

CONTEMPORARY RELATIONSHIPS BETWEEN MARKETS, PRICES AND COSTS

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Abstract: The modern market is a complex system in which various factors such as price, supply, demand and production costs meet and intertwine. Understanding the relationship between these elements is the most important for business efficiency, competitiveness and profitability of the company. The price, as the basic regulatory mechanism in the market, is a monetary expression of the value of goods or services, and its formation is directly related to production costs and market movements. The work is based on modern research and theoretical approaches from the field of economics and management. The subject of research in this paper is the analysis of modern relations between the market, prices and costs, with special emphasis on the influence of market conditions on the formation of prices and cost management in the modern business environment. The objectives of the research are focused on: Examining how prices are determined on the modern market depending on production costs; Analysis of cost accounting methods that companies use to form competitive prices; Understanding the impact of market changes and competition on price and cost adjustments; Identification of modern approaches that enable effective management of prices and costs. The research methodology is based on a combination of qualitative and quantitative approaches: Analysis of professional literature and current research in the field of economics, management and marketing; Use of primary data through case studies of successful companies that apply modern cost accounting methods; Secondary analysis of data from relevant market and financial reports; Comparative analysis of traditional and modern cost accounting systems in the context of their effectiveness and impact on price. The results of the research show that effective management of costs and their precise allocation allows companies to define competitive prices that correspond to market requirements and consumer expectations. Modern calculation systems, such as Activity-Based Costing, significantly improve the accuracy in determining costs and thus directly affect the formation of more realistic and sustainable prices for products and services. Also, in conditions of high market dynamism, flexibility in adjusting prices in relation to costs proves to be crucial for preserving profitability and market position. These studies confirm the importance of an integrated approach to the market, prices and costs as a necessary condition for successful management in the modern business environment.

Keywords: *market, costs, prices.*

Field: economy

1. INTRODUCTION

The relationships between markets, prices, and costs form the foundation of the economic system and the functioning of every economy. Supply and demand meet in the market, and prices serve as a signal that informs producers and consumers about the relative scarcity of goods and services. Production costs, on the other hand, determine the profitability limits for producers and condition their ability to survive in a competitive environment. Traditionally, price was considered a result of the interaction between costs and market factors, while in contemporary conditions, these relationships are much more complex and dynamic (Varian, 2014).

Globalization, digitalization, and rapid technological development over the past decades have significantly changed the nature of markets. Markets are no longer geographically limited but have become largely digital and global (Brynjolfsson & McAfee, 2014). Price formation accelerates and becomes more flexible thanks to algorithms and digital platforms, while cost structures transform through automation and reductions in marginal costs, especially in the field of digital goods and services (Shapiro & Varian, 1999).

2. THEORETICAL FRAMEWORK

Since the time of Adam Smith, the market has been viewed as an “invisible hand” guiding resources toward efficient allocation (Smith, 1776/1991). In classical economics, price is the result of the relationship between supply and demand, while production costs are largely determined by labor and natural resources (Ricardo, 1817/2001). Karl Marx further developed the labor-based value theory, emphasizing that labor

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is the key factor determining value and production costs (Stošić Mihajlović, 2022).

In classical theories, the relationship between prices and costs was linear and stable: costs determined the minimum price a producer had to achieve, while the market, through competition, established equilibrium. However, this approach is insufficient today to explain complex relationships in the global and digital economy.

With the development of neoclassical economics in the late 19th and early 20th centuries, the focus of analysis shifted. Instead of labor-based objective value, the concept of subjective utility was introduced. Price was no longer seen as a direct consequence of costs but as a result of consumers' subjective preferences and the balance of supply and demand (Marshall, 1890/2013).

Neoclassical theory introduces the concepts of marginal cost and marginal utility, emphasizing that equilibrium is reached when price equals marginal production costs. This concept still forms the basis of microeconomic analysis (Varian, 2014). Institutional economics, on the other hand, highlighted the importance of institutions, rules, and norms in shaping prices and costs. Transaction costs (Coase, 1937/1990) became a central factor, as markets do not function in a vacuum but within a legal and institutional framework. This is particularly relevant in the contemporary context of digital markets, where regulation, competition protection, and the "rules of the game" play a crucial role (North, 1990).

