



HEALTH ECONOMICS

Title :

Lecture no :


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وَقَلِّبْ رُبِّي زَيْتِي، عِلْمًا



كمية السلعة التي يمكن ان تشتريها الناس  القدرة على الدفع

Demand is the **ability and desire to pay** for goods and services.

If there is a high demand, the for-profit sector, governments will

supply those wants .

على القطاع الربحي

كلما زاد price قل quantity

لأن لا يستطيع الجميع ان يشتروها

Demand refers to **how much (quantity)** of a product or service is

desired by buyers or consumers.

The quantity demanded is the amount of a product people are

willing to buy at a certain price; the relationship between price and

quantity demanded is known as the demand relationship

قدرة الشخص على انتاج السلع الشخص المنتج Supply

قدرة الشخص على الدفع (المستهلكين) Demand

Negative relationship between demand and the price

In general, demand reflects :

- Population health needs,
- Their ability to pay for service utilization
- Availability of services to be used.

قدرة
على الدفع

Demand
على ملاحظتها بشكل موضوعي

Objectively observable as behavior in the market.

Money is a key factor.

"Demand" is also called "effective demand" because it's expressed only by spending money.

- Health is treated as a store which degrades يتدهور over time in the absence of "investments" in health, so that health is viewed as a sort of wealth.
- Investment in health is costly مكلف

الاستثمار في قطاع الصحة مكلف ولكن له أهمية لأنه يزيد الانتاجية

Need versus demand...

X مذون

- Health plans that focus on need and ignore demand will face under- or over-utilization of service capacity
- If one believes quantity demanded is too little or too much (e.g. under-use or over-use of emergency room) relative to need, then quantity demanded must be manipulated by changing,
 - price or other costs to buyer, or
 - demand through marketing or de-marketing

A model of demand for medical care...

المستهلكات

- According to Michel Grossman, consumers have a demand for health for two reasons:

سلعة استهلاكية

– Health is a **consumption commodity**—it makes the consumer **feel better**



تعاكس على الانتاجية

سلعة استثمارية

– Health is an **investment commodity**—a state of health will determine the amount of **time available** to the consumer for productivity

امتناع

الناس عندما

Demand
للصحة

بسبب

Grossman's demand model...

- مخزون
- يحدث
- مخزون من الصحة يقل مع مرور الوقت
- According to this model **every one inherits a stock of health** when born
 - Health **depreciated** overtime, however an investment is required to sustain health
 - As peoples' age advances there is an **increase** in rate of illness and in the **utilization** of health services.
 - The stock of health can be sustained by **investment** to maintain health, such as **use of health services** and **health promoting activities**

مع مرور الوقت
التخفيض

الحفاظ
على الصحة

كلما الشخص كبير بالعمر كلما قل مخزون الصحة عنده 🧐

الحفاظ عليه

الحفاظ على الصحة

يفترض ان الشخص يمتلك stock of health يولد به الشخص ويقبل مع مرور الوقت

Grossman's demand model...

- ^{وجهة النظرى} A view of medical care demand being ^{بحري} derived from the demand for health ^{مستوح} implies the following:
 - increase in **age** result in an increase in the rate at which the person's **stock of health depreciates**
 - ^{تعريفنا} Over the life cycle people will attempt to offset ^{مخزون الصحة ينخفض} part of the increased rate of depreciation in ^{استهلاك} their stock of health by ^{محاو} increasing their **expenditure on health** ^{التعويض عن طريق زيادة الانفاق الصحي}
 - ^{انفاقهم} the demand for medical care will increase with increases in **person's income** ^{كلما زاد دخل الشخص كلما زاد انفاقه على الصحة}

الكمية المطلوبة

Quantity demanded is negatively related to price. This implies that the demand curve is downward sloping (holding ALL other variables constant)

يخترل

بغيره

منحنى الطلب

ثبات

المتغيرات الأخرى

• قانون الطلب Law of Demand

– The *law of demand* states that, the quantity (q) demanded of a good falls when the price (p) of the good rises

