AS Micro: Understanding Changes in Market Equilibrium Prices

The **twin forces of supply and demand** play a key role is establishing prices in markets for different goods and services.

When supply and demand are in balance a market is said to have reached an **equilibrium** resulting in a state of balance or rest. In microeconomics, equilibrium is reached at a price when quantity supplied balances with demand, there is no surplus or shortage that might drive prices lower or higher.

The equilibrium is also called the "**market-clearing price**"

When a market is in a stable equilibrium, it requires an **external event** to cause this to change. Changes in either the level of market demand and/or market supply will bring about a new equilibrium price and quantity traded. For example,

A rise in demand, for a given level of market supply will cause prices to increase and the quantity traded to expand

A rise in supply, for a given level of market demand will cause prices to decrease and the quantity traded to expand

In the exercise below there is a change in either a condition of demand or supply. In each case decide first whether demand or supply has changed, in which direction (an increase or a decrease) and the probable impact on the market equilibrium price. How many of the changes can you identify correctly?

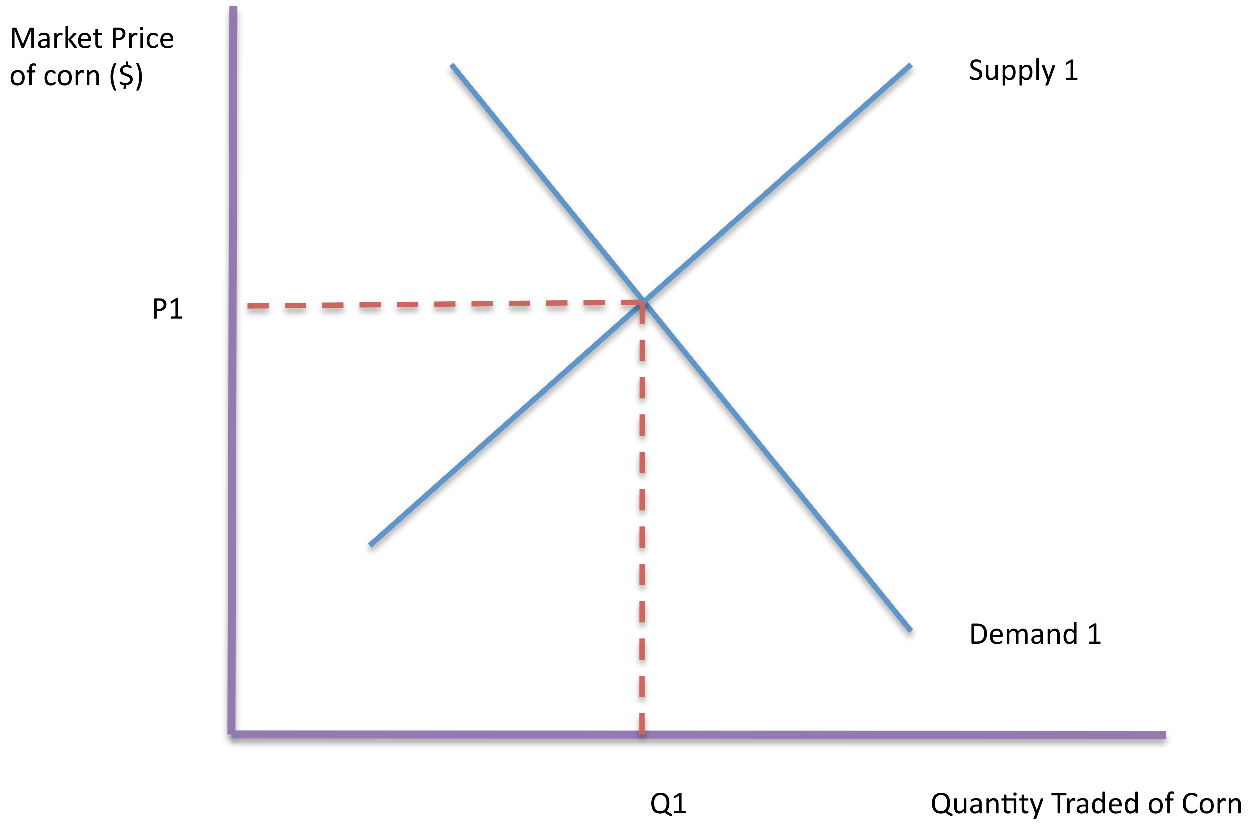
In each case assume ceteris paribus, i.e. all other factors that might affect supply and demand in the market remain unchanged. This simplifying assumption allows is to isolate the impact of a single change.

