

MARKET EQUILIBRIUM IN MICROECONOMICS AND FACTORS AFFECTING ITS CHANGE

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Abstract

This paper analyzes the key and modern factors influencing market equilibrium and its changes in microeconomics. The processes of equilibrium formation and disruption are examined based on the demand and supply model. The impact of factors such as household income, consumer preferences, prices of substitute and complementary goods, government policies, taxes, subsidies, and price controls is discussed. In addition, modern factors such as global supply chains, inflation, digital platforms, and information asymmetry are also analyzed. The results show that market equilibrium is a constantly changing process.

Keywords: Microeconomics, market equilibrium, demand, supply, price, inflation, subsidy, tax, digital economy, information asymmetry.

Introduction

With the transition of the economy to market relations, the need for knowledge that explains the functioning mechanism of a market economy in society has been increasing. This includes understanding the economic activities of enterprises (firms) based on various forms of ownership, their behavior in market conditions, and ways to efficiently use limited production resources, thereby ensuring their effective performance.

Under the leadership of the President of the Republic of Uzbekistan, Sh.M. Mirziyoyev, the process of forming a modern and developed market economy system is being implemented based on the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017–2021. Today, it is essential to address issues such as strengthening macroeconomic stability, maintaining high economic growth rates, deepening structural reforms, increasing the competitiveness of the national economy through modernization and diversification of its leading sectors, modernizing and rapidly developing agriculture, reducing state participation in the economy, protecting private property rights and enhancing their priority status, encouraging the development of small businesses and private entrepreneurship, continuing institutional and structural reforms, and ensuring comprehensive and balanced socio-economic development of regions, districts, and cities through effective and optimal use of their existing potential.

Market equilibrium refers to a state where demand and supply for a particular good or service are equal. In other words, the market price reaches a level at which the quantity consumers are willing to buy equals the quantity producers are willing to supply. This condition ensures efficiency in the economy and the rational allocation of resources. In modern microeconomic theories, market equilibrium is widely studied through approaches such as General Equilibrium Theory and Partial Equilibrium Analysis. These theories make it possible to deeply analyze interconnections between markets as well as equilibrium conditions in individual markets.



Market equilibrium is not constant; it changes under the influence of various factors. One of the most important factors is the set of economic and non-economic variables affecting demand and supply. For example, increases in consumer income, changes in tastes and preferences, and population growth raise demand, which may lead to an increase in equilibrium price and quantity. At the same time, improvements in production technologies, changes in resource prices, or shifts in government policy affect supply and can lead to a new market equilibrium.

In scientific research, including analyses based on the Supply and Demand Model, changes in market equilibrium are studied using graphical and mathematical methods. This model explains how any external shock in the market causes shifts in demand or supply curves and leads to the formation of a new equilibrium point.

Literature Review

The analysis of literature on the topic of market equilibrium in microeconomics and the factors influencing its changes covers theoretical and empirical studies from different periods. This review highlights the essence and dynamics of market equilibrium based on classical, neoclassical, and modern approaches.

First, among classical economists, Adam Smith emphasized that the market mechanism is regulated by the “invisible hand,” substantiating that natural equilibrium is formed through the interaction of demand and supply. This idea was later developed by representatives of the neoclassical school. In particular, Alfred Marshall, in his work *Principles of Economics*, scientifically grounded the concept of partial equilibrium through the intersection of demand and supply curves. He turned the graphical analysis of market equilibrium into a key tool of economic analysis. At a later stage, the theory of general equilibrium was developed. The General Equilibrium Theory, proposed by Léon Walras, demonstrated that all markets can reach equilibrium simultaneously while being interconnected. In modern literature, this approach has been further improved through mathematical models and computational methods.

In the second half of the 20th century, microeconomic analysis deepened further, and the factors affecting market equilibrium expanded. For example, in the textbook *Economics* by Paul Samuelson and William Nordhaus, it is shown that market equilibrium depends not only on demand and supply but also on government policies, taxes, subsidies, and externalities.