تنخفض

* عكسيه *

- كلما زاد السعر قل الطلب

- كل العوامل الأخرى ثابتة

Demand Schedule ⇒ کلی سٹاکل جدول

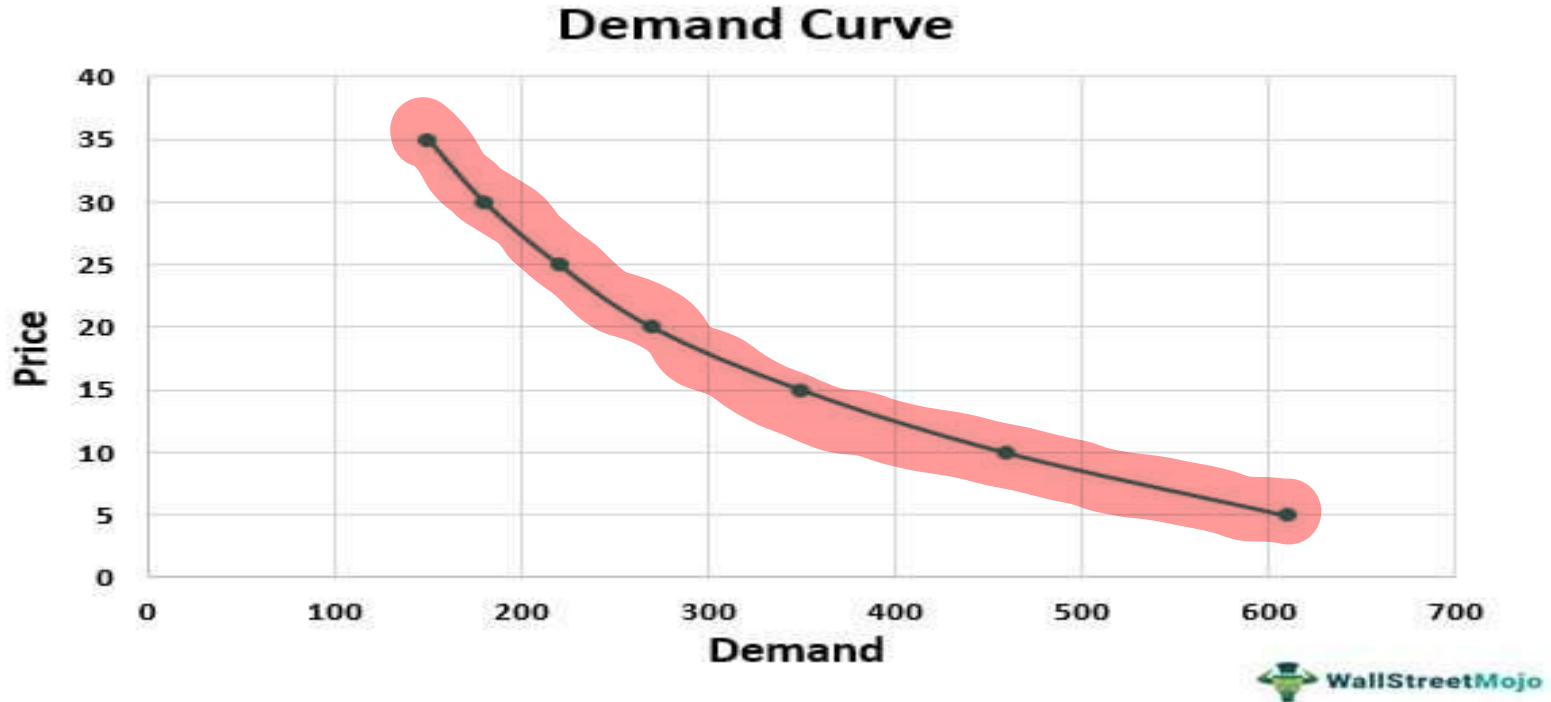
- The **demand schedule** is a **table** that shows the relationship between the **price** of the good and the **quantity demanded**. Negative relationship

Market Demand Schedule	
Price (\$)	Quantity Demanded (units)
5.00	610
10.00	460
15.00	350
20.00	270
25.00	220
30.00	180
35.00	150

Market Demand Schedule	
Price of a Small Soda	Number demanded per day
\$0.25	890
\$0.50	500
\$0.75	480
\$1.00	470
\$1.25	410
\$1.50	350
\$1.75	280
\$2.00	240
\$2.25	200
\$2.50	150
\$2.75	100

Demand Curve ^{منحنی} ⇒ ^{علی سبکی منحنی}

- The *demand curve* is a ^{رسم بیانی} graph of the relationship between the price of a good and the quantity demanded.



