

Government Regulation of the Mobile Communications Industry in the Kyrgyz Republic

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Abstract

The article reviews the situation on the mobile communications market in the Kyrgyz Republic which is characterized by high concentration and tariff growth outpacing inflation. After a period of rapid development and high competition in the early 2000s, the market reached saturation, and the transition to bundled tariffs complicated the comparison of providers' offers. The analysis shows that, despite the presence of several players in the market, there is a tendency to coordinate actions in the pricing area which has led to an increase in the monthly average revenue per user (ARPU) and profitability of the industry significantly exceeding inflation and average profitability in the economy. The article proposes to study the mechanisms of government regulation that will ensure fair competition and prevent further uncontrolled growth of tariffs, while maintaining incentives

for investment in infrastructure development, including the deployment of a 5G network, and improving the quality of services.

Keywords: government regulation, communications industry, pricing, strategy, oligopoly, competition, mobile operators

JEL: L13, L51, L96, L98

1. Introduction

The mobile communications industry that has developed in the Kyrgyz Republic is a classic oligopoly with an ever-increasing level of concentration which at the present stage requires the introduction of government regulation and pricing oversight.

Cellular communications developed quite rapidly in the Kyrgyz Republic which first of all was caused by the low coverage of the population by landline networks (figure 1). The high level of competition in the industry in the early 2000s and the availability of cellular services due to differentiated plans offered by mobile operators with consideration of concerns of various population segments by 2010 led to 97% of the Kyrgyz Republic's entire population using the services of cellular

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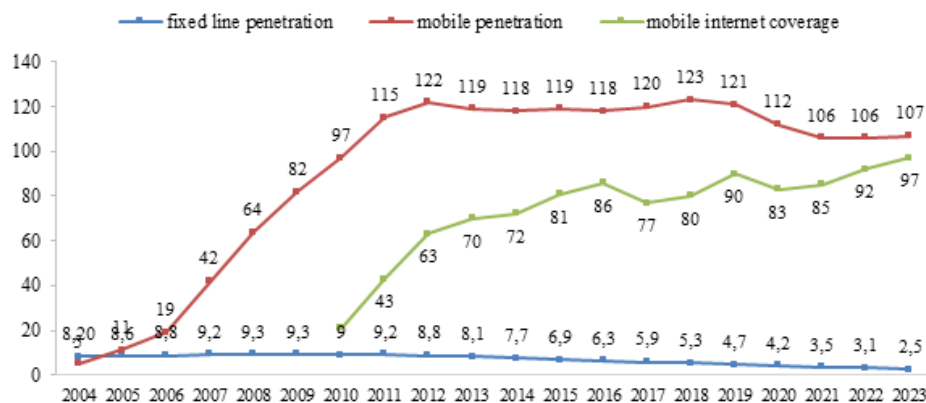


Figure 1. Fixed line and mobile penetration, and internet coverage of the Kyrgyz Republic population, %

Source: Authors' calculation

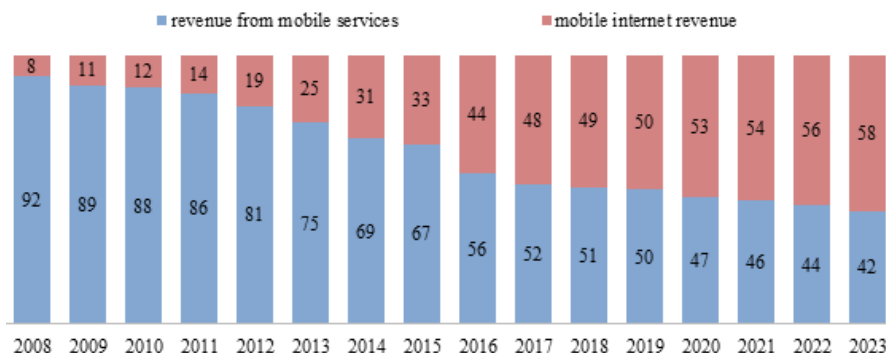


Figure 2. Revenue structure of cellular companies in the Kyrgyz Republic, %.