In modern scientific research, market equilibrium is considered a dynamic process. Scholars such as Joseph Stiglitz emphasize that under conditions of information asymmetry, markets do not always achieve efficient equilibrium. This led to the formation of the concept of market failure. Additionally, within the framework of behavioral economics, it has been scientifically proven that consumers’ irrational decisions also affect market equilibrium. Recent empirical studies (including reports by the World Bank, the International Monetary Fund, and other international organizations) highlight that global shocks—such as pandemics, inflationary pressures, and disruptions in supply chains—lead to frequent changes in market equilibrium. This indicates the need to reconsider traditional demand and supply models.

Research Methodology

In this study, the use of a mixed-methods approach is considered appropriate. This method allows for the integration of theoretical analysis and empirical research. Theoretically, market



equilibrium is studied based on the Supply and Demand Model and General Equilibrium Theory, while empirically it is tested using real data.

a) Theoretical Analysis Methods

General patterns of market equilibrium are identified using induction and deduction methods. Economic processes are analyzed in a simplified form through abstraction and modeling techniques.

Comparative analysis is used to study differences between various markets (for example, food markets and industrial goods markets).

b) Economic-Mathematical Methods In modern research, mathematical models play an important role in determining market equilibrium. For example, demand and supply functions are expressed as follows:

$$Q_d = a - bP \quad ; \quad Q_s = c + dP$$

The equilibrium condition is:

$$Q_d = Q_s$$

Through this equation, the equilibrium price and quantity are determined. In addition, the statistical significance of factors affecting demand and supply is evaluated using econometric models (such as OLS and regression analysis).

Analysis and Main Results

Economic analysis shows that market equilibrium is formed based on the Supply and Demand Model. The intersection point of the demand and supply functions determines the equilibrium price and quantity in the market.

$$Q_d = Q_s$$

Modern studies (especially in the context of digital markets) have revealed that market equilibrium is not constant, but rather changes frequently.

Analysis of the Impact of Demand Factors Scientific observations show that: An increase in household income raises demand, leading to higher equilibrium price and quantity.

Changes in consumer tastes and preferences shift the demand curve. Prices of substitute and complementary goods have a significant impact on demand. Growth in household income contributes to an increase in overall demand. An increase in household income is one of the most important demand factors in the economy. When income rises, consumers' purchasing power increases, enabling them to buy more goods and services. This leads to an increase in demand for most goods.

In economic theory, such goods are called normal goods. For example, in sectors such as



clothing, household appliances, and services (tourism, education), rising income significantly increases demand.

As a result, the demand curve shifts to the right, leading to the emergence of a new market equilibrium point:

equilibrium price increases

equilibrium quantity increases

From the perspective of the Supply and Demand Model, this process is considered a demand shock.

Changes in Consumer Preferences

Consumer preferences are one of the most dynamic factors shaping demand. This factor is influenced not only by economic conditions but also by social, psychological, and cultural aspects.

Preferences may change due to:

advertising and marketing

fashion and trends

cultural shifts

social media influence

emergence of new technologies

For example, increased interest in a healthy lifestyle leads to a sharp rise in demand for organic products and sports goods. Similarly, growing environmental awareness expands the market for “green products.”

In such cases, the demand curve shifts either to the right or left:

if a product becomes more popular → demand increases → price and quantity rise

if interest declines → demand decreases → price and quantity fall

Behavioral Economics explains these processes through the influence of psychological factors and the non-rational nature of human decision-making.

The Impact of Substitute and Complementary Goods Prices

In the market, each good is interconnected with others and affects demand through two key concepts:

a) Substitute Goods These are goods that can replace each other (e.g., tea and coffee). If the price of a substitute good increases:

consumers choose a cheaper alternative

demand for the main good increases

its equilibrium price and quantity rise

b) Complementary Goods These are goods consumed together (e.g., printers and cartridges). If the price of a complementary good increases:

demand for the main good decreases

market equilibrium shifts downward

both price and quantity decrease

These processes are also analyzed within the Supply and Demand Model, showing that markets are interdependent.

Analysis of Supply Factors

The main factors affecting supply include:



production costs

technological progress

taxes and subsidies

Modern research shows that technological development significantly increases supply and leads to lower prices (especially in industry and IT sectors).

