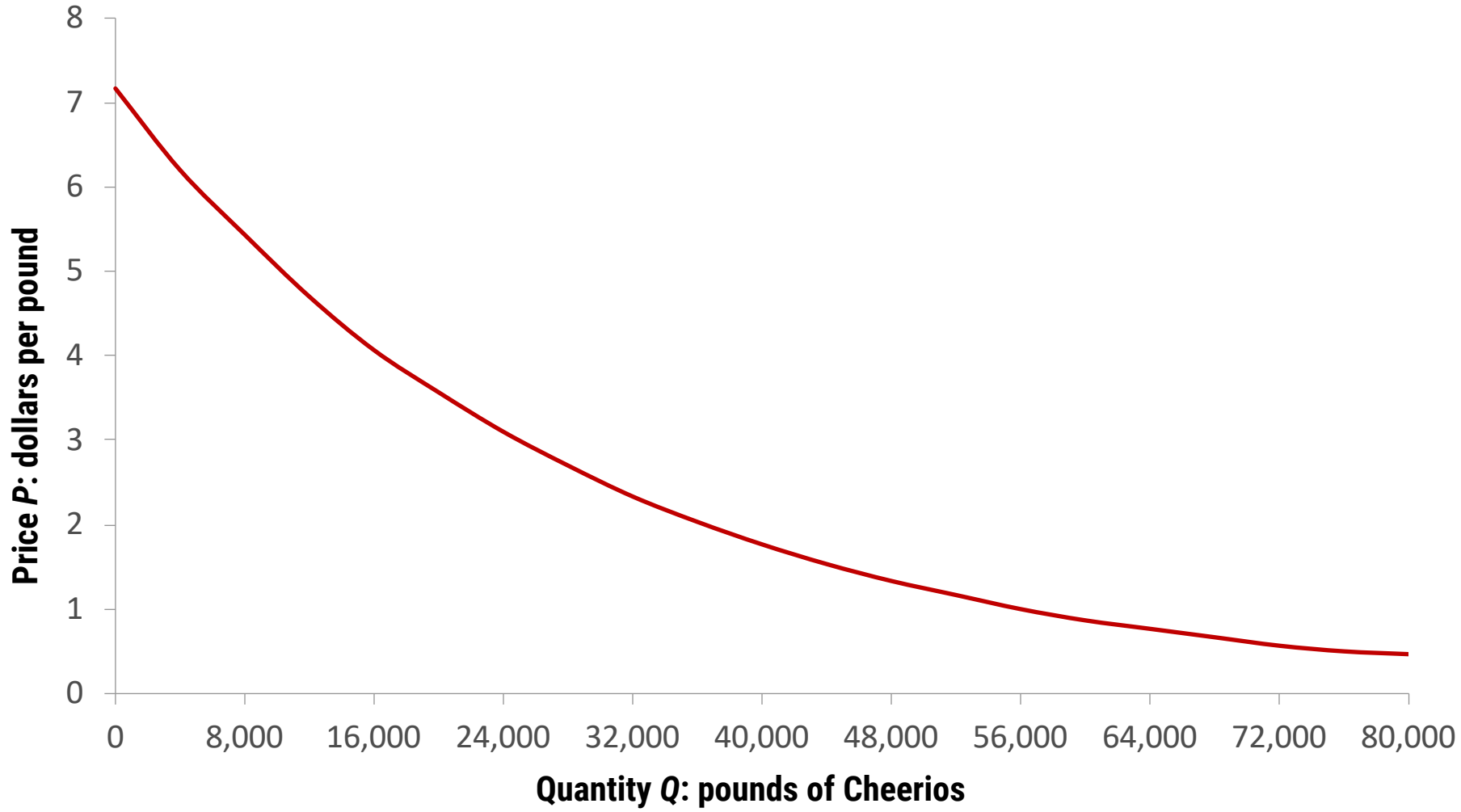
How much you value (and would pay) for something

Reflects aggregate preferences

FINDING WTP

“Would you be willing to spend $X for Y?”