With the development of information technologies and digital platforms, the relationships between markets, prices, and costs have undergone radical changes. The digital economy introduces concepts such as network effects, platform markets, and extremely low marginal costs (Shapiro & Varian, 1999). In this context, price no longer depends solely on costs but on a company's ability to create additional value for users and manage network effects.

Globalization has further intensified competition and created markets that are both global and digital. Consumers today have access to a wide range of goods and services, placing pressure on businesses to reduce costs and optimize prices to remain competitive (Stiglitz, 2010).

The information society, based on knowledge and technology, has shifted the focus from material costs to intangible factors – brand, reputation, service quality, and customer experience. In the modern economy, price increasingly reflects perceived value rather than just production costs (Kotler & Keller, 2016).

3. MARKET IN THE MODERN ECONOMY

The market is the central coordination mechanism in the modern economy. Its main function is the allocation of resources through price signals. When the price of a good rises, it signals producers to increase production while motivating consumers to rationalize consumption. In this way, the market aligns supply and demand (Samuelson & Nordhaus, 2010).

The market determines the equilibrium price through the interaction of supply and demand. Modern markets are characterized by global competition, digital platforms, and network effects. However, in a globalized environment, markets gain a new dimension. Trade liberalization, the growth of international investments, and the integration of financial markets have made national markets part of a broader global system (Krugman, Obstfeld, & Melitz, 2018). This increases competition but also economic dependence on global flows.

Modern markets also play a significant role in fostering innovation. Global competition forces businesses to invest in research and development to reduce costs and differentiate products (Porter, 2008). At the same time, markets become more volatile due to factors such as geopolitical tensions, climate change, and digital disruption.

One of the most important market transformations in the 21st century is the emergence of digital markets and platform business models. Digital platforms such as Amazon, Alibaba, eBay, act as intermediaries connecting buyers and sellers in a digital environment. They significantly reduce transaction costs, increase price transparency, and expand market reach to a global level (Parker, Van Alstyne, & Choudary, 2016).

Unlike traditional markets, digital markets are characterized by network effects. The value of a platform increases with the number of users – the more buyers and sellers are involved, the more attractive the platform becomes to new participants (Rochet & Tirole, 2003). This leads to a "winner-takes-all" phenomenon, where a small number of platforms dominate the global market.

Moreover, digital markets enable personalized pricing, as platforms collect vast amounts of consumer data. Based on analytics and algorithms, companies can adjust offers and prices for individual users (Chen, Mislove, & Wilson, 2016). This benefits consumers through lower prices and better offers but also raises challenges in terms of privacy and fairness. While classical economic theory assumes

perfect competition, modern markets are far from this ideal. Many industries are dominated by oligopolies and monopolies, particularly in the digital sector, where giants such as Google, Apple, Facebook, and Amazon (GAFA) dominate (Zuboff, 2020). This market structure has mixed consequences. On one hand, large companies possess resources for research, development, and innovation. On the other hand, their market power can limit competition, slow innovation, and result in pricing that does not reflect actual costs (Stiglitz, 2010). In this context, market regulation becomes a key factor. Antitrust policies and competition protection laws aim to prevent abuse of market power and ensure fair conditions for all participants. For example, the European Union has introduced measures against digital giants, including fines for abuse of dominant positions and new regulations for digital platforms (European Commission, 2020). Market regulation today faces additional challenges. Traditional measures may be effective in the “physical” economy, but digital markets require new forms of regulation that consider algorithmic pricing, data collection, and the global nature of platforms.

4. PRICES IN CONTEMPORARY BUSINESS CONDITIONS

Traditionally, prices have been formed through two main approaches: the cost-based approach and the market-based approach. Cost-based approach assumes that the price must cover total production costs and ensure a certain level of profit. This model is particularly applied in industrial products and sectors where costs can be calculated precisely (Kotler & Keller, 2016). Market-based approach is based on supply and demand. The price is formed as a result of interaction between consumers and producers, where competition plays a key role in setting boundaries. In perfect competition, the price approaches the level of marginal production costs (Varian, 2014).