Price of Ice-Cream Cone

\$3.00

2.50

2.00

1.50

1.00

0.50

0

1

2

3

4

5

6

7

8

9

10

11

12

Quantity of Ice-Cream Cones

Price of Ice-Cream Cone	Quantity of Cones Demanded
\$0.00	12
0.50	10
1.00	8
1.50	6
2.00	4
2.50	2
3.00	0

1. A decrease in price ...

2. ... increases quantity of cones demanded.

Understanding The Concept of Needs, Wants and Demands

تجميع افكار
للحياة
منظمة

Needs

حالات اسامية في عدم وجودها يعني ممان

- States of deprivation
- Physical - food, clothing, shelter, safety, water
- Social - belonging and affection
- Individual - knowledge and self-expression

Wants

لاستكمال الحياة دونه

A want is a product desired by a customer that is not required for us to survive. So, want is the complete opposite of need, which is essential for our survival.

Demands

If a customer is willing and able to buy a need or a want, it means that they have a demand for that need or a want.

Substitutes بدائل → بدائل للمنتج \rightsquigarrow تعطي نفس الـ wants في النهاية تلبي

– Other goods or services which **satisfy the same wants** or provide the same characteristics

– E.g;

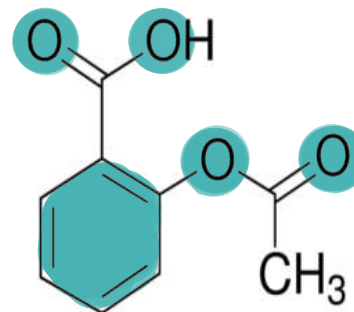
- **Doctor versus general practitioner** عقابيل
- **Generic and brand name medications** ادوية عامة اسماء تجارية
- **Private and public hospitals**

عندما يكون هناك بديل بسعر اقل و تلبية نفس الغاية بالتالي يؤدي ذلك إلى انخفاض الطلب على المنتج الأول

– If the generic medication decreases in price, demand for brand name will decrease



Dr. Omnia Elmahdy



How can we reduce the quantity of smoking demanded in the population ?



How can we reduce the quantity of smoking demanded

1. ^{اعلانات} Public service announcements, ^{كلمات الصحة اللائحة} mandatory health warnings ^{حظر الصنع} on cigarette packages, and the prohibition of cigarette ^{اعلان السجائر} advertising on television are policies designed to ^{تهدف} reduce the demand for cigarettes.

2. ^{مزايا السجائر} Raising the price of cigarettes (through tobacco taxes) lowers the quantity of cigarettes demanded

رفع السعر حتى يقل الطلب

3. Studies have shown that a **10% increase in the price** of cigarettes causes a **4% reduction in the quantity** of cigarettes demanded. For teens a **10% increase in price** leads to a **12% drop in quantity** demanded.
4. Studies have also shown that a **decrease in the price** of cigarettes is associated with **greater use of marijuana**. Thus, it appears that tobacco and marijuana are **complements**.