Count all the people who are willing to pay at each price


8
7
6
5
4
3
2
1
0
Price P: dollars per pound
0
8,000
16,000
24,000
32,000
40,000
48,000
56,000
64,000
72,000
80,000
Quantity Q: pounds of Cheerios

Willingness Toupee

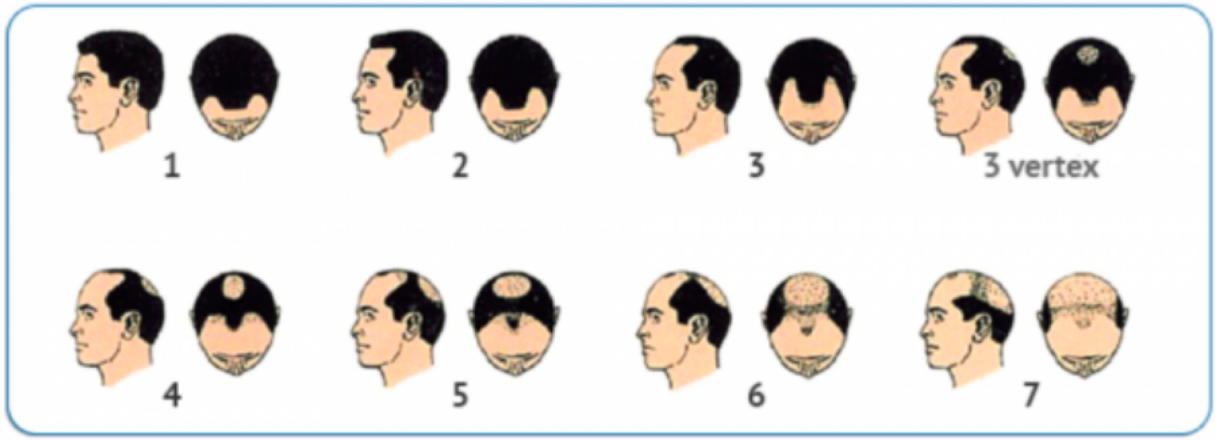
David M. McEvoy, O. Ashton Morgan and John C. Whitehead[1]

Department of Economics
Appalachian State University
Boone, NC 28608

Abstract: In this paper we tackle the hairy problem of male pattern baldness. We survey balding men and elicit their willingness to pay to move from their current sad situation to a more plentiful one. Then we comb-over the results. What's the average willingness to pay to move from a glistening cue ball to a luscious mane? About $30,000.

Keywords: mullet, skullet, comb-over, ducktail, Beatlemania, buzz cut, whiffle, pageboy, attribute non-attendance

