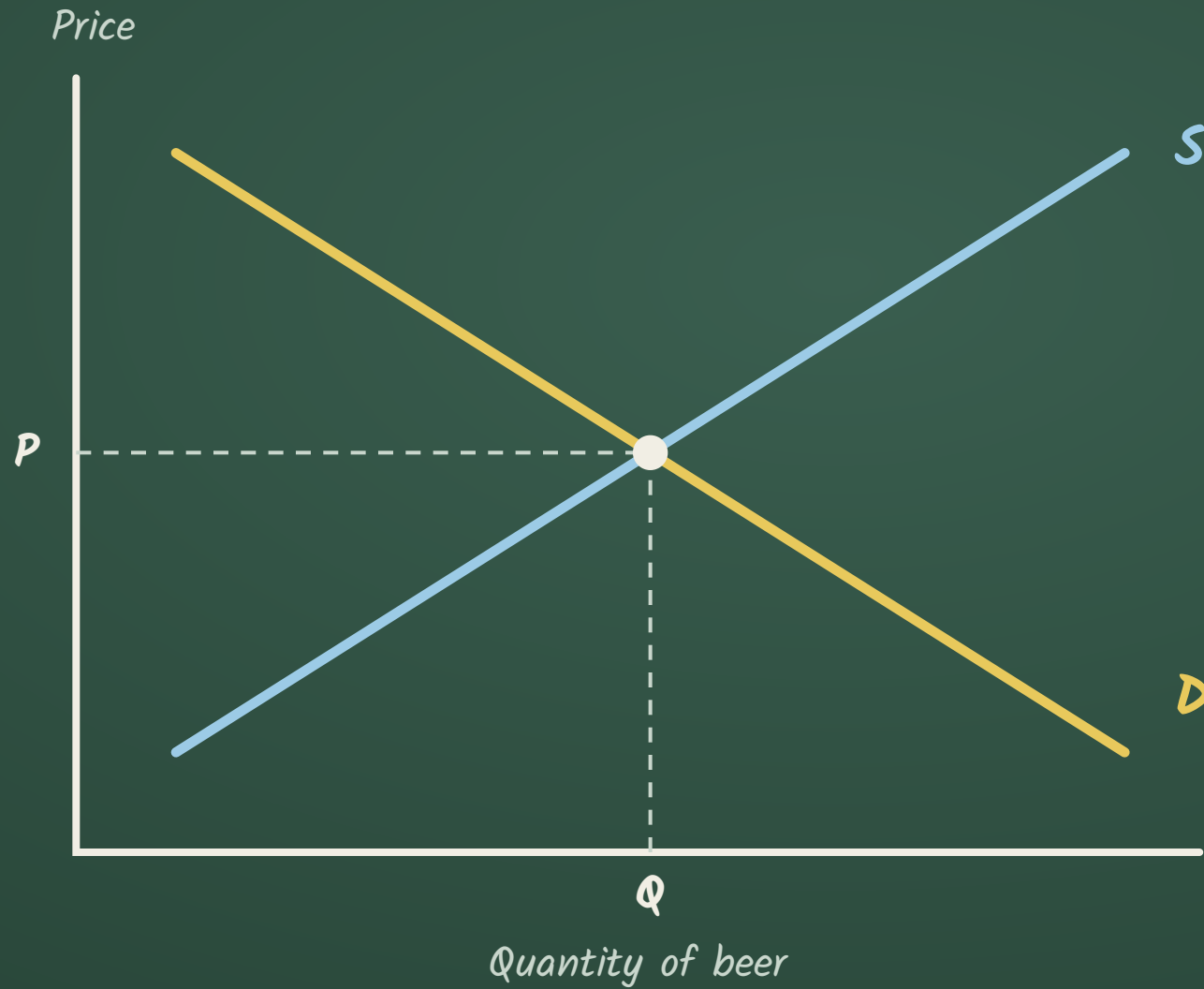


Economics in 30 Minutes

Part 3: How Markets Change

Vincent Maistre

The market for beer



*Start here.
Everything else held still.*

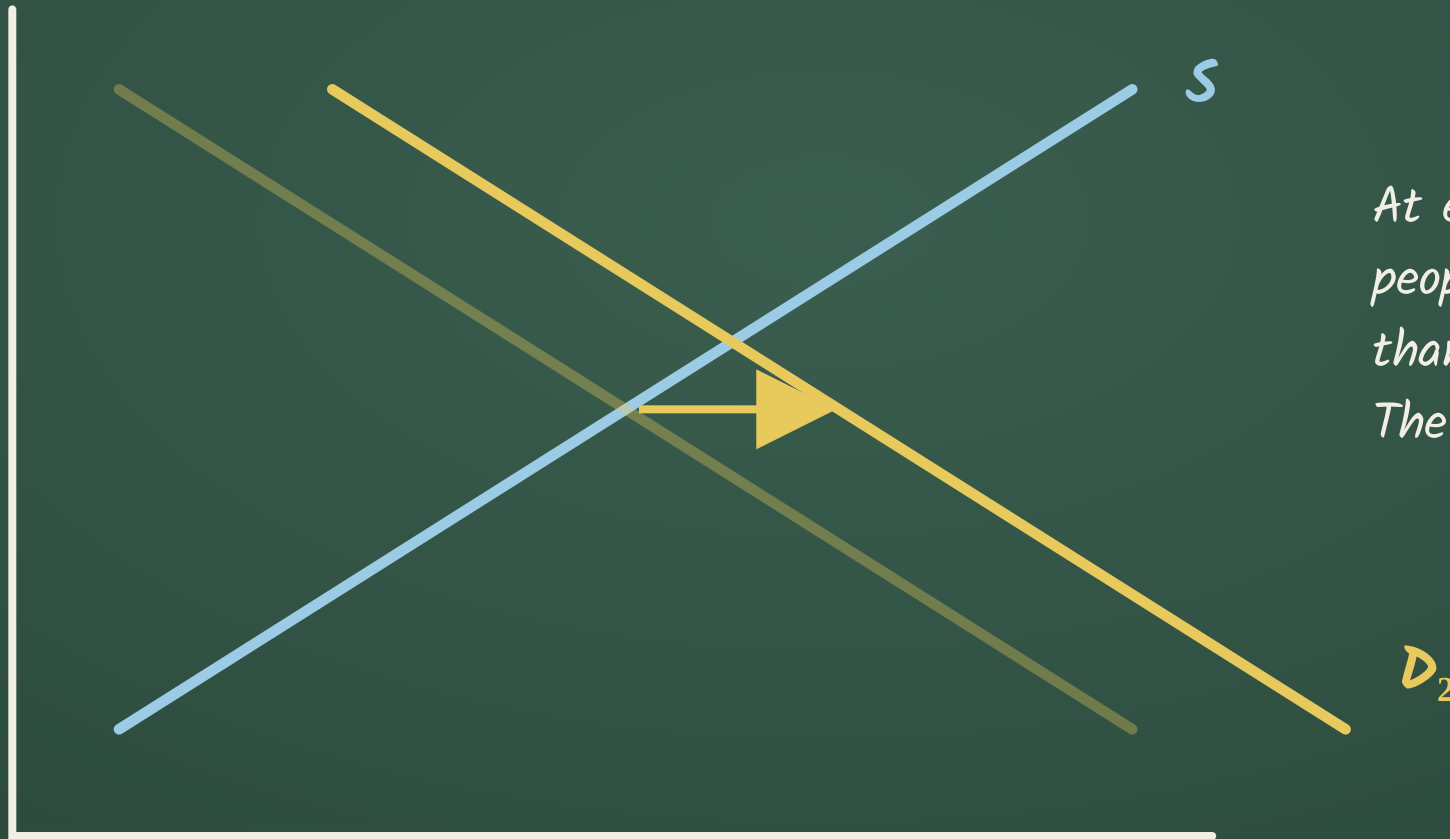
The price of beer changes



Beer gets cheaper.
People buy more beer.
You slide along the line.
The line itself doesn't move.

Something other than the price changes

Price



At every price,
people want more beer
than before.
The whole line moves.

Quantity of beer

What else could change how much beer people buy?

P Beer's own price

Movement along the line. Don't let it onto the shift list.

P ?

P ?