الحد // التقليل

الخصائص

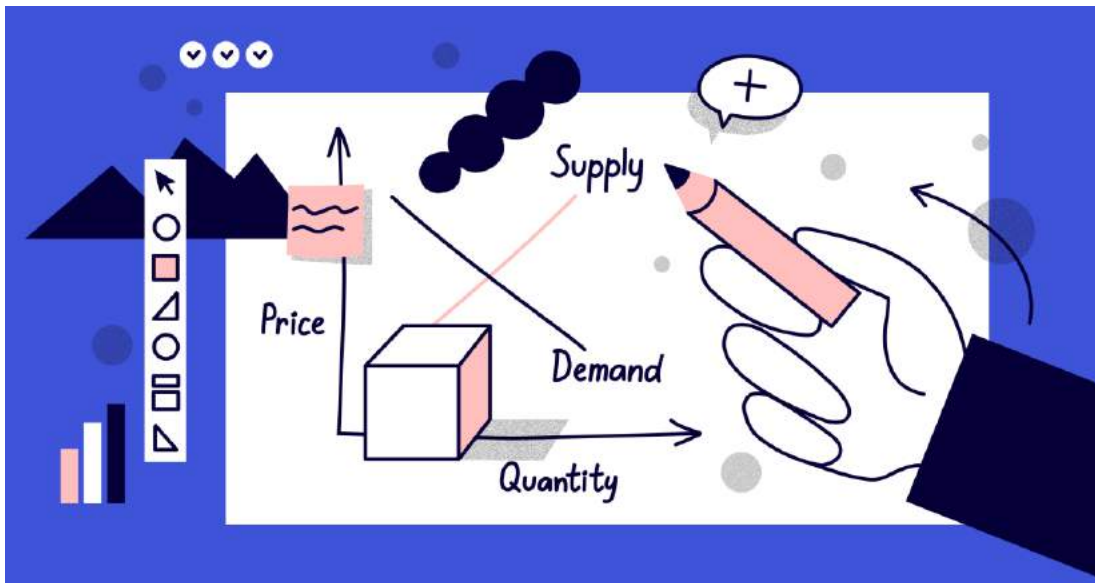
يرتبط مع

مكملان



Healthcare Economic Terms:

3- Supply



Dr. Omnia
Elmahdy

التوريد الخدمية // السلع
التي يقدر البائع على
انتاجها

← SUPPLY →

الكمية المعروضة

كمية السلعة

- **Quantity supplied** is the amount of a good that **sellers** are **willing and able** to sell.

راغبون

قادرون

عندما يرتفع سعر السلعة يؤدي ذلك إلى انخفاض الطلب عليها بينما هذا يدفع شركات الإنتاج و المنتجين والباقي ع السلع على زيادة الإنتاج من هذه السلعة بهدف الربح وتعمل لها اعلانات وعروض

Law of Supply



الكمية المعروضة



- The **law of supply** states that, the **quantity supplied** of a good **rises** when the **price** of the good **rises**.