These two approaches still form the foundation of economic theory and practice, but modern business conditions require their adaptation. In highly competitive markets with homogeneous products, the cost model is still significant, whereas in innovation-driven, branded, and digital services industries, flexible pricing models increasingly play a role.

With the development of information technologies and digital platforms, dynamic pricing has emerged. This model involves adjusting prices in real time according to changes in supply, demand, and individual consumer characteristics (Elmaghraby & Keskinocak, 2003). Well-known examples include: 1) The airline and hotel industries, where ticket and room prices change depending on occupancy and booking time; 2) Ride-sharing platforms (Uber, Bolt), where algorithms adjust ride prices based on real-time demand and driver availability; 3) E-commerce, where companies like Amazon use sophisticated algorithms to adjust competitor prices and customer behavior. The most successful firms are those that have as their number one priority a total comprehension of the value perceived by their customers combined with innovative approaches to monetization.”

(Zatta, 2023). Dynamic pricing allows for revenue maximization and more efficient resource management. However, it raises ethical and fairness concerns, as consumers may pay different prices for the same products or services (Chen et al., 2016). Additionally, algorithmic pricing can lead to tacit collusion, where competing firms’ algorithms independently set similar prices, reducing competition and increasing market prices (Ezrahi & Stucke, 2017).

In contemporary business conditions, price is no longer merely a reflection of costs and market relations but also of the perceived value that a product or service provides to consumers. This approach is known as value-based pricing (Nagle, Hogan, & Zale, 2016). Brand and reputation play a key role in price formation. Companies such as Apple or Tesla successfully charge premium prices due to strong branding and perceived innovation and quality, even though their production costs do not fully explain the price difference compared to competitors (Kapferer, 2012).

Customer experience is also increasingly important. Consumers are willing to pay higher prices for products and services offering additional value through better service, personalization, and post-sale support. This is especially pronounced in the service sector, such as telecommunications, financial services, and healthcare (Lemon & Verhoef, 2016). In the digital economy, the freemium model has emerged, where basic services are free while additional features are paid. Companies such as Spotify, LinkedIn, and many software providers use this model, creating a large user base while generating revenue from consumers willing to pay for added value (Anderson, 2009).

5. COSTS AND THEIR TRANSFORMATION

In classical economics, costs are traditionally divided into fixed and variable. Fixed costs do not depend on production volume (e.g., rent, machine depreciation, administrative salaries). Variable costs change proportionally with production (materials, energy, labor in production). Digitalization has significantly changed the cost structure, reducing marginal costs.

Table 1. Compare costs in classical and digital economies.

Cost Type	Classical Economy	Digital Economy
Fixed Costs	High (equipment, buildings)	Relatively low (cloud, software)
Variable Costs	High (materials, labor)	Low (marginal tends to zero)
Distribution	Transportation costs	Digital distribution – negligible costs

Source: Authors' research

Total costs are the sum of fixed and variable costs, while average and marginal costs allow firms to analyze optimal production volume (Varian, 2014). Traditionally, companies based strategies on reducing production costs to offer competitive prices and maintain profitability, particularly in the industrial era where economies of scale played a key role in lowering average costs (Marshall, 1890/2013).

Digitalization has significantly altered cost structures in modern economies. In the digital economy, fixed costs are high, while marginal production costs are very low or nearly negligible. Examples: For software products, most costs relate to development and testing; distributing an additional copy generates almost no extra cost (Shapiro & Varian, 1999); In digital services (streaming, cloud computing, online courses), the marginal cost of serving an additional user approaches zero; Automation and AI reduce the need for human labor in routine tasks, lowering variable costs in the long term (Brynjolfsson & McAfee, 2014). This shift changes the traditional relationship between prices and costs. While in the industrial economy price largely reflected production costs, in the digital economy price is based on perceived value and competitive dynamics rather than just costs. This change pressures traditional industries while creating new business models based on subscriptions, advertising, and freemium approaches (Anderson, 2009).