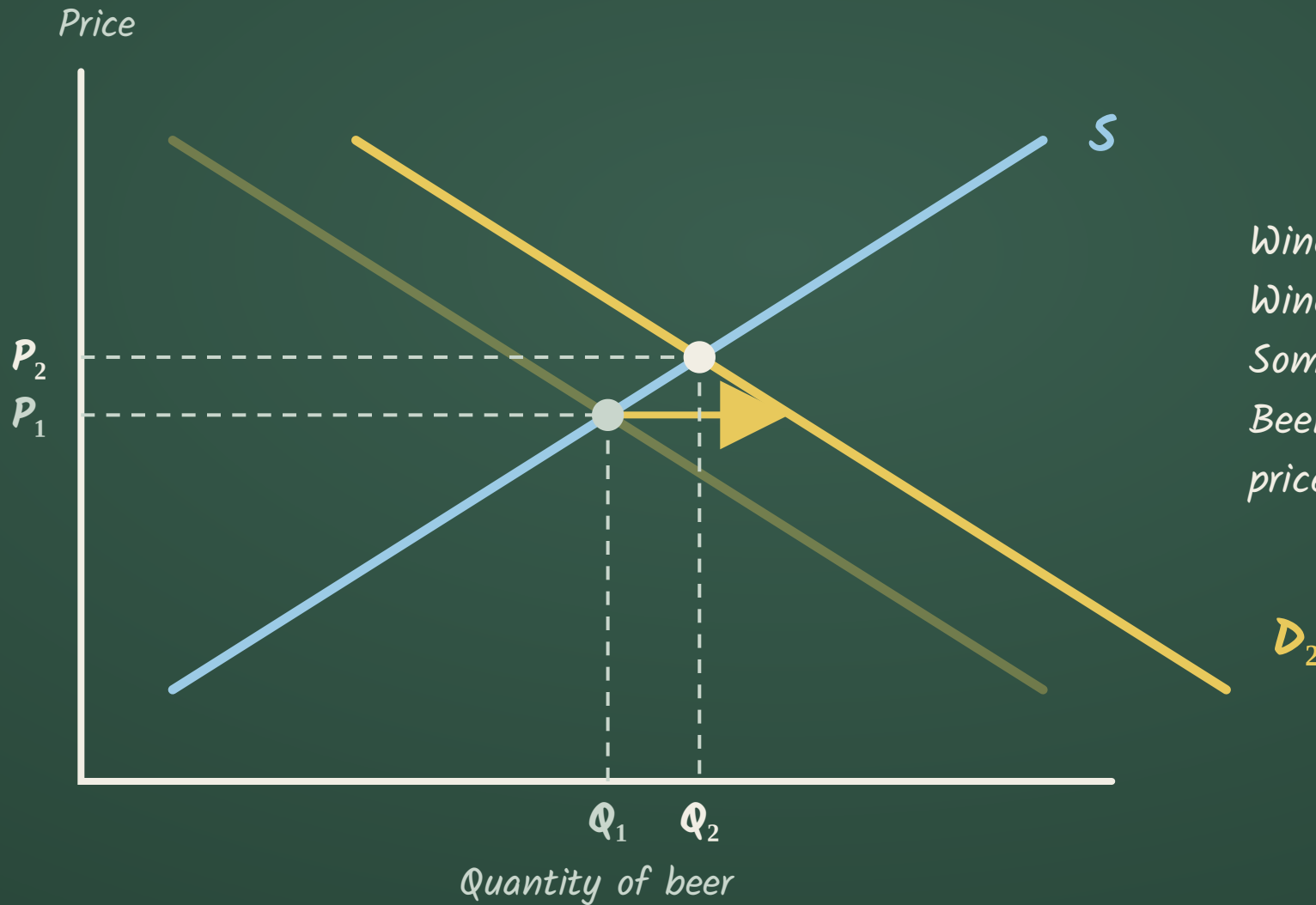
I ?

N ?

T ?

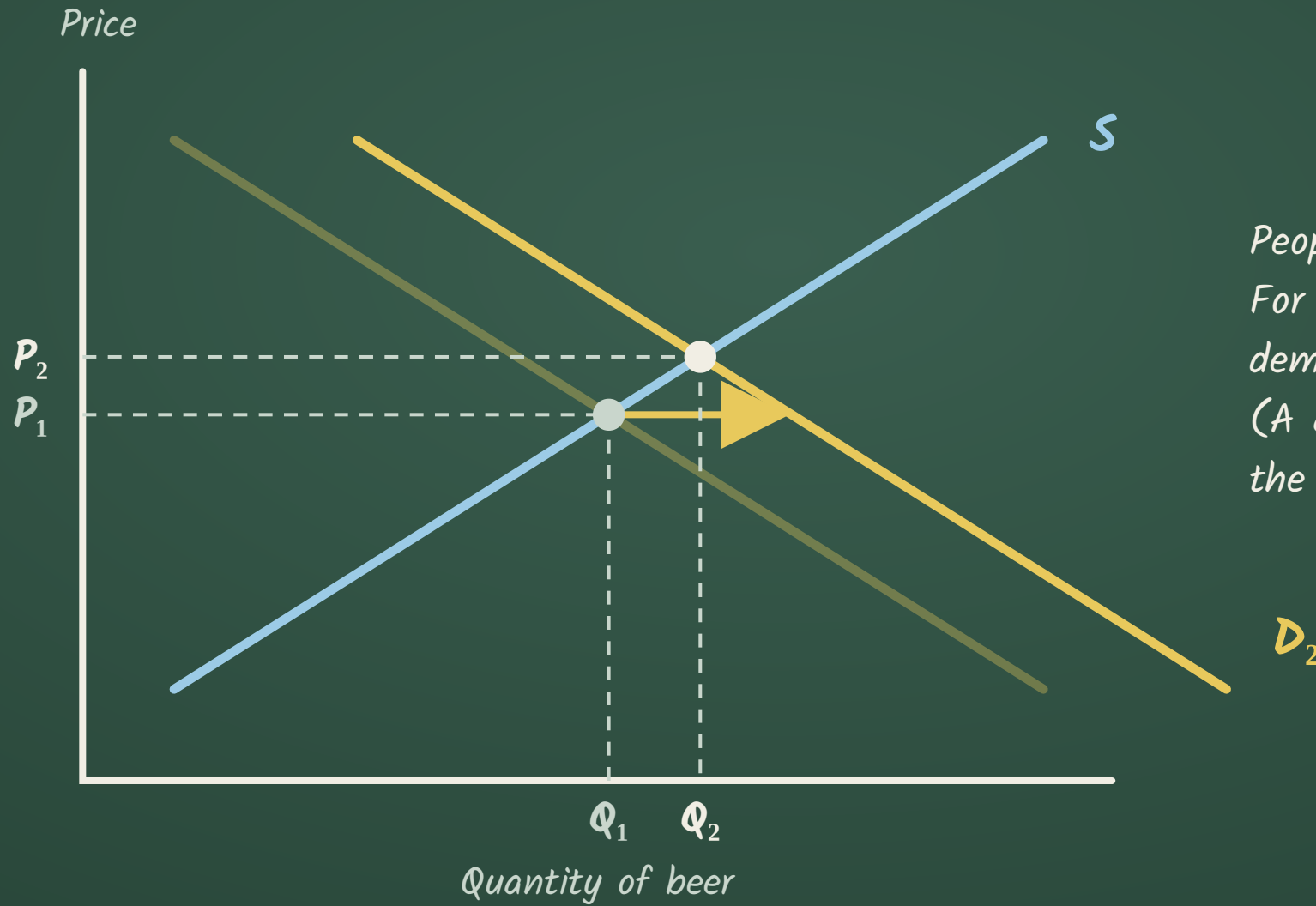
E ?