Source: Authors' calculation

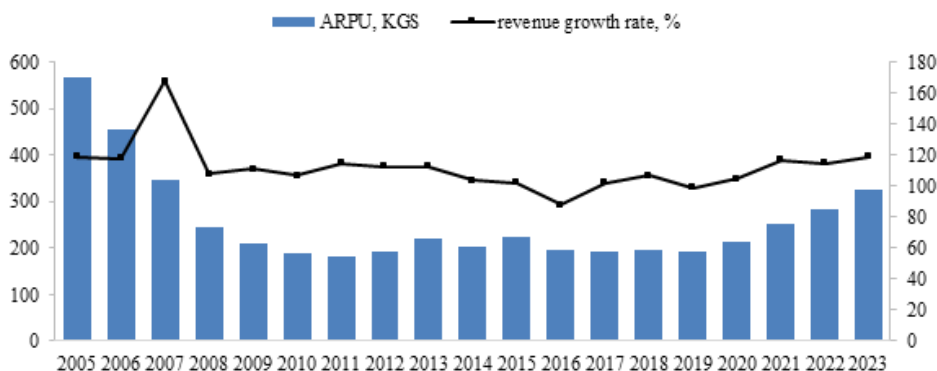


Figure 3. Cellular companies' ARPU (KGS - kyrgyz som – national currency of the Kyrgyz Republic) and revenue growth rate in the Kyrgyz Republic

Source: Authors' calculation

companies and the growth of the mobile services market reaching its ceiling (*Annual Reports 2003-2023*).

Mobile operators were forced to run various promotional campaigns to lure customers away from competitors in order to increase their market share, which led to “price” wars. The simple tariff model that existed at the time when each subscriber service had its own cost (SMS, calls inside the network, offnet calls) helped consumers control their expenses and track the tariff plans of all market players. Tariffs for cellular services decreased by an average of 5-15% per year. From 2011 to 2023, the number of customers of cellular operators exceeded the population of the Kyrgyz Republic by an average of 10-15% (Gordiuskina, 2024).

The rise of mobile internet and the emergence of WhatsApp in 2008 led to the revenue structure of mobile operators changing due to the stagnation of voice communications (figure 2).

Internet has taken over all communication methods and thus brought about significant changes in the pricing system. The emergence of bundle plans which included mobile data, voice communication, SMS and various bonuses in one package made it difficult for consumers to evaluate and compare price offers among competing mobile companies. The growing intensity of competition on the cellular communications market forcing market players to retain not only existing subscribers but also existing marginal income pushed mobile operators to coordinate their actions in the pricing area. The companies' rates began to grow, quite often almost synchronously. Thus, cellular companies' monthly average revenue per user (ARPU) increased by 52% in years 2020 to 2023 (figure 3), while accumulated inflation

for the same period was 28.5%. (calculated by the authors based on data on the consumer price index published by the Kyrgyz Republic Statistics Committee) (Consumer Price Index, 2025).

2. Overview of the current state

In recent years, the communications industry has also been witnessing an excess of companies' profitability of spending over the average cost profitability among companies in the Kyrgyz Republic (figure 4). Thus, the profitability of spending of telecom companies increased by 80% over for 2020-2023 outpacing the average annual level for companies in the Kyrgyz Republic economy by 12-13% (National Statistics Committee of the Kyrgyz Republic, n.d.).

