

Czech University of Life Sciences Prague

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Bachelor Thesis

Regional Development in the Context of the COVID-19

Crisis: A Case Study of the Kyrgyz Republic

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BACHELOR THESIS ASSIGNMENT

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Business Administration

Thesis title

Regional Development in the Context of the COVID-19 Crisis: A Case Study of the Kyrgyz Republic

Objectives of thesis

One of the key objectives of this thesis is to investigate and compare the effects of the economic slump that was brought about by COVID-19 on the development of regional areas in two different regions within the Kyrgyz Republic. To be more specific, the areas of Osh and Bishkek have been chosen for the purpose of research. These locations, which represent both rural and urban environments respectively, have been chosen. Performing a comparison analysis between these two locations is a secondary objective of the research that is being conducted.

Methodology

The objective of the thesis is to assess the effects of the pandemic crisis on regional development. The focus of the thesis is on the socio-economic aspects of local development, examining the roles played by local actors, as well as the impact of both external and internal socio-economic factors on regional and local development.

The thesis will take the form of a comparative case study, with an analysis of the Osh and Bishkek regions from various socio-economic perspectives. This analysis includes the following indicators in comparative analysis:

- GDP per capita
- Income inequality (Gini Coefficient)
- Mortality rate
- Inflation rate
- Unemployment rate
- Poverty rate
- Gender Inequality

Based on the comparison, the conclusion will be presented.

The proposed extent of the thesis

30 – 40

Keywords

Economic crisis, GPD per capita, mortality rate, pandemic.

Recommended information sources

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Declaration

I declare that I have worked on my bachelor thesis titled "Regional Development in the Context of the COVID-19 Crisis: A Case Study of the Kyrgyz Republic" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.03.2024

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Regional Development in the Context of the COVID-19 Crisis: A Case Study of the Kyrgyz Republic

Abstract

This thesis explores the intricate dynamics of regional development amidst the unprecedented challenges posed by the COVID-19 pandemic, focusing on the case study of the Kyrgyz Republic.

The research encompasses a thorough examination of economic theories, regional development concepts, and the specific impacts of the COVID-19 crisis on Central Asia, followed by a practical analysis of the Kyrgyz economy and socio-economic indicators. The theoretical framework delves into foundational economic theories, including the New Theory of Trade, Basic Product Theory, and the Neoclassical model, providing insights into the concepts underpinning regional economic development. Moreover, the study elucidates the significance of regional disparities and their implications for economic growth and development.

The practical part of the thesis offers a comprehensive overview of the Kyrgyz Republic, encompassing the general impact of COVID-19 on the country, the development of its economy, and a comparative analysis of key macroeconomic indicators across selected regions. Through a detailed examination of indicators such as GDP per capita, unemployment rate, average income, inflation rate, poverty rate, mortality rate, and agricultural production, the study provides valuable insights into the socio-economic consequences of the pandemic at the regional level. Furthermore, the research evaluates the relief measures implemented by the Kyrgyz government to alleviate the socio-economic burden of the crisis, highlighting the effectiveness of policy responses in addressing the challenges faced by businesses, households, and vulnerable populations.

Keywords: Economic crisis, GDP per capita, mortality rate, pandemic

Regionální rozvoj v kontextu krize COVID-19: Případová studie Kyrgyzské republiky

Abstrakt

Tato práce se zabývá složitou dynamikou regionálního rozvoje uprostřed bezprecedentních výzev, které představuje pandemie COVID-19, a zaměřuje se na případovou studii Kyrgyzské republiky.

Výzkum zahrnuje důkladné zkoumání ekonomických teorií, koncepcí regionálního rozvoje a konkrétních dopadů krize COVID-19 na Střední Asii, po němž následuje praktická analýza kyrgyzské ekonomiky a socioekonomických ukazatelů. Teoretický rámec se zabývá základními ekonomickými teoriemi, včetně nové teorie obchodu, teorie základního produktu a neoklasického modelu, a poskytuje vhled do koncepcí, na nichž je založen regionální hospodářský rozvoj. Studie navíc objasňuje význam regionálních rozdílů a jejich důsledky pro hospodářský růst a rozvoj.