Supplied **زاد** price **زاد** كلما زاد

- Supply Schedule

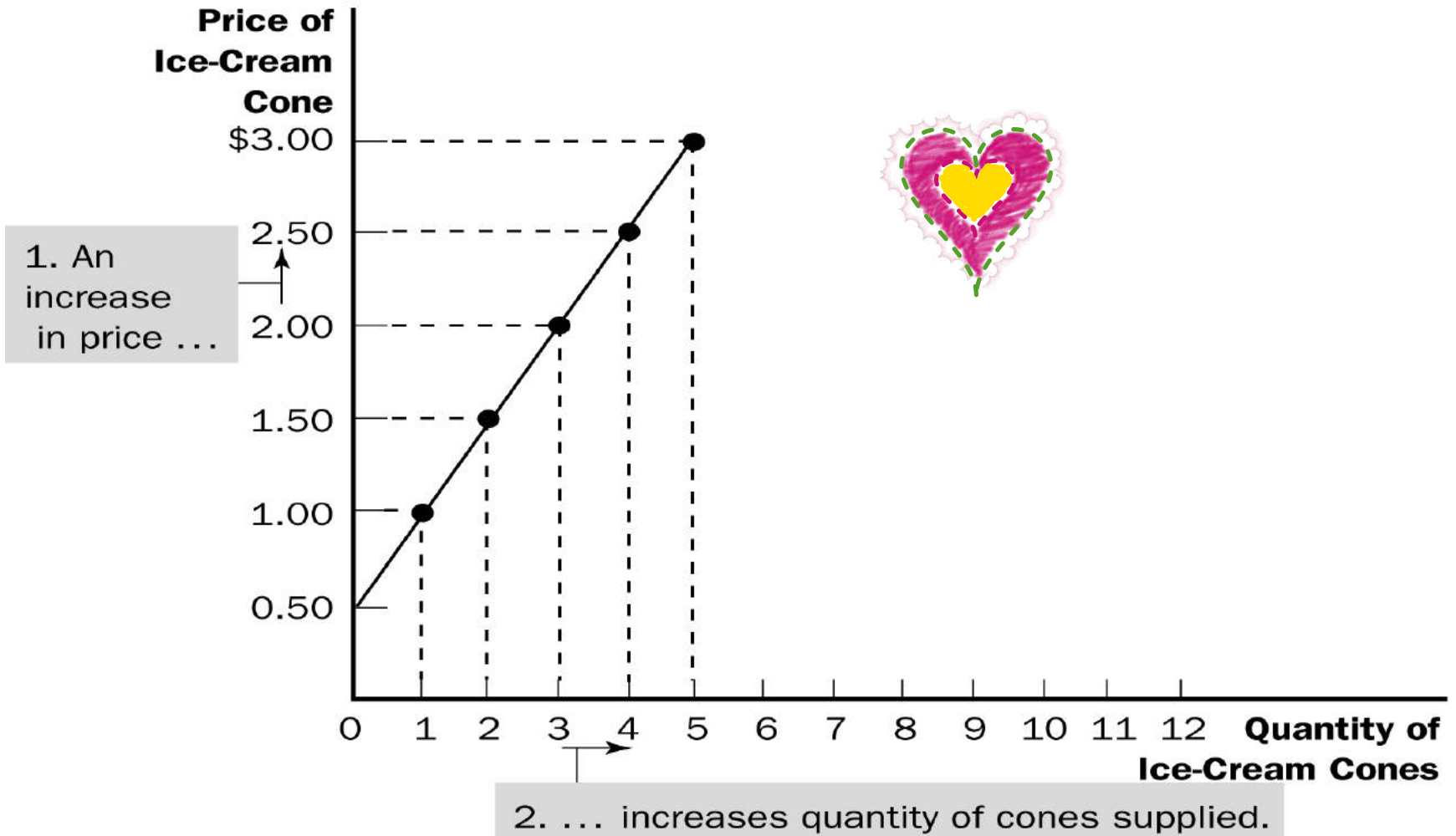
- The *supply schedule* is a table that shows the relationship between the price of the good and the quantity supplied

* الكمية المعروضة وسعرها *

	Price of Ice-Cream Cone	Quantity of Cones	
	\$0.00	0	
	0.50	0	
	1.00	1	
	1.50	2	
	2.00	3	
	2.50	4	
	3.00	5	

- Supply Curve

- The *supply curve* is the graph of the relationship between the price of a good and the quantity supplied.



