

Demand and Supply Examples

Review

Price Floors and Ceilings keep market price from allocating scarce goods.

Using demand and supply to predict changes in prices and quantities.

Shifts in the demand schedule

Shifts in the supply schedule

What have we learned?

Econ 101 M. Salemi

The New York Times

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A Month Free? Rents Are Falling Fast

By ELIZABETH A. HARRIS

IN this painful economic climate of layoffs and shrinking investments, there is a sliver of positive news: it's a good time to be a renter in [New York City](#). Prices are falling, primarily in [Manhattan](#), and concessions like a month of free rent are widespread.

Although it is notoriously difficult to quantify the state of the rental market, rents fell in almost every sector of the Manhattan market last year, according to [the Manhattan Rental Market Report](#) produced by the Real Estate Group, a New York brokerage. The steepest drop was in one-bedrooms, down 5.7 percent in buildings with doormen and 6.53 percent in buildings without. The only category that rose: rents for two-bedroom apartments in doorman buildings, up just a bit, by 0.61 percent. But these numbers, like most available data, represent asking rents rather than the final price. Anecdotal evidence suggests that some people are negotiating rents as much as 20 percent lower than the original prices asked by landlords. These figures also leave out incentives, like a month of free rent or a landlord's paying the broker fee, which can add up to real savings.

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Price is a Rationing Mechanism

A Demand Schedule shows the quantity of a well-defined good that buyers are willing and able to purchase at each possible price.

A Supply Schedule shows the quantity of a well-defined good that sellers are willing and able to sell at each possible price.

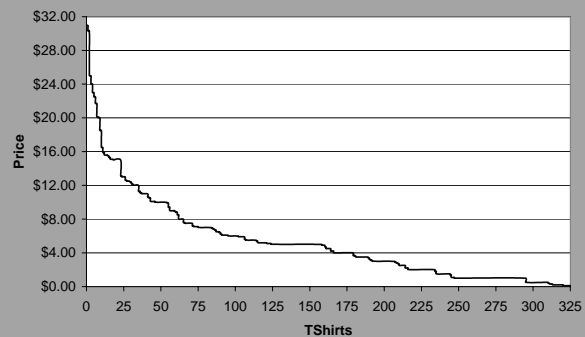
The Equilibrium Price:

Is the price such that quantity demanded equals quantity supplied.

Separates prospective buyers into two groups: those who get the good and those who do not.

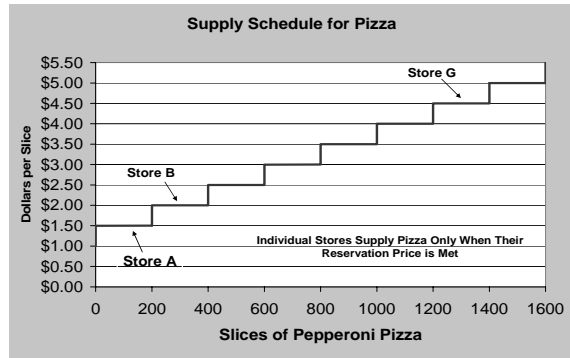
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Econ 101 Demand for UCSC T Shirt



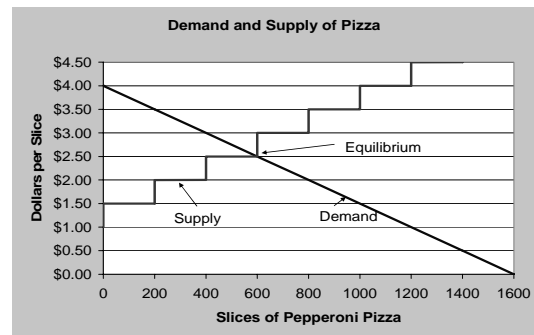
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Review Supply Schedule



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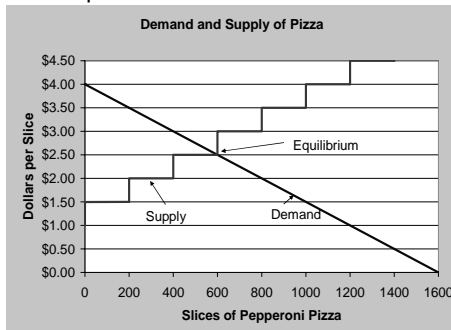
Market Equilibrium occurs at the price where quantity demanded equals quantity supplied.