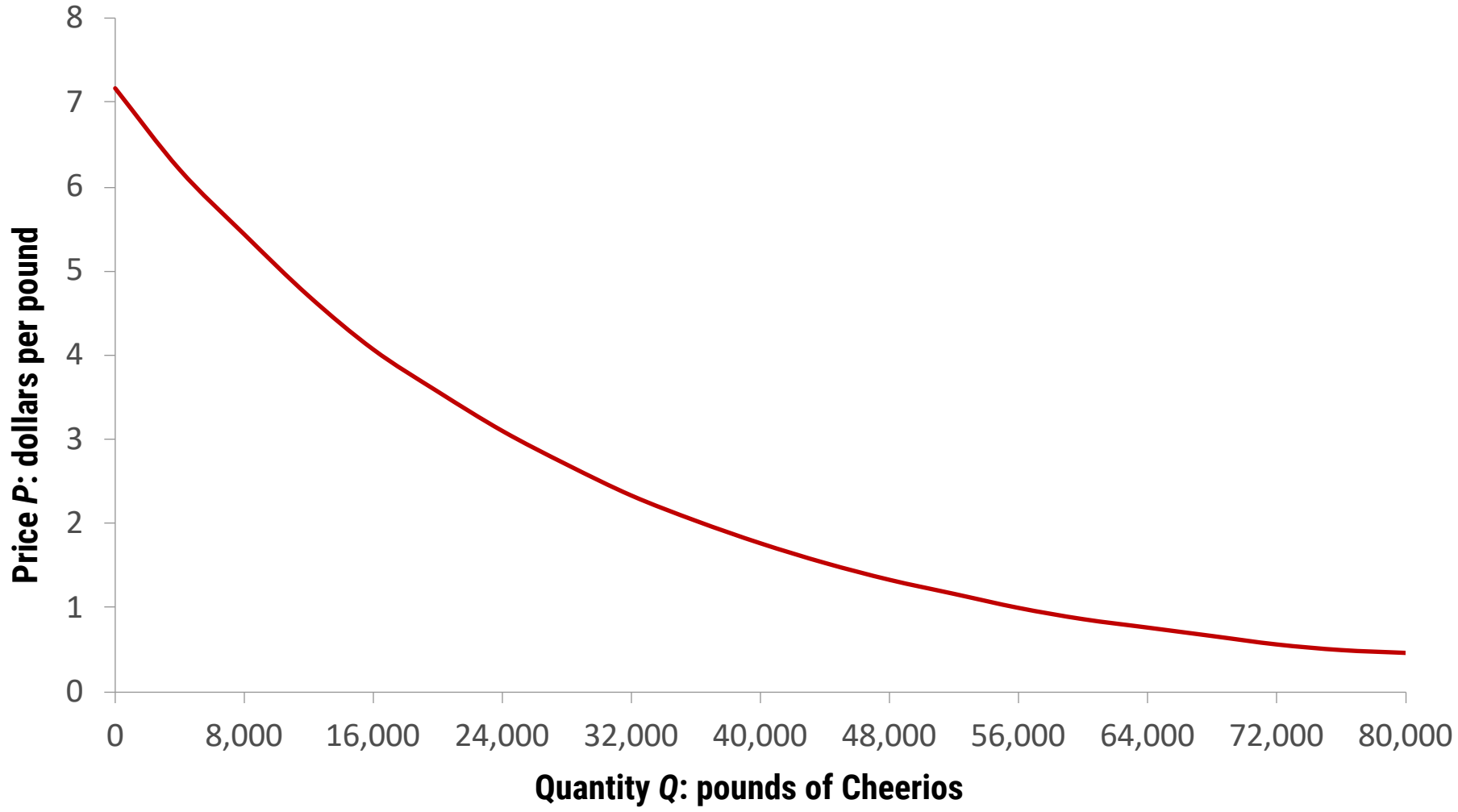
You identified your current baldness as a Level 7 on the Norwood Scale. Suppose now that it is possible to improve your hair coverage to a Level 4.



Would you be willing to pay a one-time fee of $10,000 to improve your hair coverage to a Level 4?