Praktická část práce nabízí ucelený přehled o Kyrgyzské republice, zahrnující obecný dopad COVID-19 na zemi, vývoj její ekonomiky a srovnávací analýzu klíčových makroekonomických ukazatelů ve vybraných regionech. Prostřednictvím podrobného zkoumání ukazatelů, jako je HDP na obyvatele, míra nezaměstnanosti, průměrný příjem, míra inflace, míra chudoby, úmrtnost a zemědělská produkce, poskytuje studie cenné poznatky o socioekonomických důsledcích pandemie na regionální úrovni. Výzkum dále hodnotí pomocná opatření zavedená kyrgyzskou vládou s cílem zmírnit socioekonomickou zátěž krize a zdůrazňuje účinnost politických opatření při řešení problémů, kterým čelí podniky, domácnosti a zranitelné skupiny obyvatel.

Klíčová slova: Hospodářská krize, HDP na obyvatele, úmrtnost, pandemie.

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1. Introduction

This thesis takes an in-depth look at the economic growth of the area, focusing on the Kyrgyz Republic and how it dealt with the many problems that the COVID-19 pandemic caused. This section gives a detailed explanation of the study's goals and the methods it used in the beginning. It also gives a short but thorough review of relevant literature, explaining important ideas like the economic base, regional development paradigms, and how the COVID-19 problem affected Central Asia.

The practical part of this thesis carefully looks at different macroeconomic measures and compares their changes over time in different parts of the Kyrgyz Republic. In addition, it takes a deep look at the pandemic's effects on society and the economy, as well as the effectiveness and reach of the government's aid efforts in this massive and unprecedented disaster.

The next section gives a clear and in-depth explanation of the analysis's results, covering a wide range of indicators such as GDP per capita, unemployment rates, average income levels, the changing nature of inflation, the number of people living in poverty, death rates, agricultural production statistics, and the growth paths of businesses in Kyrgyzstan. It summarizes the conclusion that can be taken from these results, including the most important insights and implications that may have been extrapolated based on the analytical exercise.

2. Objectives and Methodology

2.1 Objectives

The central focus of the thesis is to evaluate the repercussions of the recent pandemic on the regional development of the Kyrgyz Republic. This study employs a case study approach, specifically examining two selected regions (Osh and Bishkek) to compare the impacts and analyze the duration required for these regions to recover from the effects of the pandemic.

2.2 Methodology

The methodology of the thesis centers on examining the socio-economic attributes of local development, emphasizing the involvement of local actors and considering both external and internal socio-economic factors related to regional and local development. The approach involves conducting a case study through comparative analysis of socio-economic indicators, including but not limited to GDP per capita, inflation rate, unemployment rate, number of enterprises, mortality rate, and others. Graphs and tables are employed to visually present the comparative analysis of each region.

3. Literature Review

Since the core aim is to assess the regional development of the Kyrgyz Republic, it is essential to cover theories of regional development.

3.1 The Concept of Economic Base

Among all of the ideas, the idea of economic basis is the one that is most widely accepted. According to Isard (1965), this theory provides an explanation for the development of an area by separating the economy into two distinct categories of activities, namely endogenous and exogenous activities, and by identifying the connections between them that are involved in the process of a territory's development. Since the requirement for products and services is what drives the economic growth of the area and forms its function and unique features in terms of social and geographic division of labor, the concept asserts that the exogenous (export) operations are essential and make up the economic foundation of the region. This is because the customer demand for products and services is what promotes the region's economic growth (Ezcurra & Rapún, 2006; Tsiapa, 2015).

There is a process for reproduction that is initiated by economic sectors and corporations that are engaging in export operations. This mechanism involves collaborating companies and related sectors that are performing activities in the domestic market. The exogenous sector, which is tightly tied to the fundamental (exogenous) sector, is responsible for stimulating other internal aspects of the regional economy, which are referred to as the endogenous sector. Therefore, according to Nekrasov (1978), the suggestions for local government that are based on this theory offer operations that attract investors who are competitive in both national and global markets and who work in the economy or service sectors which promote technological modernization. The need of providing assistance to the export operations of regional manufacturers is emphasized by Romer (1986). Considering that there are academics who believe that regionalized specialization needs to be developed and that branches that are representative of a certain area ought to be encouraged, this subsequently becomes a contentious issue. This choice, on the other hand, poses a risk for traditional areas that are dominated by the heavily deteriorating heavy industry. According to Nguyen (2020), several professionals believe that growing new sectors of the economy and diversifying the exogenous basis are both required.

The straightforwardness of the premises that underpin the theory of the economy has contributed to the concept's widespread acceptance; yet, it also serves as the source of opposition that calls into question the feasibility of describing the growth of an area by means of a model that contains just a limited number of factors (Ezcurra & Rapún, 2006; Tsiapa, 2015). In addition, it is important to emphasize that the notion does not constitute a unified theoretical framework since it has been concurrently created in a number of nations. As a result, according to Isard (1965), it is more of a combination of different concepts whose relationships are hard to describe.