Market	Change in the Market	Shift in Demand or Supply?	Increase or Decrease?	Effect on market price - higher or lower?
World market for steel	The IMF issues a report forecasting a slowdown in global construction output and investment for 2012			
World market for gas	An exceptionally cold autumn and winter period affects North America			
European market for grapes	Spring floods badly affects the crop of grapes from Mediterranean countries			
The global market for gold	A depreciation (fall) in the value of the US exchange rate (the dollar) and other currencies			
The market for new cars	A sustained rise in the world price of steel and rubber			
UK market for coal	The European Union increases the size of the import tariff on coal from non-EU countries			

Market	Change in the Market	Shift in Demand or Supply?	Increase or Decrease ?	Effect on market price - higher or lower?
UK market for new homes	The Bank of England decides to raise interest rates from 1% to 3% over the course of a year			
Market for air travel within the European Union	The European Union introduces a carbon tax on airlines - a Euro 20 tax per tonne of CO2 emissions			
The world market for tea	A number of emerging economy governments invest a multi-million $ scheme to raise productivity and yields in tea-growing businesses			
UK market for road haulage services	The UK government reduces the level of excise duty (tax) on each liter of diesel used by lorries			
The UK market for vintage whisky	An industry expert publishes a forecast of rising whisky prices for the next five years due to strong interest from overseas buyers			
UK market for haddock	The European Union relaxes (cuts) restrictions on the number of days that fishing vessels can catch haddock in the north sea			
The market for UK government bonds	The Bank of England announces an expansion of it’s policy of Quantitative Easing			
Market for computer games such as FIFA12	A fall in the level of consumer confidence and expectations of rising unemployment			
The market for skilled bricklayers in the UK building industry	The UK government introduces a lower cap (quota) on the number of migrants who are allowed to take skilled work in the UK construction industry			

Analysing price changes - the world market for corn

Read through the extract below and then using this supply and demand diagram - show and explain briefly why the price of corn has been rising in world markets. Remember to label your supply and demand curves carefully (where appropriate) and draw to the price and quantity axes.



Corn is a soft commodity along with the likes of coffee, tea and rubber. Referred to as “yellow gold”, corn is used in products ranging from cereals, snack foods, salad dressings, soft drink sweeteners, chewing gum and peanut butter. Little wonder that changes in the world price of corn can have a noticeable effect on the prices that we may for many popular foods and drinks.

The key to understanding the demand-side of the market for the corn is to focus on demand from three key industries - livestock, ethanol and food processing. World demand for corn has grown at rapid rates in recent years including farmers who use corn as feed in fattening livestock in developing countries. As per capita incomes rise, so does the demand for meat in poorer nations.