- ◯ Yes
- ◯ No
- ◯ I'll think about it

WTP = DEMAND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XYZ FRAMES

Specifications

Squares attached at all four corners using labels

Labels **cannot** be wider than sticks

Squares must be square when inspected

Labels must be cut (**not torn**) with the scissors

Costs

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

Round 1

1 worker allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

Round 1

1 worker allowed

Table rental: $1.00

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Wage per employee: $0.40

$2 per good frame

00:00

Round 2

2 workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

Round 2

2 workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

00:00

Round 3

Unlimited workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

Round 3

Unlimited workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

00:00

Round 4

Unlimited workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

Round 4

Unlimited workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

00:00

Round 5

Unlimited workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

Round 5

Unlimited workers allowed

Table rental: $1.00

Scissor rental: $0.50

Popsicle stick: $0.10

Label per corner: $0.05

Wage per employee: $0.40

$2 per good frame

00:00

Fixed costs

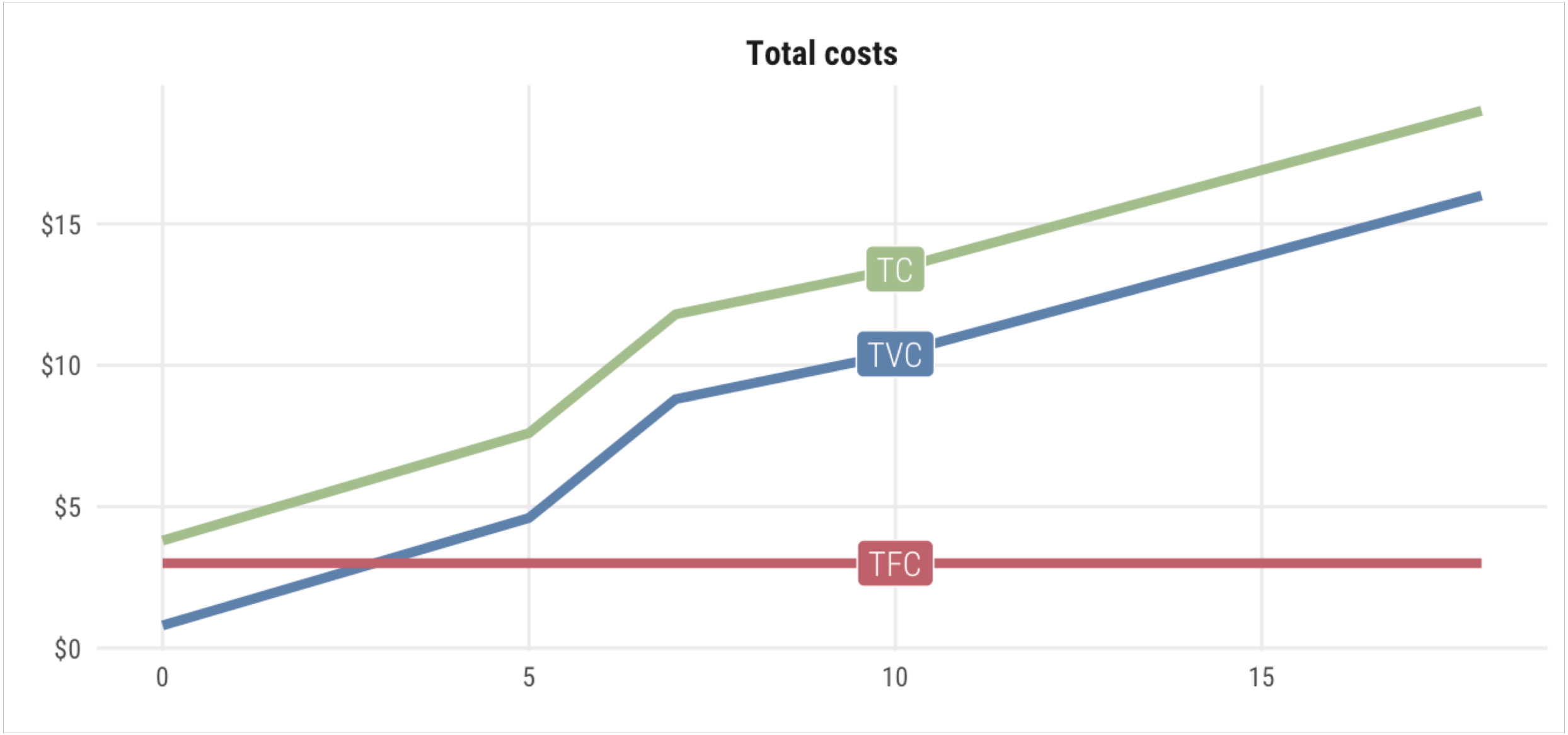
Variable costs

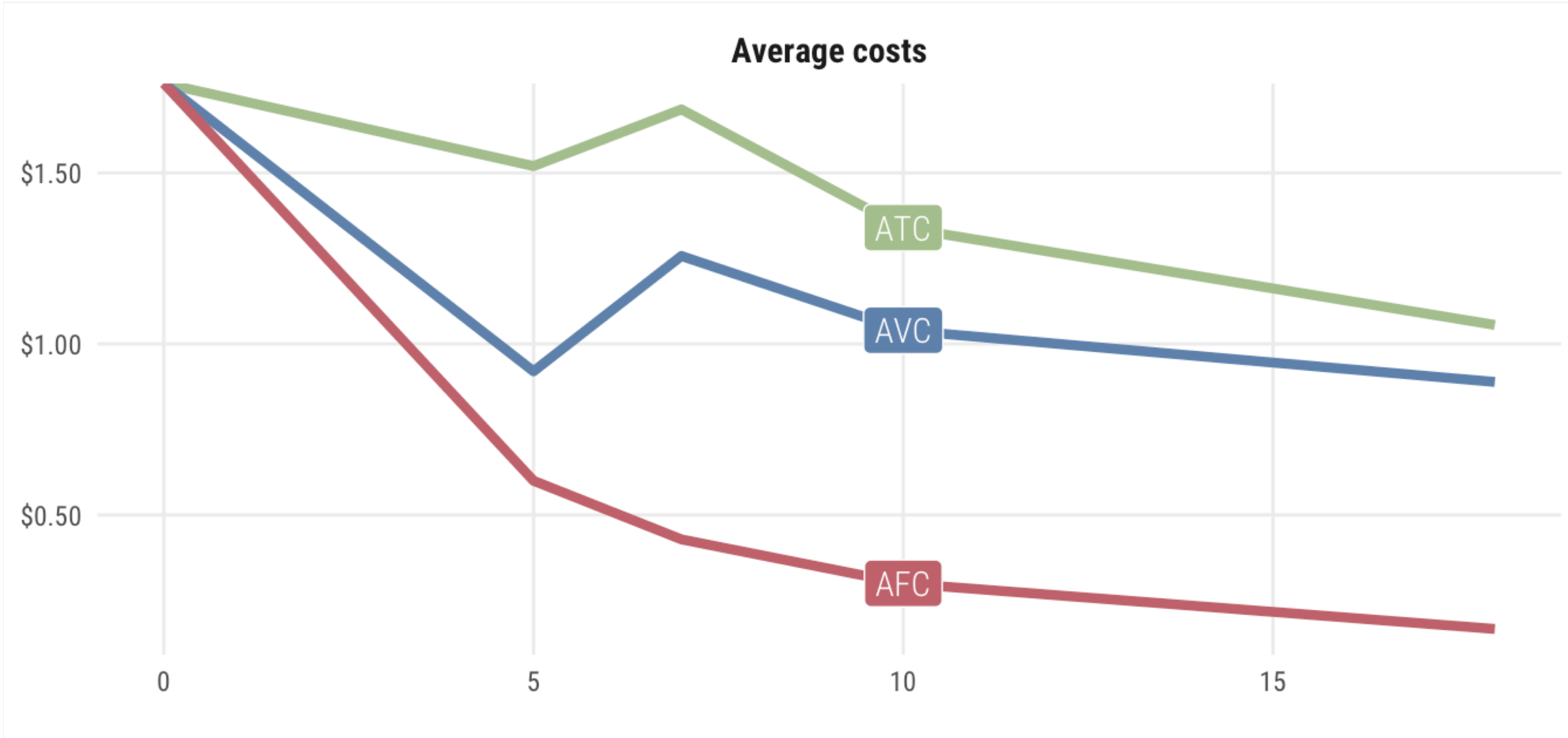