Wine gets expensive



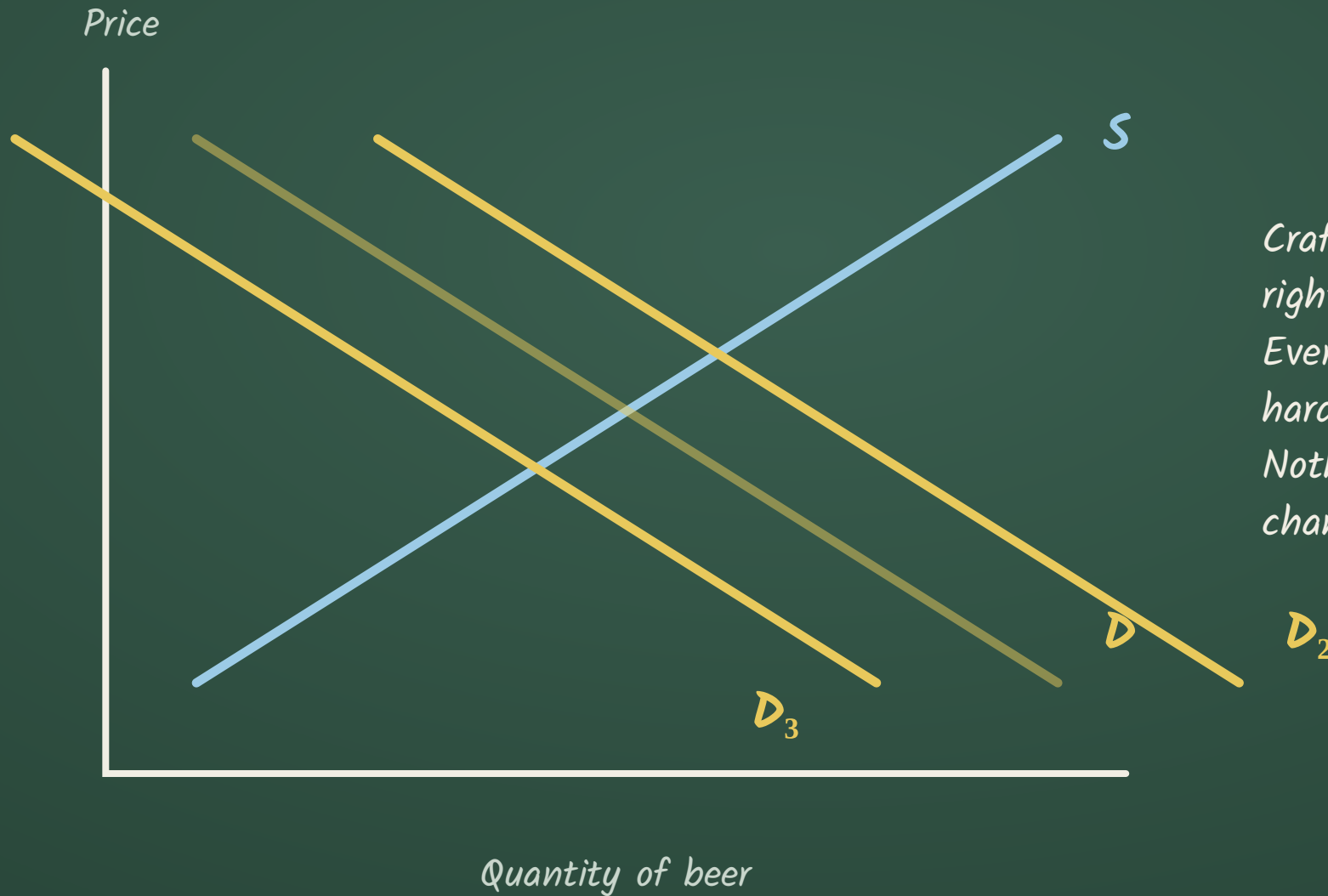
Wine is a substitute for beer.
Wine goes to \$18 a bottle.
Some wine drinkers switch.
Beer demand shifts right:
price up, quantity up.