As of 2024, the following 3 providers offering the full range of services operated on the country's market of mobile electronic communication:

1. Alpha Telecom CJSC (MEGA™), a 100% state-owned company;
2. NUR Telecom LLC (OI™), a private company; and
3. Sky Mobile LLC (Beeline™), a private company. (Rachkovskaya & Gordiuskina, 2024)

NUR Telecom LLC has maintained its leadership in the industry in recent years due to its technical superiority and a well-chosen strategic position (this can be judged by the growth of the company's market share from 51% in 2021 to 66% in 2023) (The share of each operator in the market can be determined by the amount of taxes paid) (Tazabek, 2024). The other two providers are trying to maintain their competitive positions by leading in local markets or lobbying their interests with the government (Mega operator's market share was 22%, Beeline –

12%). The government support (for example, by delaying the introduction of 5G technology due to the financial unpreparedness of two market players lagging behind in terms of the number of subscribers) reduces the intensity of competition and involuntarily leads to an increase in the monopolization of the mobile communications market and the market power of companies operating on it (the Hirschman-Herfindahl concentration index (HHI) has increased from 3793 to 4984 over the past three years). At the same time, the government support is hindering the technical improvement of the mobile telecom industry (Kaktus.media, 2024). According to experts, the introduction of 5G technology, although requiring significant investment, leads to reduced operating expenses for cellular companies, decreased load on 3G and 4G networks, and overall service quality improvement.

3. Results

The mobile provider market is very attractive for investment being a potential for the growth of the digital economy. The need for investment forces companies in an

oligopoly to raise prices for their services taking advantage of the “conscious imitation” strategy with enterprises copying the dominant leader’s pricing policy without entering into a cartel agreement. The rate growth in the Kyrgyz Republic occurs against the background of a decrease in the service quality which is negatively perceived by consumers. According to Ookla, Kyrgyzstan worsened its position in terms of internet speed and held the 107th position in 2024 (100th position in 2023). While neighboring Kazakhstan and Uzbekistan that have implemented 5G technologies took 72nd and 95th positions, respectively, among 160 countries (Kaktus.media, 2025).

Mobile phone customers currently have no influence on the choice of the tariff composition and structure, and mobile operators impose unclaimed products on them in order to raise prices. Cellular companies constantly refer to low rates in the Kyrgyz Republic and the lack of funds for new investments. According to the British website Cable.co.uk, Kyrgyzstan held the 5th position with the cheapest mobile data among 233 countries in 2023. People in Kyrgyzstan pay USD0.17 per GB of data which is 1.8 times lower than in Uzbekistan,

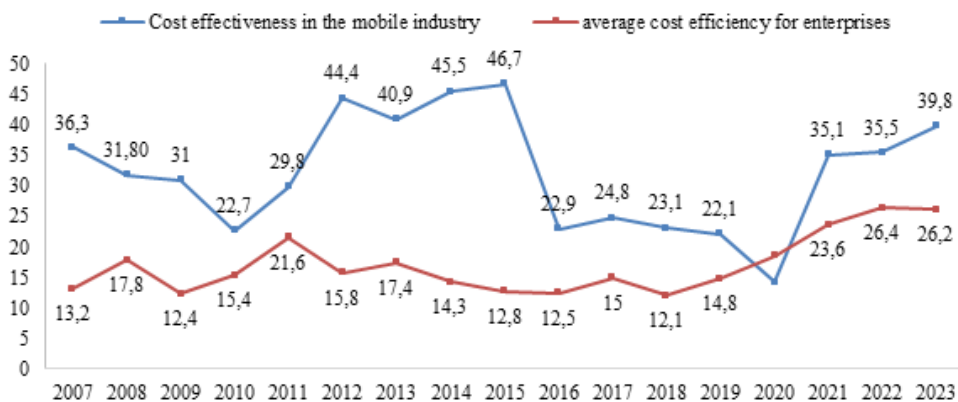


Figure 4. Profitability of spending (% ratio of sales profit against production cost) of telecom companies and that average for companies in the Kyrgyz Republic economy.

Source: Authors' calculation

2.4 times lower than in Kazakhstan, 9.4 times lower than in Tajikistan, and 67 times lower than in Turkmenistan (Kaktus.media, 2023).