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In equilibrium, the number of slices that will be denied to consumers even though consumers have a positive reservation price for those slices is ...

- A. 0
- B. 600
- C. 1000
- D. 1600



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Use Your Clickers To Answer
The Following
Graded Question

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Given the displayed demand and supply data, equilibrium price and quantity are:

- A. \$3.00, 200
- B. \$1.50, 200
- C. \$2.25, 125
- D. \$2.25, 75
- E. None of the Above

Price	Quantity Demanded	Quantity Supplied
\$4.00	10	300
\$3.75	15	275
\$3.50	20	250
\$3.25	25	225
\$3.00	30	200
\$2.75	35	175
\$2.50	50	150
\$2.25	75	125
\$2.00	100	100
\$1.75	125	75
\$1.50	200	50
\$1.25	250	0
\$1.00	400	0

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Price Floors and Ceilings keep market price from allocating scarce goods.

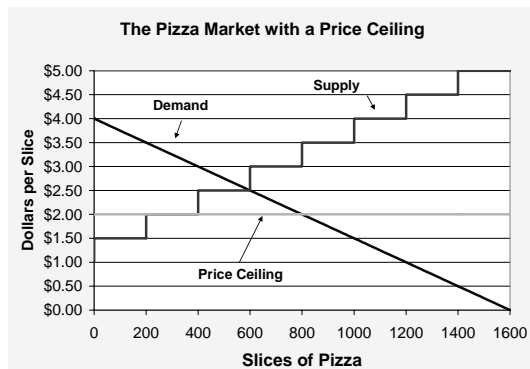
A Price Ceiling is a legal requirement that the price of a particular good not rise above the ceiling level.

A Price Floor is a legal requirement that the price of a particular good not fall below the floor level.

Price ceilings and floors only matter when they are binding on the market.

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Price Ceiling



Price Ceiling

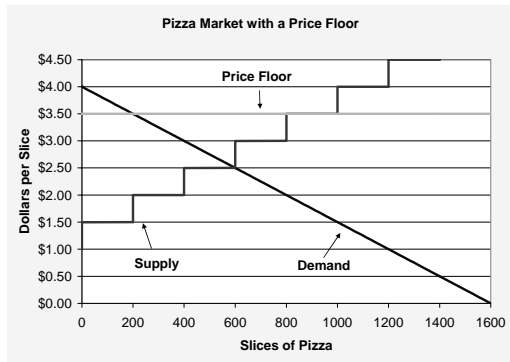
The equilibrium price is \$2.50, higher than the ceiling price of \$2.00.

Quantity Demanded is:
 800 slices at \$2.00.
 400 slices at \$2.50.

Non-market mechanisms will decide who gets the available slices.

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Price Floor



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Price Floor

The equilibrium price is \$2.50, lower than the floor price of \$3.50.

At the floor price of \$3.50:

Quantity demanded is 200 slices.

Quantity supplied is 1000 slices.

There is excess supply. Firms have an incentive to find a way around the floor.

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Use Your Clickers To Answer
The Following
Graded Question

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Which of the following correctly describes the effects of binding price floors and ceilings on markets?

- A. A price floor causes quantity demanded to exceed quantity supplied.
- B. A price ceiling leads buyers to compensate sellers in alternative ways.
- C. A price ceiling causes quantity supplied to exceed quantity demanded.
- D. A price floor leads buyers to compensate sellers in alternative ways.

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Shifts in the demand schedule

The demand schedule gives the relationship between quantity demanded and price with

other demand factors unchanged.

When other demand factors change, the demand schedule shifts.

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Factors that Increase Demand

- A decrease in the price of complements.
- An increase in the price of substitutes.
- An increase in income (for normal goods).
- An increase in preference for the good.
- An increase in population of potential buyers.
- An increase in expected future price of the good.

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Use Your Clickers To Answer
The Following
Non-Graded Question

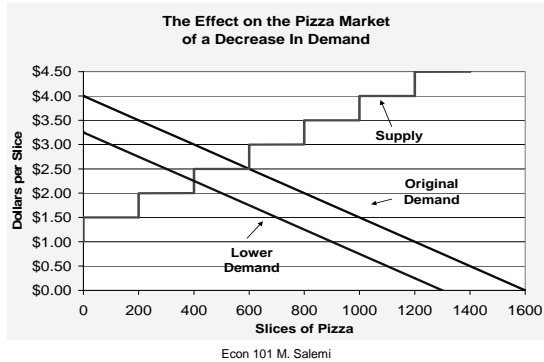
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A sale on Subway sandwiches will cause a (an) _____ in the equilibrium price and a (an) _____ in the equilibrium quantity of pizza.