3.1.1 The New Theory of Trade

The new theory of trade places a higher value on the role that export operations play in the growth of regions and provides an explanation for the processes that underlie the advantages that the world's economy derives from business transactions across nations that are at various stages of growth. When it comes to the amount of time and money that is used by manufacturing in different places, answers are being sought via the specialization of production. Therefore, countries that are abundant in money export things that need a lot of money, while places that are abundant in labor force export products that require a lot of time.

According to Maza and Villaverde (2011), the possibility for bilateral trade among such locations is seen to be more favorable for those areas that consume the most capital. As a consequence, local governments in less developed areas must to provide assistance not only for exporting and open trade internationally, but also for their investments in infrastructure and institutions, particularly financial institutions, as well as for specialized educational opportunities (Ohlan, 2013).

3.1.2 The Basic Product Theory

The notion of economic basis is referred to in the basic product theory, meaning a theory that describes the elements that contribute to economic growth over the long run. The idea proposes that regional growth may be accomplished by gradually specializing some items in order to make them stronger competitors on international markets. In order to attain the gains that result from product specialization, it is necessary to improve the organization for manufacturing and reduce the cost associated with financial transactions (Magrini, 1999).

The duties that this theory envisions for all administrative authorities include bolstering the trend of specialization, investing in infrastructure (such as transportation and telecommunications), giving assistance to financial and advising organizations, and offering services to educational and commercial institutions (Cooke, 1994). The orders and recommendations that are developed on the assumption of geographical geographic growth (at different scales: global, national, regional, and local) have a significant impact on the economic, political, and social actions that are taken by regional authorities (Kallioras, 2015). These orders and suggestions point to the economic benefits that result from the spatial concentration of economic activities.

3.1.3 Neoclassic model

Following World War II, practically every aspect of economic programs had been established on neoclassical economic theory, that has supplied the basis upon which these strategies have been based. Traditional concepts and approaches for regional development possess a tendency to concentrate, in one way or a different one, on the capital-labor manufacturing process and on replies by the government through a variety of economic and non-monetary programs. This pattern of concentration has been observed in a number of different ways. Capital (K) and labor (L) are the two inputs that are responsible for producing production (Q) in this framework:

$$Q = f(K, L)$$

In order to determine the level of productivity of a region's economy in terms of both labor and capital production, this straightforward two-factor model may be utilized. It is possible to extend the model such that it incorporates other functions or components, such as technology (T) or other variables, such as learning, to have the following equivalents:

$$Q = f(K, L, T\dots)$$

The neoclassical approach, as described by Richardson (1973), provides a framework for understanding how modifications to capital and labor affect the economic performance of countries and regions. Nevertheless, it fails to sufficiently elucidate the impact of productivity, performance, and various other crucial factors associated with labor, capital, and technology use on growth in the economy, particularly in regional economies, as highlighted by Malecki (1991: 111). Therefore, it may be deduced which neoclassical

hypotheses do not possess the capacity to accurately identify or explain the components that influence business creation procedures or the expansion of regional economies.

3.2 Regional Development

3.2.1 Definition of region

There is no universally agreed-upon description of the area in the scientific literature. Nevertheless, the majority of authors concur that the region encompasses a distinct geographical proximity, shared neighborhood, and interconnectedness, and that there exists a certain level of cultural uniformity, characterized by the interplay between particular communities, as well as a shared space or feeling of society. The area functions as both a subsystem of the country's socio-economic complex and an autonomous entity with a self-contained cycle of reproduction. It exhibits distinct forms of reproduction phases and possesses unique characteristics in social and economic activities.

Regional development includes planned and synchronized initiatives aimed at fostering economic expansion, societal advancement, and infrastructure enhancement within designated geographical areas or regions (Rodríguez-Pose, 2004). This notion acknowledges that various regions throughout a nation or between countries may exhibit disparate degrees of growth as a result of variables such as topography, resources, historical legacies, and choices in policy.