Analysis of Government Policy and External Factors

Economic policy directly affects market equilibrium:

Taxes → reduce supply Taxes increase production costs, as producers must pay a portion of revenue or profit to the government. This reduces net income and makes production more expensive. As a result:

firms reduce output

less efficient firms may exit the market

overall supply decreases

This leads to a leftward shift of the supply curve:

equilibrium price increases

equilibrium quantity decreases

This phenomenon is analyzed through the concept of tax incidence, which studies who bears the greater burden of the tax (producers or consumers).

Subsidies → encourage production A subsidy is financial support provided by the government to producers. It reduces production costs and motivates firms to produce more.

Effects of subsidies:

firms' profits increase

new firms are encouraged to enter the market

overall supply expands

As a result, the supply curve shifts to the right:

equilibrium price decreases

equilibrium quantity increases

This is widely applied in agriculture, energy, and socially important sectors. From the Supply and Demand Model perspective, subsidies act as a government "stimulus" mechanism.

Price Controls → shortages or surpluses

Governments sometimes impose price controls to protect consumers or control inflation:

a) Price Ceiling (maximum price) If the set price is below equilibrium:

demand increases

supply decreases

shortage occurs

b) Price Floor (minimum price) If the set price is above equilibrium:

supply increases

demand decreases

surplus occurs

These situations distort the natural market equilibrium and may lead to market failure.

Analysis of Modern Factors

Recent research highlights new influencing factors:

disruptions in global supply chains



inflation and macroeconomic instability

digital platforms and online markets

information asymmetry

Global Supply Chain Disruptions In a globalized economy, goods are produced through complex international supply chains. Disruptions (due to logistics issues, sanctions, pandemics) lead to:

slower production

reduced supply

higher prices

Inflation and Macroeconomic Instability Inflation (a general rise in prices) directly affects microeconomic markets:

production costs increase

firms raise prices

consumers' real purchasing power declines

This leads to simultaneous shifts in demand and supply, making equilibrium unstable.

Digital Platforms and Online Markets With the development of the digital economy, markets are shifting to online platforms:

easier market entry (more competition)

greater price transparency

faster adjustment of demand and supply

Real-time information accelerates equilibrium formation, but global competition also increases downward pressure on prices.

Key Findings

Based on the above analysis, the following conclusions are drawn:

Market equilibrium has a dynamic nature

Demand and supply factors act simultaneously

Government intervention can have both positive and negative effects

Technological progress changes equilibrium and reduces prices in the long run

Market failures can disrupt equilibrium due to information asymmetry and externalities

The influence of global and digital factors is increasing, making equilibrium dependent not only on national but also international conditions

Conclusion and Recommendations

The conducted scientific analysis shows that market equilibrium is a complex economic process formed on the basis of the Supply and Demand Model and is constantly changing. According to modern economic approaches, market equilibrium is not static but dynamic in nature, shifting under the influence of various internal and external factors.

First, demand and supply factors are the main drivers of market equilibrium. While consumer income, preferences, and changes in market conditions shape demand, production costs, technology, and resource availability determine supply.

Second, modern studies indicate that an ideal equilibrium is not always achieved in the market. This situation is explained by the concept of market failure. Information asymmetry, externalities, and monopoly conditions limit market efficiency. Third, the development of the digital economy, globalization, and changes in supply chains introduce new factors influencing



market equilibrium. This highlights the need to reconsider traditional economic theories.

Recommendations

Based on the above conclusions, the following practical recommendations are proposed:

- ✚ increase market information transparency to reduce information asymmetry, it is necessary to develop open data platforms. this helps minimize market failures and brings the market closer to efficient equilibrium.
- ✚ strengthen the competitive environment it is important to limit monopoly and oligopoly structures to create healthy competition. this ensures the free movement of demand and supply.
- ✚ optimize government policy taxes and subsidies should be used rationally to avoid artificially distorting market equilibrium. government intervention should be applied only in cases of market failure.
- ✚ support technological development promoting innovation and new technologies increases supply and ensures long-term stable equilibrium.
- ✚ develop adaptive policies to global risks to reduce the impact of supply chain disruptions and external shocks, diversification and reserve mechanisms should be strengthened.
- ✚ expand scientific research and econometric analysis to better understand market processes, modern analytical tools such as big data and econometric models should be widely used.

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