Incomes rise



People have more to spend.
For an ordinary beer,
demand shifts right.
(A cheap beer might go
the other way.)

Tastes change



*Craft beer is fashionable:
right.*

*Everyone switches to
hard seltzer: left.*

*Nothing about the price
changed first.*

Three more, quickly

Price of a complement

Cheap wings, cheap pizza: more beer. Right.

Number of buyers

A college opens down the road. Right.

Expectations

“Prices rise Monday.” People buy on Saturday. Right, today.

Each one is an arrow on the same graph.



Everything that moves the demand line

P Beer's own price: along, not shift

P Price of substitutes

P Price of complements

I Income

N Number of buyers

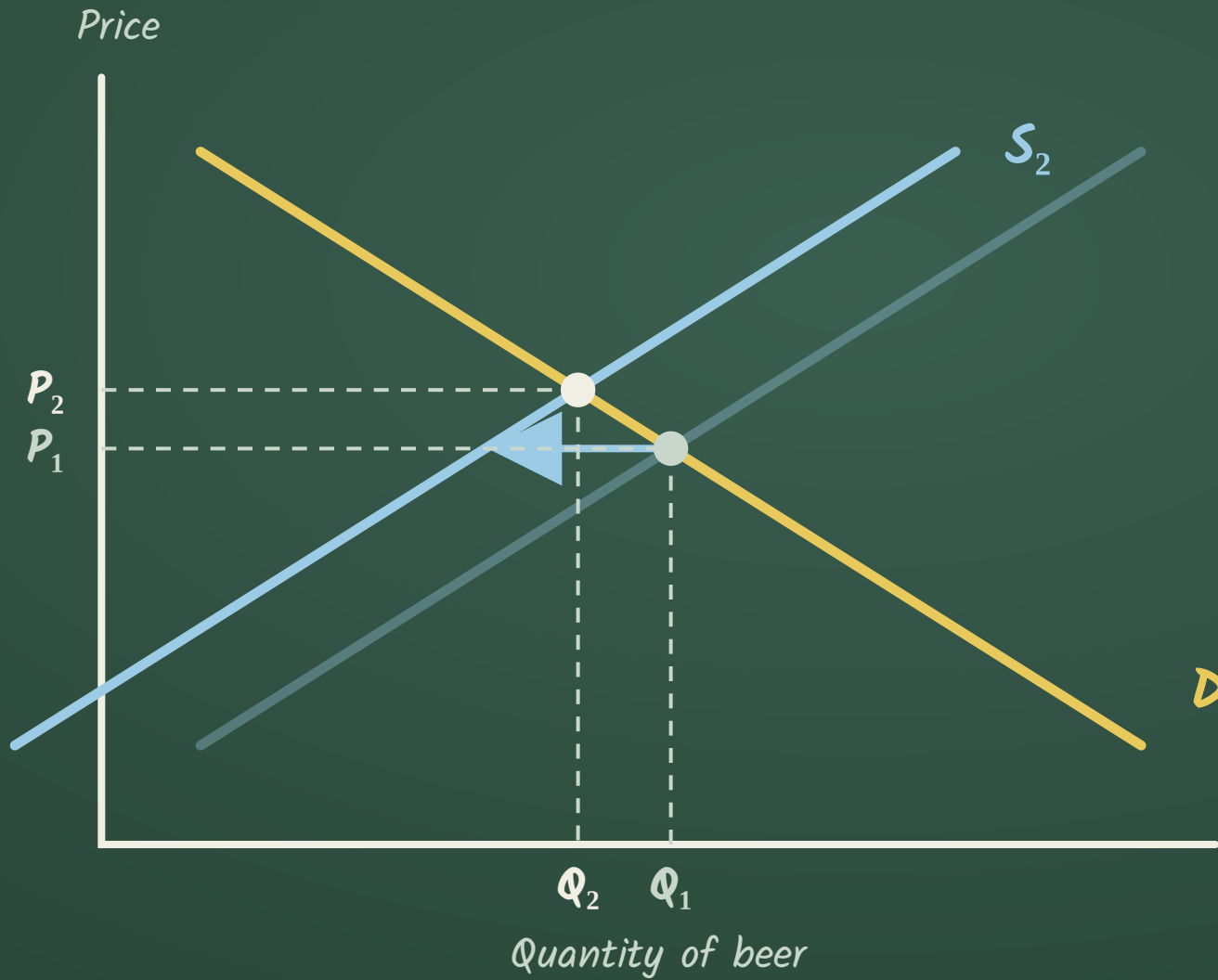
T Tastes

E Expectations

PPPINTE

Everything except the beer's own price shifts the curve.