Change in Quantity Supplied

Price of Ice-Cream Cone

\$3.00

1.00

0

1

C

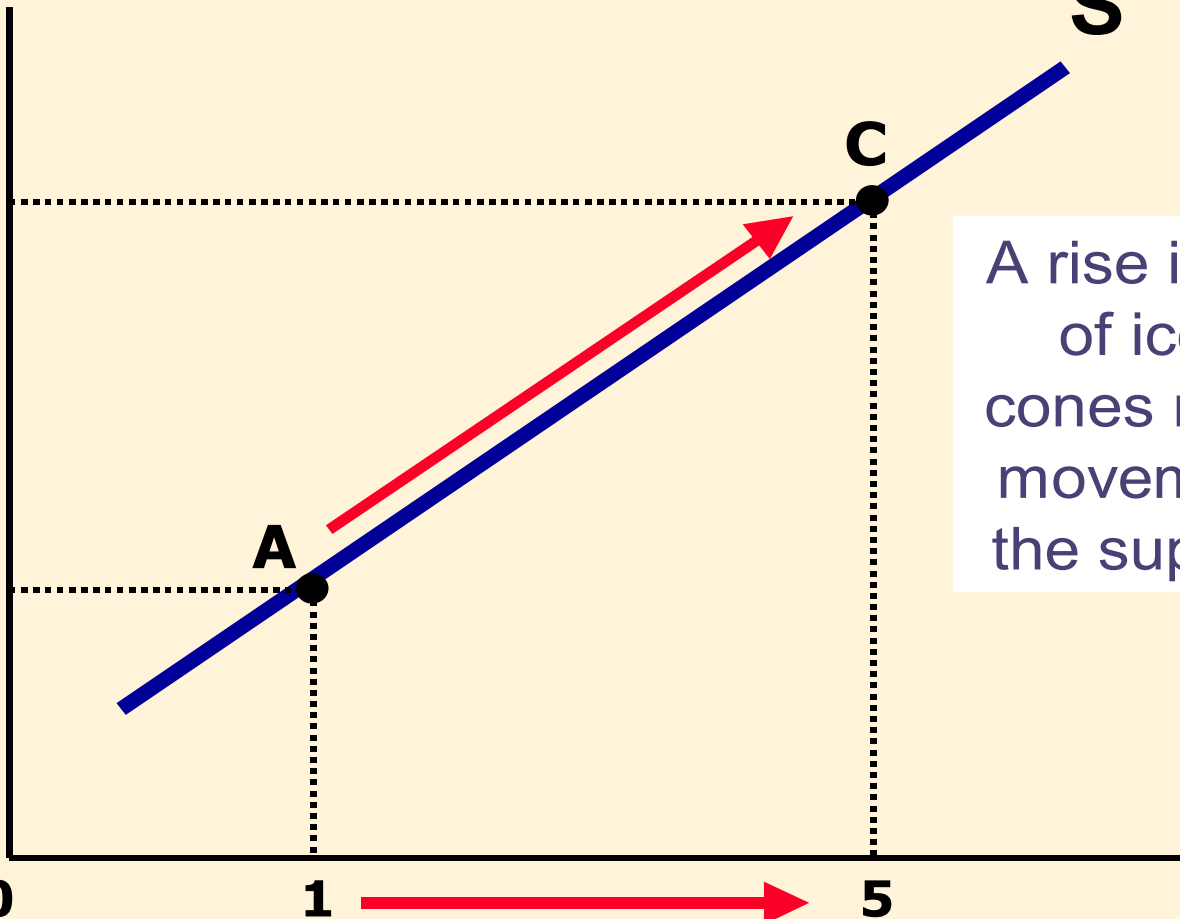
A

S

A rise in the price of ice cream cones results in a movement along the supply curve.

Quantity of Ice-Cream Cones

5



What are the supplies in healthcare?

- 1- **Labor time** of various trained professionals, such as GPs, specialists, nurses, medical technicians, pharmacists, and many others
وقت العمل *طوائف المهنيين المدربين* *الطباء عاطلين* *فني الطب*
- 2- **Procedures and testing**, such as magnetic resonance imaging (MRI) scans and laboratory analyses of blood samples
العمليات والإجراءات *التصوير بالرنين المغناطيسي* *تحاليل مخبرية* *عينات الدم*
- 3- **Hospital and nursing care services**
خدمات التمريض
- 4- **Emergency services** such as ambulances
خدمات الطوارئ
- 5- **Pharmaceutical products** (which itself covers a huge range, from bandages to chemotherapy drugs)
منتجات صيدلانية *بمدياتها* *العلاجات الكيميائية* *العلاجات* *مجموعة كبيرة*

Equilibrium

حالة التوازن

Equilibrium refers to a situation in which the **price** has reached the level where **quantity supplied equals quantity demanded**.

supply = demand ^{تساوي}

Demand Schedule

Price of Ice-Cream Cone	Market
\$0.00	19
0.50	16
1.00	13
1.50	10
2.00	7
2.50	4
3.00	1

Supply Schedule

Price of Ice-Cream Cone	Market
\$0.00	0
0.50	0
1.00	1
1.50	4
2.00	7
2.50	10
3.00	13

هو سبب
الطلب

مستوى الذي وصل
إليه السعر وهو
المستوى الذي فيه
يتساوى
supplied
and demanded

At \$2.00, the quantity demanded is equal to the quantity supplied!

SUPPLY AND DEMAND TOGETHER

Demand Schedule

Price of Ice-Cream Cone Market

\$0.00	19
0.50	16
1.00	13
1.50	10
2.00	7
2.50	4
3.00	1

Supply Schedule

Price of Ice-Cream Cone Market

\$0.00	0
0.50	0
1.00	1
1.50	4
2.00	7
2.50	10
3.00	13

نقطة
التقاء

At \$2.00, the quantity demanded is equal to the quantity supplied!

Figure 8 The Equilibrium of Supply and Demand