- A. Increase, increase
- B. Increase, decrease
- C. Decrease, increase
- D. Decrease, decrease

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Suppose Subway lowers the price of its sandwiches.



The effect on the pizza market of a decrease in the price of a substitute

Why does demand for pizza fall?

Subways sandwiches are a substitute for pizza. Some consumers switch from pizza to subs.

By how much does the demand for pizza fall?

By 300 slices per day—the horizontal difference between the old and new demand schedules.

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The effect on the pizza market of a decrease in the price of a substitute

What is the effect on equilibrium price?

The equilibrium price falls from \$2.50 to \$2.25 per slice.

What is the effect on equilibrium quantity?

The equilibrium quantity falls from 600 slices per day to 400 slices per day as one store drops out.

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The effect on the pizza market of a decrease in the price of a substitute

If demand fell by 300 slices per day, why did the equilibrium quantity fall by only 200 slices?

The decrease in equilibrium price offset some of the shift in demand.

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Shifts in the Supply schedule

The supply schedule gives the relationship between quantity supplied and price with

other supply factors unchanged.

When other supply factors change, the supply schedule shifts.

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Factors that Increase Supply

A decrease in the cost of materials, labor, or other inputs used to produce the good in question.

An improvement in technology that reduces the cost of producing the good.

An improvement in the weather (especially for agricultural products).

An increase in the number of suppliers.

A decrease in the expected future price of the good.

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Use Your Clickers To Answer
The Following
Graded Question

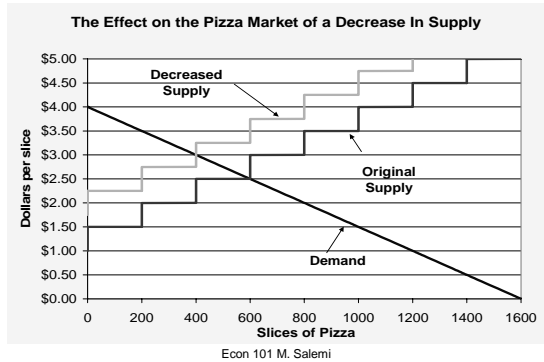
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An increase in the price of Mozzarella cheese will cause a (an) _____ in the equilibrium price and (an) _____ in the equilibrium quantity of pizza.

- A. Increase, Increase
- B. Increase, Decrease
- C. Decrease, Increase
- D. Decrease, Decrease

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Suppose the price of Mozzarella cheese increases...



The effect on the pizza market of an increase in the cost of a ingredient

Why does supply for pizza fall?

The higher cost of Mozzarella means pizza is more expensive to produce than before.

By how much does the supply of pizza fall?

The supply price rose by \$0.75 for each quantity. The effect on quantity is different for different prices because of the stair-step shape of the supply schedule.

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The effect on the pizza market of an increase in the cost of a ingredient

What is the effect on equilibrium price?

The equilibrium price increases from \$2.50 to \$3.00 per slice.

What is the effect on equilibrium quantity?

The equilibrium quantity falls from 600 slices per day to 400 slices per day.

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The effect on the pizza market of an increase in the cost of a ingredient

If the supply price rose by \$0.75 per slice why did the equilibrium price rise only by \$0.50 per slice?

Consumers are not willing to buy 600 slices at a price \$3.25 (\$2.50 + \$0.75). The quantity demanded falls because of the increase in price.

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Use Your Clickers To Answer
The Following
Graded Question

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Which of the following could account
for falling rents in Manhattan in 2009?
Rents in Manhattan fell because...

- A. Rent ceilings on Manhattan apartments were eliminated.
- B. Rent floors on Manhattan apartments were raised.
- C. Incomes of Manhattan consumers fell due to the recession.
- D. Several large Manhattan apartment building were demolished to make a new subway line.

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What Have We Learned?

Price Floors and Ceilings keep market price from allocating scarce goods.

A shift in demand results from changes in other demand factors and causes a change in equilibrium price and quantity.

A shift in supply results from changes in other supply factors and causes a change in equilibrium price and quantity.

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