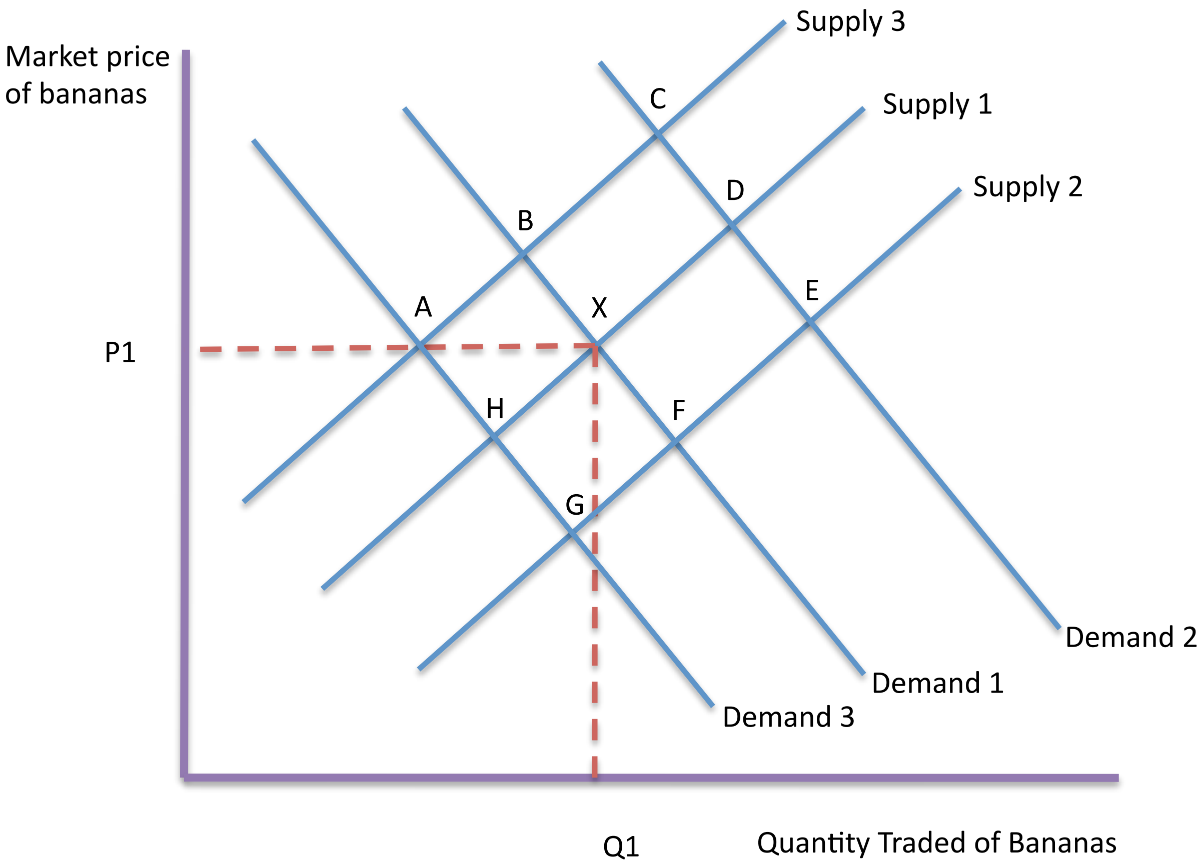
Another cause of rising demand has been purchases for corn-based ethanol in the United States and the European Union. Four years ago the United States Congress passed the Energy Independence and Security Act which acted as a green light for producers of alternative energy such as ethanol. The Act requires 15 billion gallons of ethanol be consumed in the United States per year by 2015, irrespective of what has happened to the global price of corn or crude oil. The result in the USA in 2011 is that over a quarter of scarce corn production must be given over to ethanol manufacturing.

To some analysts there has been a permanent increase in global demand for corn. The result has been scrambling by buyers to purchase available stocks and an inevitable rise in prices.

The short-term situation has been exaggerated by a year-long ban on grain exports by Russia (only recently lifted) and there have also been supply problems outside of the USA - grain-producing regions in Russia, Ukraine, Kazakhstan, and South America were hit by drought in 2010.

The market for bananas

In this exercise we are asked to think about changes in supply and demand conditions in the market for bananas - a globally-traded fruit. The supply and demand diagram below indicates a series of supply and demand curves with the initial equilibrium price and output at P1 and Q1 respectively (shown by point X). In each of the following examples, always starting out at point X, what is the most likely new equilibrium point (A, B, C, D, E, F, G or H) in the event of the change mentioned in the table.



	Change in market conditions (for each change assume ceteris paribus - i.e. all other factors held constant)	**New equilibrium point**
1	Rising per capita incomes in developing countries	
2	Flooding hits Ecuador, one of the world's leading banana exporters	
3	Growing demand for housing causes a reduction in land available for banana production in the Caribbean	
4	The EU launches a highly effective advertising campaign to persuade people of the health benefits of eating fruit every day	
5	There is a rise in fuel and fertilizer costs for banana growers **AND** there is a large fall in the price of apples	
6	Improvements in irrigation increase yields in banana growing regions	
7	The EU government provides a subsidy to schools who provide bananas for students as part of school lunches	
8	There is a sizeable increase in the price of oranges **AND** a fall in the cost of transporting bananas from growers to consumer markets	