The hop warehouse fire



Hops cost more.
At every price, breweries
brew less.
Supply shifts left:
price up, quantity down.

Yakima, Washington, October 2, 2006

A hop warehouse burns.

About two million pounds of hops, around 4% of the U.S. crop.

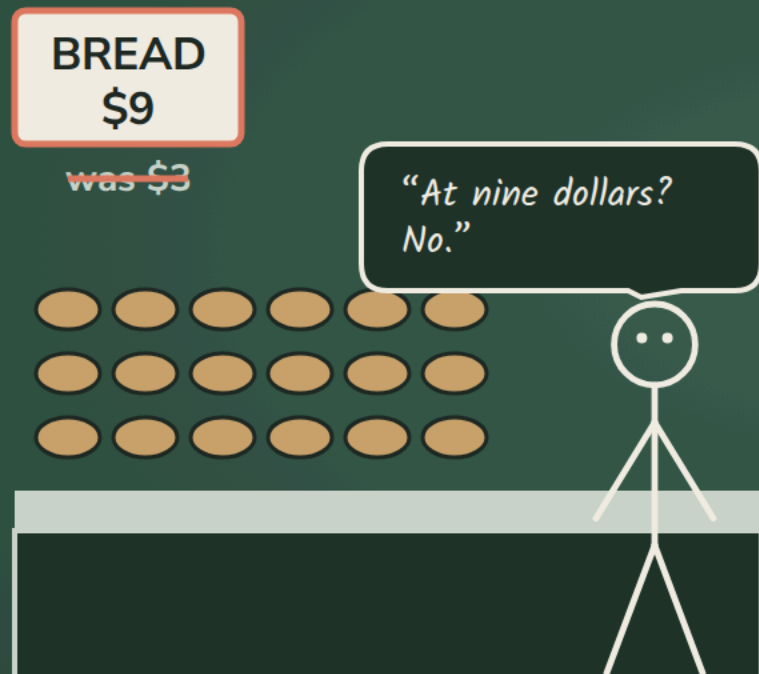
Two poor harvests follow, after years of shrinking acreage.

Beer prices rose in 2007 and 2008.

A small shock in an already tight market moves the price a lot.

Same empty bakery. Two different causes.

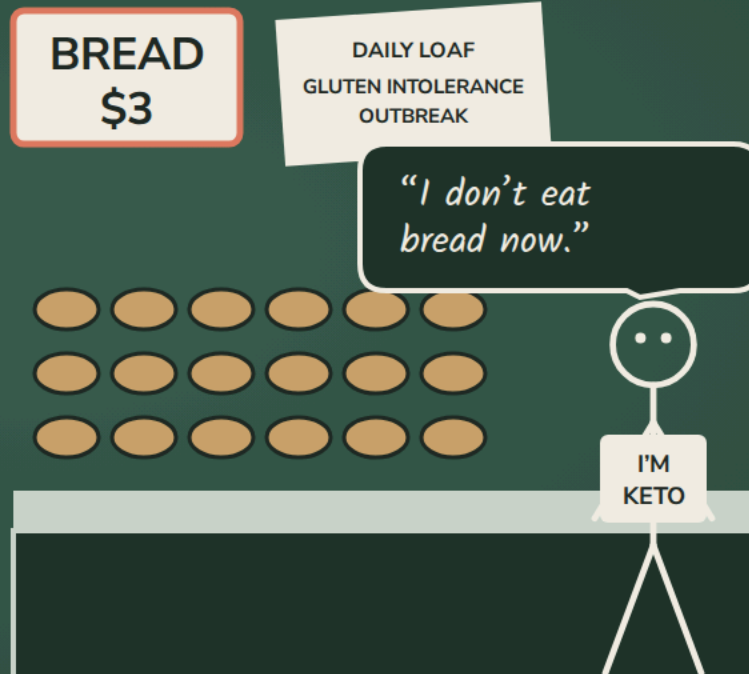
1. The price went up



1. Movement along the curve.

Demand didn't fall. Quantity demanded did.

2. Tastes changed



2. The curve shifts.

Same price, fewer buyers. Tastes are the *T* in PPPINTE.

"Nobody wants bread anymore" is only true in one of these.