However, if you look at the cost of the mobile data basket relative to gross national income (GNI) per capita the picture is quite different (figure 5).

The cost of the mobile telecom service basket relative to GNI per capita in the Kyrgyz Republic is the highest among the member countries of the Commonwealth of Independent States (CIS) and amounted to 2.7% of GNI per capita in 2024 (The IN Agency for Digital Technologies, 2025). The relationship between the cost of the mobile services basket and mobile Internet traffic per capita is clearly visible. In the Kyrgyz Republic, this indicator is one of the lowest (following Azerbaijan), 58.8 GB per person, which is 49% less than in neighboring Kazakhstan (Central Asian Bureau for Analytical Reporting, 2021).

4. Discussion

The government needs to move from lobbying for the interests of certain companies in order to maintain their financial stability to effectively regulating the pricing process for

mobile operators' products. At the same time, it is necessary to harmonize the interests of:

- the population having low income and relatively high value of the cellular service basket against their income (particularly tangible for low-income populations in the Kyrgyz Republic);
- cellular service providers, as their rates determine how capable they are of investing in new technologies; and
- the government for which the development of state-of-the-art technologies means an increase in the country's competitiveness, and raising the capacity for improving the quality of goods and services in many sectors.

The following model of maximum tariff growth can be proposed:

$$\text{Maximum tariff growth, \%} = \frac{\Delta I + \Delta \pi}{\Delta R},$$

where

ΔI is the growth of investment in the industry, %

$\Delta \pi$ is the consumer inflation growth, %

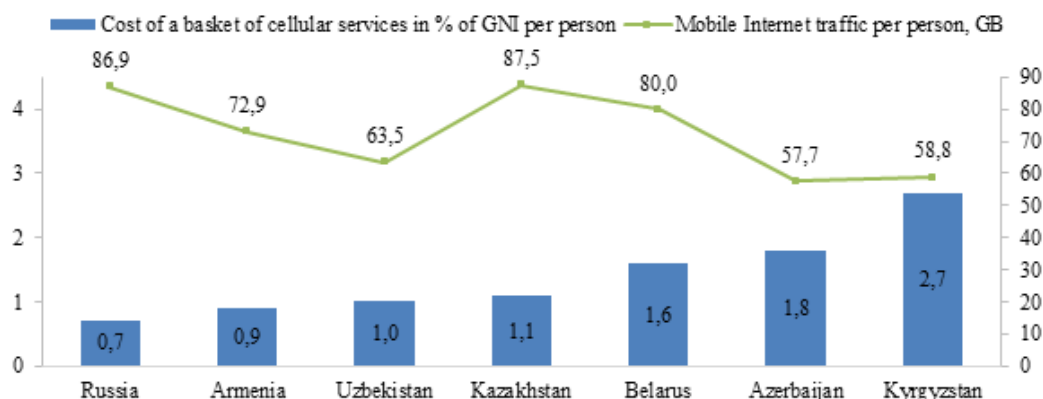


Figure 5. Cost of the cellular service basket in % of GNI per capita, and mobile data traffic per person (GB) in 2024

Source: Authors' calculation

ΔR is – excess of profitability in the industry over the average company profitability in the economy, %

This maximum growth model can:

- promote improvement of companies' performance;
- make the pricing policy transparent and clear to consumers;
- fast-track the 5G technology implementation in the industry.

5. Conclusion

The government should encourage cellular companies to introduce "social" plans that can meet the needs of low-income groups, despite the fact that providers already have "social" plans. Their appearance on the market was caused by the competitive struggle among providers during the COVID-19 pandemic when they tried to take subscribers over from each other by offering niche products.

Consistent and predictable government policy on allocation of 350 MHz radio frequencies for implementing the 5G technology and creating conditions for healthy competition should compensate for interference with the pricing process.

The analysis conducted showed the necessity and expediency of introducing elements of government regulation of tariffs in the mobile operator sector which is increasingly demonstrating a model of cooperative behavior.

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