Average costs

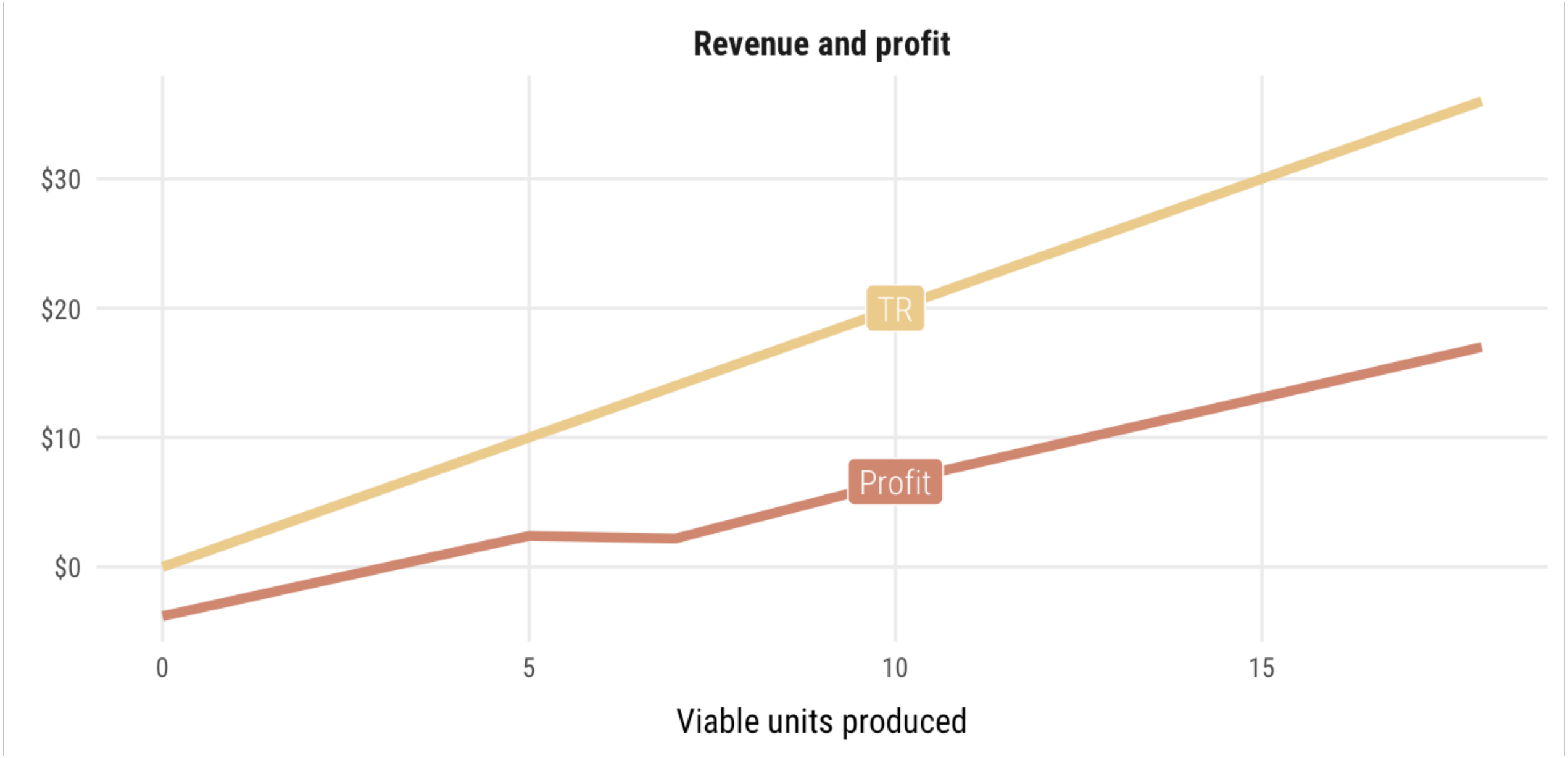
Cost function shape

Revenue

Profit


Total costs
$15
$10
$5
$0
0
5
10
15
TC
TVC
TFC


Average costs
$1.50
$1.00
$0.50
ATC
AVC
AFC
0
5
10
15


Revenue and profit
$30
$20
$10
$0
TR
Profit
0
5
10
15
Viable units produced

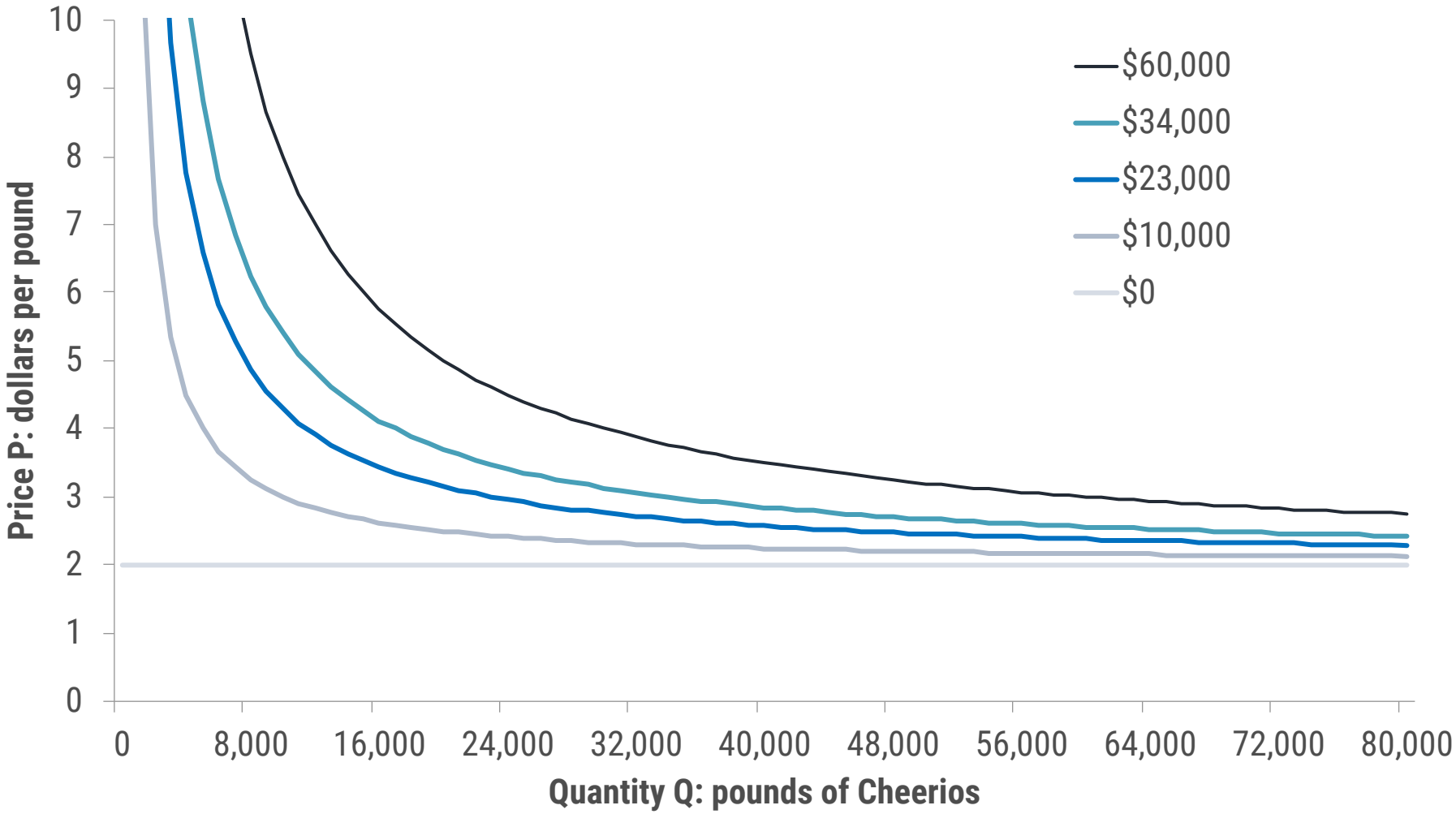
Total costs (TC)	Unit cost × quantity
	$1 × Q
Total revenue (TR)	Price × quantity
	P × Q
Profit (π = TR – TC)	(P × Q) – ($1 × Q)
	π = (P – $1) × Q