Blakely (1994: 13) defines regional economic development as:

“a process in which local governments or community-based organizations are engaged to stimulate or maintain business activity and/or employment. The principal goal of local economic development is to stimulate employment opportunities in sectors that improve the community, using existing human, natural and institutional resources “

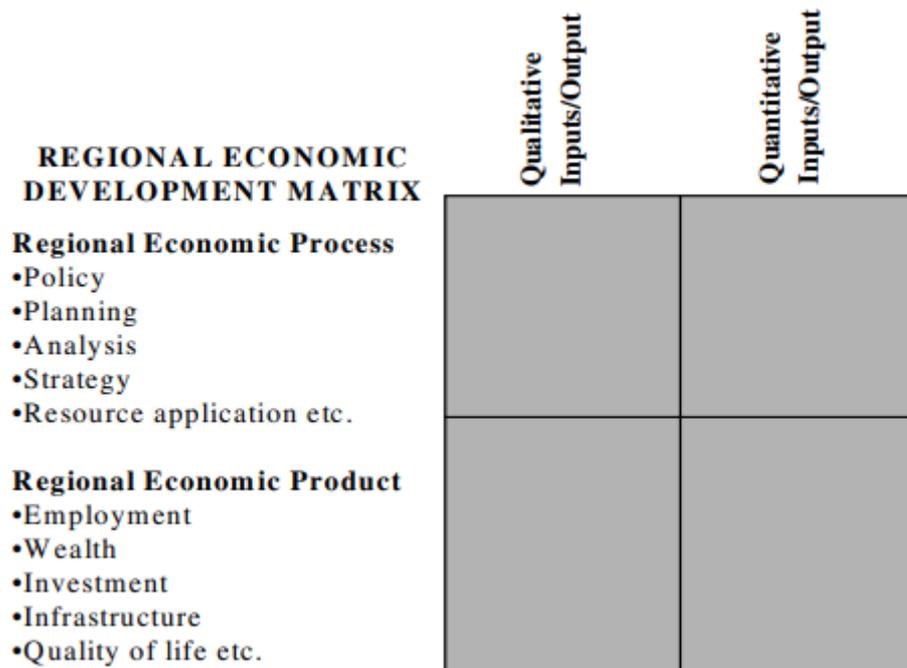
This explanation integrates an additional aspect into the concept of economic development, expanding its scope beyond only labor, capital, pricing, and productivity. It focuses on the activation of social resources (Coleman, 1988). Economists have typically overlooked the role of social and cultural values in shaping economic progress. Nevertheless, the new theory of growth aligns with this novel approach. In this perspective, economic progress pertains to improvements in the standard of living resulting from changes, rather

than only from population growth or changes in the local employment market and production of goods and services.

Malecki's (1991) definition of regional economic development seeks to encapsulate these concepts See Picture – 1. He defines it as:

„ ...a combination of qualitative and quantitative features of a region's economy, which the qualitative or structural [are] the most meaningful...The qualitative attributes include the types of jobs—not only their number—and long-term and structural characteristics, such as the ability to bring about new economic activity and the capacity to maximize the benefits which remains within the region “. - Malecki's (1991: 7)

Picture 1: Regional economic development as a matrix of qualitative, quantitative, process



Source: Adopted from Malecki's (1991)

The objectives of regional growth often involve decreasing disparities in revenue, employment, and quality of life across different areas, improving the competitive edge of underdeveloped regions, and promoting sustainable growth that considers ecological, interpersonal, and economical factors (Krugman, 1991).

Regional development strategies typically encompass a blend of regulations, expenditures, and programs that prioritize the growth of facilities, education and skills training, inventiveness and entrepreneurial activity, manufacturing growth, employment

creation, and the delivery of essential services like education and healthcare. These programs aim to promote economic expansion, entice investments, provide employment prospects, and enhance the general well-being of citizens in certain areas.

Sustainable regional growth involves the cooperation and synchronization of several participants, such as:

- governmental organizations
- municipalities
- business sector companies
- community groups
- foreign direct investments.

It furthermore entails thorough planning, supervision, and assessment to guarantee that initiatives are customized to the distinct requirements and objectives of every area and that they support the ultimate objectives of sustainable growth.

3.2.2 Types of Regions

The primary connections in the geographical arrangement of manufacturing and the cohesive advancement of the nation's areas are the nation's urban and rural communities, that may exist in a permanent or temporary state. The population is categorized into urban and rural areas based on variables such as population size, occupation in industry or agriculture sector, and lifestyle. Urban regions have a greater density of individuals. Settlements in cities can be identified according to two main characteristics:

1. the population residing in the given region
2. the employment level of such people.