The sentence that ends exam careers

*“Demand went up,
so the price went up,
so demand went down.”*

*The higher price moves buyers along the new line.
It does not push the line back.*

Blaming the wrong side

*A refinery goes down. Gas jumps forty cents.
“People suddenly want more gas.”*

No. That's a supply story.

*Ask first: did something change for the buyers,
or for the sellers?*

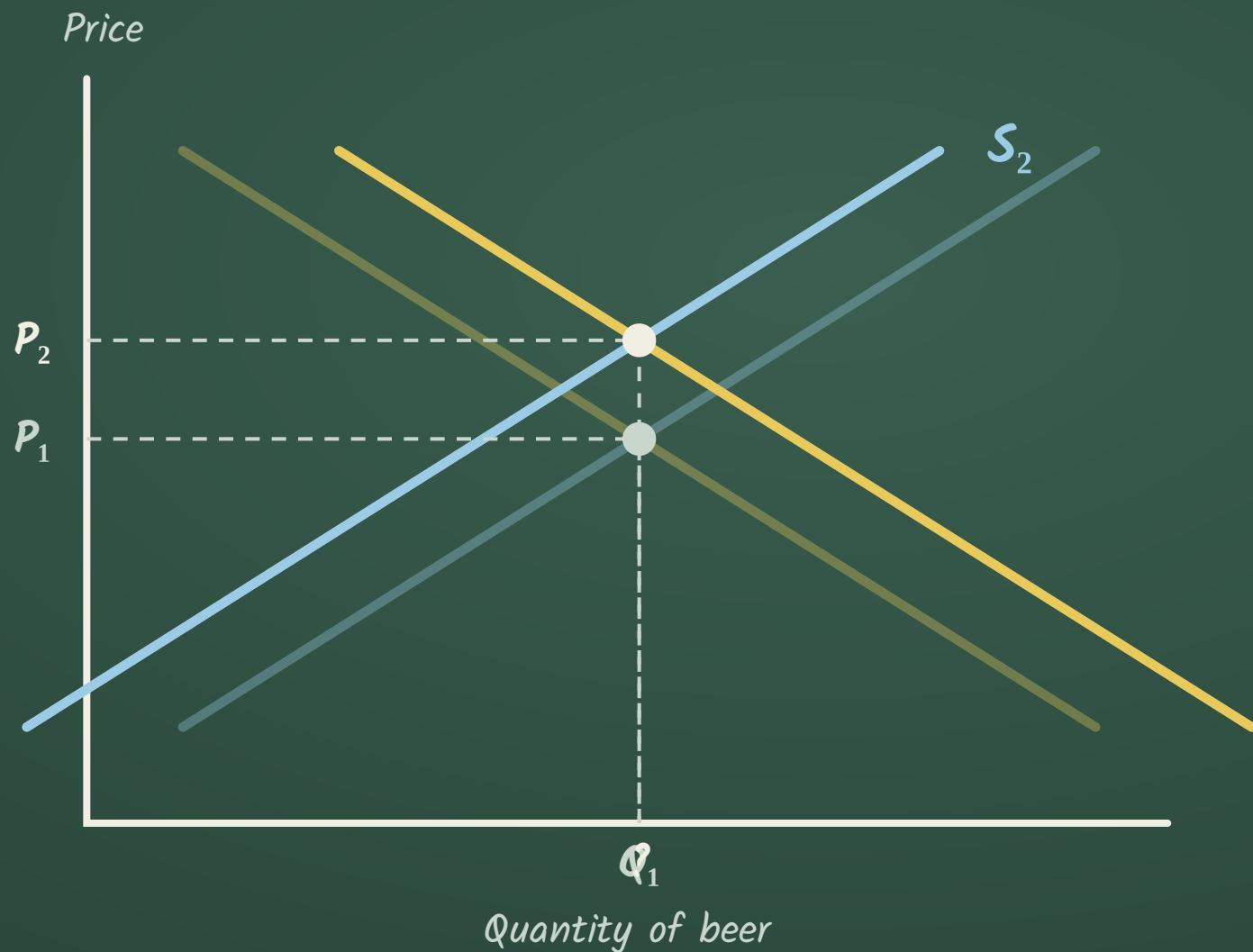
What the graph can and can't tell you

Direction, yes.

Size, no.

*Real curves take data, most of it private,
and a lot of tedious work to estimate.
The arrows are honest. The lengths are guesses.*

Two things at once



Incomes rise (ordinary beer)
and the hops burn,
the same month.
Price: up, for sure.
Quantity: depends
on which shift is bigger.

One market, or all of them?

Irving Fisher, 1920: people blamed rising prices on profiteers, speculators, middlemen and trusts.

Each of those can raise one price.

Explaining one price doesn't explain inflation.

When every price rises together, look at the whole economy, not one market.

Your turn

Pause the video.

*Assume: ordinary beer is a normal good;
wine and beer are substitutes;
beer supply is unchanged and slopes up.*

Draw each change from the original graph.