ISOPROFIT CURVES

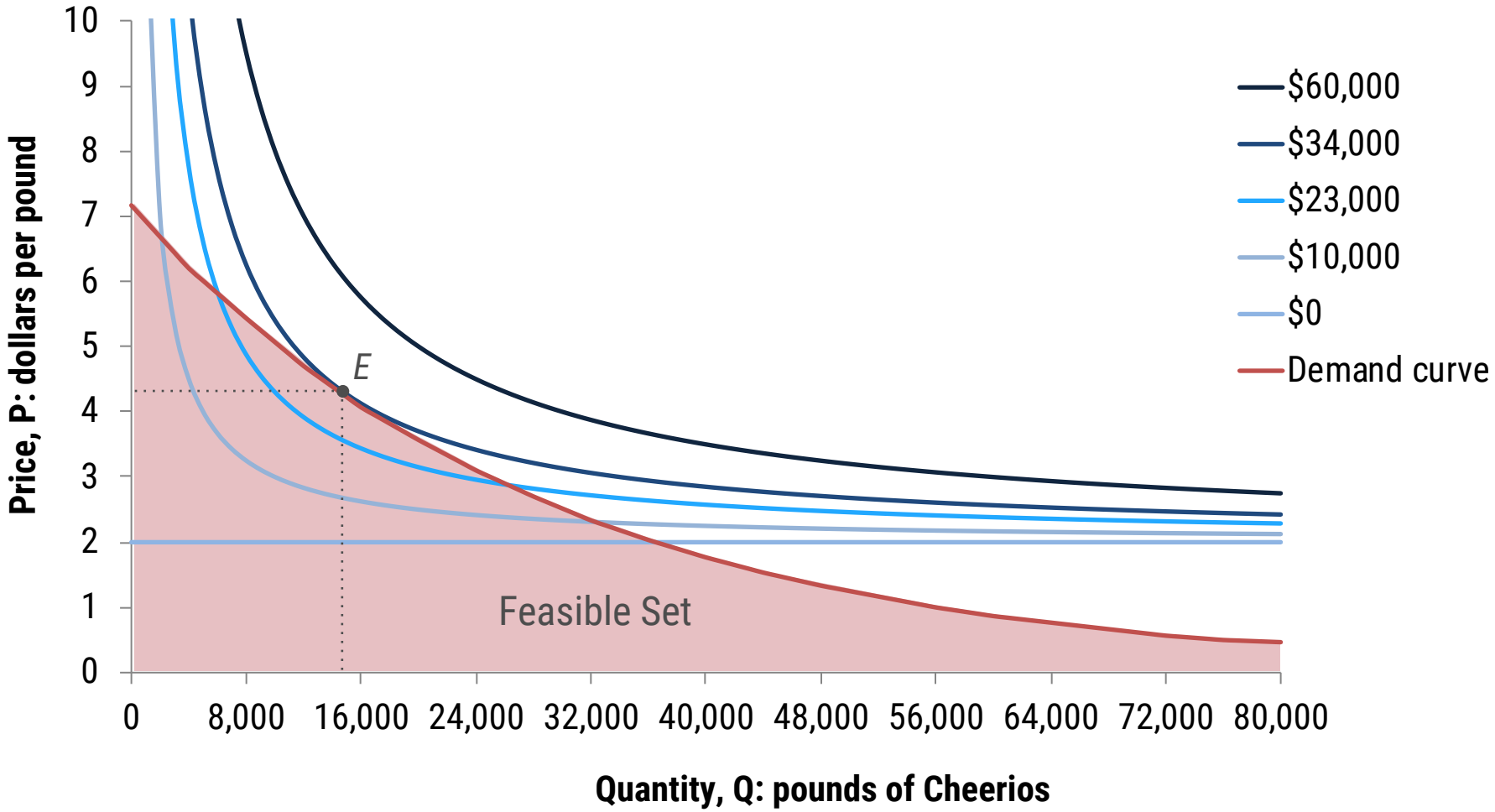
These are real!

(P – $1) × Q

(or some similar equation)



PROFIT MAXIMIZATION



SCALE, LOCATION, NETWORKS, AND TIME

SIZE AND LOCATION

Economies of scale

Cost to make stuff goes down as you make more stuff

Economies of agglomeration

Cost to make stuff goes down as you clump together

Network effects

Cost to make stuff goes down when everyone uses your stuff

ECONOMIES OF SCALE

If you double the inputs, you get more than double the outputs

If you {{increase}} the inputs, you get more than {{that increase in}} the outputs

SCALE, LOCATION, NETWORK, OR NOTHING?

eBay and PayPal

QWERTY and Dvorak keyboards

Doubling a recipe

Walmart's distribution network

Costco

Henry Ford's assembly line

Rural Chinese moving to cities

NEXT TIME(S)

Rent, surplus, and gains from trade

Elasticity

Supply and demand

Market power and natural monopolies