# Market Equilibrium

Remember that the “free interaction” of buyers and sellers in a market will lead to “a particular level of trade” taking place at “a particular price.” At the market equilibrium no individual buyer and no individual seller can alter his or her own behavior in such a way as to increase his or her own surplus. Equilibrium – a “stable state” for a system which will persist as long as outside factors do not change.

The equilibrium in the model of Supply and Demand is:

* “stable” (if we are there we will stay there, unless outside forces change; but this had to be true by the definition of equilibrium)
* “unique” (there is one and only one equilibrium, a property which follows from the “Law of Demand” and “Law of Supply”)
* “self enforcing” (at higher prices there is downward pressure on price; at lower prices there is upward pressure on price – therefore if we start at any other price, we will be pushed toward the equilibrium price)

Use the following to answer question 1

| **Price per Video Game** | **Quantity**  **Demanded per Year** | **Quantity Supplied per Year** |
| --- | --- | --- |
| $5 | 30 | 102 |
| 4 | 48 | 84 |
| 3 | 66 | 66 |
| 2 | 84 | 48 |
| 1 | 102 | 30 |

What is the equilibrium **Price** and **Quantity?**

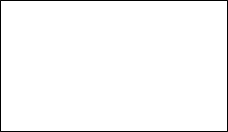
P\*= $3 and QD=QS=66 units where the quantity supplied equals to quantity demanded.

Excess Supply – a situation in which quantity supplied is greater than quantity demanded (resulting in “downward pressure” on price).

## Example 1:

**At the price of $30 what happens to the market?**

# 30



Excess Supply at a price of $30:

price

Supply

quantity supplied (of 100) is greater than quantity demanded (of 20) [i.e., “more sellers than buyers”] => “downward

pressure” on price

Demand

0

Quantity

0

S(30)=100

D(30)=20

If quantity supplied is greater than quantity demanded, we have excess supply or we have surplus.

## Example 2:

Use the following to answer question

| **Price per Video Game** | **Quantity**  **Demanded per Year** | **Quantity Supplied per Year** |
| --- | --- | --- |
| $5 | 30 | 102 |
| 4 | 48 | 84 |
| 3 | 66 | 66 |
| 2 | 84 | 48 |
| 1 | 102 | 30 |

Beginning with equilibrium in the table above, an increase in price of $1 would

### It causes a surplus of 36. (if the price goes up to $ 4 dollars, QS=84 and QD=48

Remember your equilibrium price is $ 3 and it goes up to $4, we will have “**surplus or excess supply**”

Recall: If quantity supplied is greater than quantity demanded, we have excess supply or we have surplus.

Excess demand – a situation in which quantity demanded is greater than quantity supplied (resulting in “upward pressure” on price).

## Example 1:

Use the following to answer question

| **Price per Video Game** | **Quantity**  **Demanded per Year** | **Quantity Supplied per Year** |
| --- | --- | --- |
| $5 | 30 | 102 |
| 4 | 48 | 84 |
| 3 | 66 | 66 |
| 2 | 84 | 48 |
| 1 | 102 | 30 |

Beginning with equilibrium in the table above, an decrease in price of $1 would

### It causes a shortage of 36. (if the price goes up to $ 2 dollars, QD=84 and QS=48)

Remember your equilibrium price is $ 3 and it goes down to $2, we will have “**shortage or excess demand**”

Recall: If quantity demanded is greater than quantity supplied, we have excess supply or we have shortages.

## Example 2:

Consider the market for cane sugar. If there is “excess demand” at a price of $5.55, then the equilibrium price must be:

1. above $5.55.
2. exactly equal to $5.55
3. below $5.55.
4. None of the above answers are correct

If quantity demanded is greater than quantity supplied, we have excess supply or we have shortages.

Price ($)

Supply

# 5.55

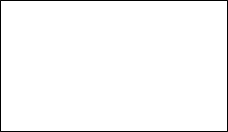
0

Demand

quantity

Excess Demand at a price of

$5.55: quantity demanded is greater than quantity supplied [i.e., “more buyers than sellers”] => “upward pressure” on price



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