Your turn

1

*Everyone in the beer market gets more income.
What happens to beer demand,
the price, and the quantity sold?*

Your turn

2

Bad weather destroys a major

European wine-grape harvest.

First the wine market. Then the beer market.

Your turn

3

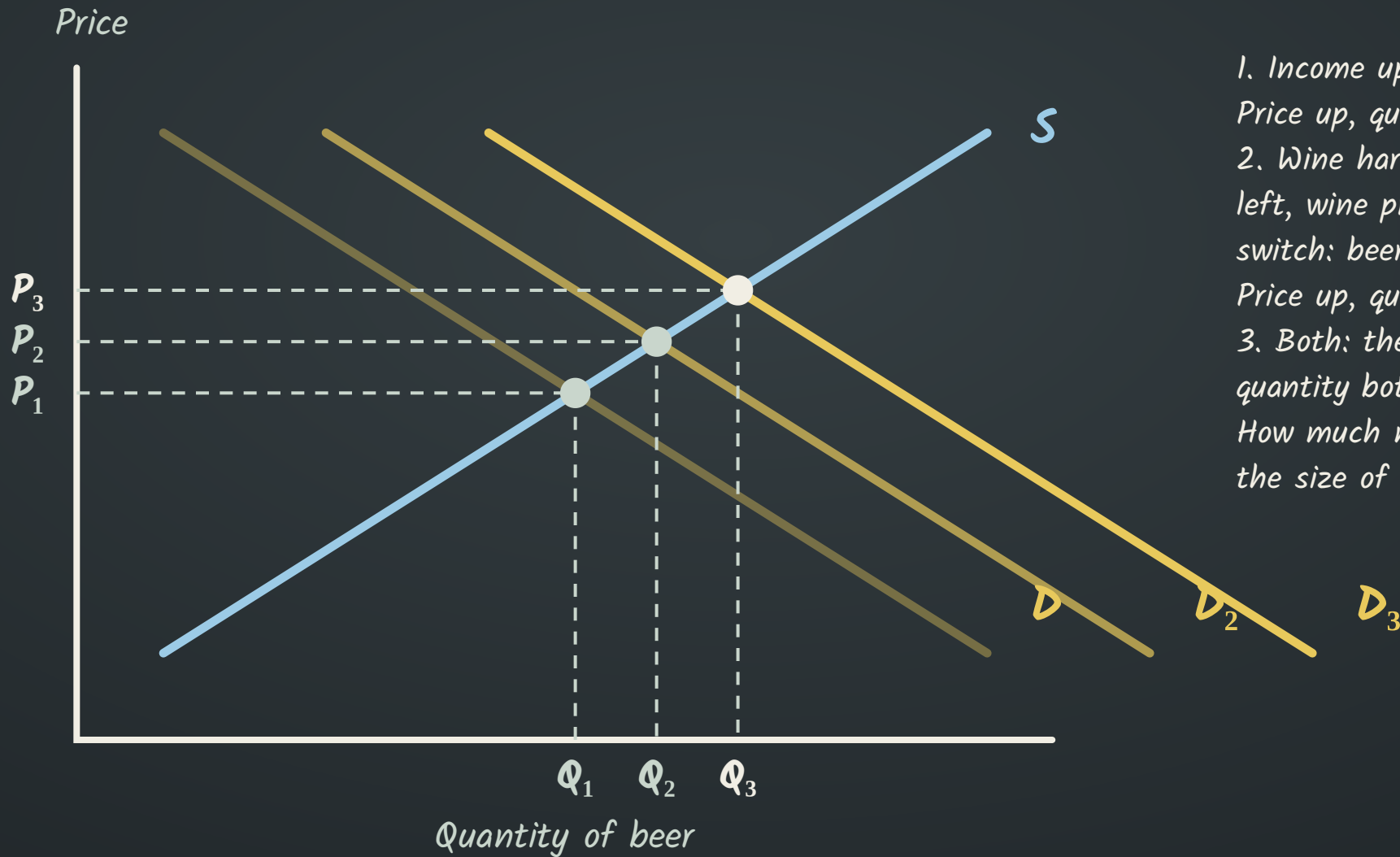
Now both happen at once.

Do they reinforce or offset each other?

What can you predict?

What would you need to predict the size?

Your turn, answered



1. Income up: D right (D_2).
Price up, quantity up.
2. Wine harvest fails: wine supply left, wine price up. Wine drinkers switch: beer D right again (D_3).
Price up, quantity up.
3. Both: they reinforce. Price and quantity both rise, for certain.
How much needs the slopes and the size of each shock.

Next

Part 4: Thinking tools and evidence

*Opportunity cost. Comparative advantage. Sunk cost.
And how you tell what caused what.*

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Part 3: How Markets Change

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Companion page: [link in the video description](#)