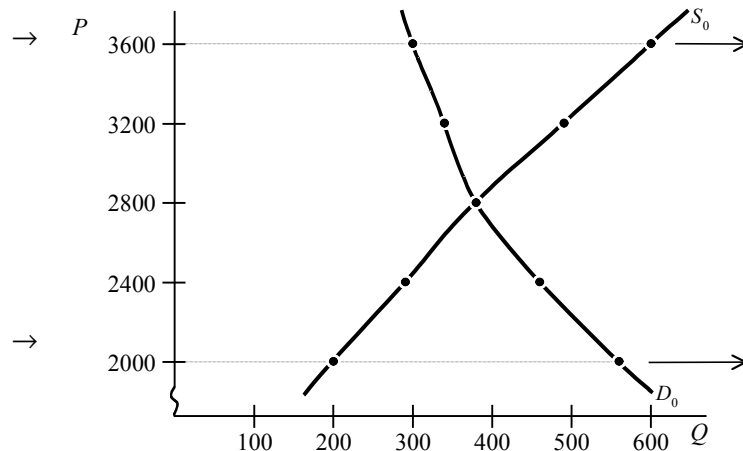


At a "high" price
there is a surplus



At price of \$3600 buyers want to buy only 300 but sellers wish to sell 600. Therefore there is a surplus in the market.

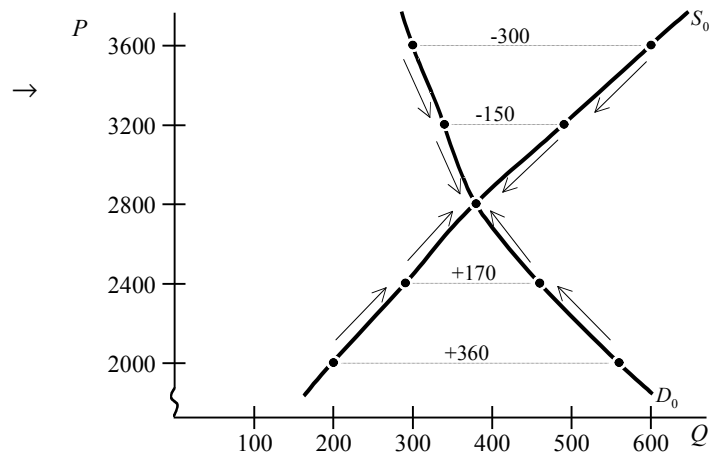
A more formal way of defining surplus would be to say that the quantity supplied exceeds the quantity demanded—which the economist refers to as a situation of excess supply.

At a "low" price
there is a shortage

At price of \$2000 buyers want to buy 560 but sellers wish to sell only 200. Therefore there is a shortage in the market.

A more formal way of defining shortage would be to say that the quantity demanded exceeds the quantity supplied—which the economist refers to as a situation of excess demand.

Calculation of
shortages and
surpluses and
"seeing" them
on the diagram



Price	Quantity Demanded (D_0)	Quantity Supplied (S_0)	Excess Demand (+) Excess Supply (-)
3600	300	600	-300
3200	340	490	-150
2800	380	380	0
2400	460	290	+170
2000	560	200	+360

How a Supply-Demand Market Adjusts to Excess Demand

There will be pressure from both sides of the market to increase price!
Both sides will be aware fairly quickly that there is a shortage.

1) Sellers have two options: raise price immediately OR
hold off selling for a while, knowing price will rise.

2) Buyers: some buyers would rather pay a higher price than not get the good at all.
These buyers will quickly begin to offer to pay a higher price.

Example: if we begin at a price of \$2000 then buyers want 560 cars but 360 buyers cannot get the good at all. However, 460 buyers are willing to pay \$2400 rather than not get the good at all (and 100 would not).

How a Supply-Demand Market Adjusts to Excess Supply

There will be pressure from both sides of the market to decrease price!
Both sides will be aware fairly quickly that there is a surplus.

1) Buyers have two options: offer a lower price immediately OR
hold off buying for a while, knowing price will fall.

2) Sellers: some sellers would rather sell at a lower price than not sell the good at all.
These sellers will quickly begin to offer to sell at a lower price.

Example: if we begin at a price of \$3600 then sellers want to sell 600 cars but 300 sellers cannot sell the good at all. However, 490 sellers are willing to sell for \$3200 rather than not sell the good at all (and 110 would not).