Besides digitalization, globalization is another key factor transforming costs. Global competition forces companies to optimize costs through: 1) Outsourcing and offshoring – relocating production to countries with lower labor costs (Gereffi & Fernandez-Stark, 2016); 2) Lean management and just-in-time systems – reducing storage costs and increasing production efficiency; 3) Automation and robotics – replacing labor with technology.

However, globalization also carries risks, such as dependence on global supply chains, which became evident during the COVID-19 pandemic (Evenett, 2020).

6. INTERACTION BETWEEN MARKETS, PRICES, AND COSTS - DISCUSSION OF FINDINGS

In traditional economics, the relationship between markets, prices, and costs was relatively linear: costs determined minimum price, while the market adjusted it to equilibrium through supply and demand (Marshall, 1890/2013). Today, this model is no longer sufficient. In the digital economy, markets and competition often dictate prices, which then force firms to adjust costs. For example, in electronics or e-commerce, global competition lowers product prices, pushing producers to optimize processes, source cheaper materials, or invest in automation to remain profitable (Brynjolfsson & McAfee, 2014). Thus, while price once followed costs, today costs increasingly follow market-determined prices. This inversion represents a fundamental change in modern economic logic. Analysis shows that relationships between markets, prices, and costs are far more complex in modern conditions than in classical models. Theories assuming stable links between these elements no longer suffice to explain the dynamics of digital and globalized economies. Key challenges today include: 1) Regulation of digital markets to prevent abuse of dominant positions and ensure fair competition (Crémer et al., 2019); 2) Ethics of algorithmic pricing, as personalized prices may lead to consumer discrimination; 3) Balancing efficiency and sustainability, as global competition and cost pressure may threaten labor rights and environmental protection.

At the same time, changes in these relationships create new opportunities. Digitalization enables lower transaction costs, greater accessibility of goods and services, and more market transparency, enhancing consumer access and enabling firms to pursue global growth.

7. CONCLUSIONS

The relationships between markets, prices, and costs have undergone deep transformation in recent decades. While in the industrial economy costs were the primary factor in determining prices, today the market and competition increasingly define the framework in which firms must adjust their costs.

Modern market-price-cost relationships are a key segment of the economic system in contemporary capitalist environments. Understanding these interdependencies enables better cost management and proper price setting, essential for successful market positioning and optimal profitability.

The introduction of modern cost accounting systems and monitoring of market changes is necessary for efficient operation in current conditions. Digitalization has brought about zero marginal costs and algorithmic pricing, while globalization has intensified competition and cost pressures. These changes pose new challenges in regulation, pricing fairness, and sustainable development.

The market comprises all interactions between producers and consumers in the exchange of goods and services. In modern markets, supply and demand determine product prices. Supply shows how much of a product or service can be offered at a given price, while demand reflects consumers' willingness to buy at that price. Price is formed through dynamic interaction between these factors, where changes in one variable can significantly impact overall market outcomes. For example, a reduction in natural gas supply can lead to significant price increases, which also affects other essential goods markets. Beyond supply and demand, prices are influenced by factors such as time frames, price elasticity, resource access, and technological progress.

Production costs are key to defining the minimum price at which producers can sell. They include all expenses related to the production process, from raw materials to labor and overhead. Modern cost accounting systems, such as Activity-Based Costing (ABC), enable more precise cost determination by product or service, aligning prices with actual production costs. Unlike traditional systems that may omit specific costs or provide less precise data, modern systems offer detailed insights into cost structures, allowing competitive pricing while maintaining profitability. Modern market conditions require companies to have quick and accurate information on costs and prices to make optimal business decisions. Increased competition and market volatility demand sophisticated cost accounting methods and monitoring of market trends. Production costs directly affect product prices but are also subject to changes due to technology, raw materials, regulation, and other factors. The market shapes the conditions under which prices and costs align. Companies effectively using modern cost systems gain a competitive advantage. Market dynamism and price variability require continuous adaptation of pricing strategies and cost management.

For the future, developing new theoretical models explaining market-price-cost relationships in digital and global contexts will be crucial. Policymakers must also balance support for innovation with consumer protection to ensure sustainable and inclusive economic growth.

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