According to Crisp (2012), the frameworks that regulate towns and cities are dynamic, meaning that their current conditions may vary and develop throughout the course of period. The construction of peculiar structure is brought about as a consequence of the fact that its fundamental components are effectively linked to each other. Fundamental exclusive manufacturing structures serve as the foundation upon which the structure of city communities is built. The structure of these combinations additionally influences the main

fundamental features of such infrastructure, which include the amount of goods produced, the level of specialization, the level of concentration in manufacturing, the creation of market and social facilities, and other similar aspects. The systems that govern cities are diverse.

3.2.2.1 Macro Region

Generally speaking, the macro region is more massive. Any state or even a group of states can be considered a macro area if the individual states that make up a nation are not large enough. There is the possibility that a macro-major area is a zone inside a nation that is made up of a few states. To provide an example, in India there are zones that are classified as East, West, North, South, and Central. Additionally, there are "Zonal Councils" that serve the purpose of facilitating cooperation, promoting collaboration, and providing bilateral guidance.

Macro districts can be seen as the second level in the structure, following the national level. For project planning reasons, it is conceivable for a physical macro area to include sections of various states within a country. For instance, the macro area will encompass many states, including large watershed projects, an electric system spanning multiple states, and specific activity planning facilities. The concept of state lines is not strictly adhered to, as the macro area may extend beyond or intersect with the administrative limits of individual states within a country. A large area may exhibit heterogeneity and lacking uniformity in several aspects. It can exhibit homogeneity in one aspect, such as physical complementarity, while displaying heterogeneity in another aspect, such as administrative borders. A macro area should possess a shared resource basis and expertise in utilizing that resource base, allowing for the development of economic activities based on the concept of comparative advantage through a geographic division of labor.

3.2.2.2 Micro Region

In the context of complex planning, a district is seen as the smallest administrative unit within a larger area. It is the smallest administrative division in the hierarchy of planning regions. The main explanation for that the region is a particularly suitable micro area for development is due to the presence of a comprehensive database and efficient management. This region is suitable for formulating plans and implementing and monitoring them through administration.

A metropolitan area can consist of a single micro region, yet its area of impact can encompass other micro territory. A nodal point, although also referred to as a micro region, typically consists of countryside areas that might include several small nodes lacking any overarching organizational structure impacting the whole area. The fundamental attribute of a micro area is its small size. Specific micro territories can include areas dedicated to resource exploitation, reclaimed land, or smaller command areas within an irrigation project.

3.2.2.3 Developed Region

Regions that have seen development demonstrate a significant increase in the output of commodities and services, resulting in a much greater contribution to the country's Gross Domestic Product (GDP). The talented and dedicated individuals who adeptly utilize modern technology are probably the key driver of success, while the availability of large natural resources may also play a role. The existence of sufficient infrastructure further expedites advancement, allowing these places to surpass underdeveloped ones at a faster pace. In certain aspects, a developed region could get excessively developed, experiencing issues such as congestion-related inefficiencies and an overemphasis on Perroux's concept of a development pole. Infrastructure expenses might become exorbitant, and individuals may experience anxiety and distress as a result of pollution and different forms of stress.

3.2.2.4 Manufacturing Regions

Certain places emerge as major industrial hubs not due to their natural resources, but rather as a result of factors such as development of infrastructure, initial drive, and ongoing government assistance, independent, supplemental, complementary, induced, and speculative investments continue to bolster the manufacturing regions. It is advisable to avoid developing a limited industrial base, since this might lead to problems if the crop providing the raw elements collapses or if the minerals that serve as the foundation for the industries become exhausted. In these places, there is an increasing abundance of both internal and foreign economies, leading to continuous development. Once all the thresholds are surpassed, these areas become excessively overcrowded, leading to a situation where the negative effects exceed the benefits of manufacturing. This includes high population density, escalating pollution levels, and a decline in overall quality of life.

3.2.3 Regional Disparity and Economic Development

The correlation between disparities in regions and national-level prosperity is likewise unclear. There is considerable divergence of view on the extent to which geographic disparities are connected with financial progress, and if they are connected, the specific nature of this connection. Certain scholars have established that this association is unfavorable meaning that big gaps have an adverse effect on economic progress. There are differing opinions on the impact of substantial economic growth on regional disparities. Some suggest that it decreases these gaps, while others contend that it actually worsens them. According to the research, growth is a process that accumulates across space and significantly amplifies regional disparities (Krugman, 1991; Romer, 1986). In contrast, Solow (1956) contended that economic expansion had the effect of diminishing regional differences.

Gurgul and Lach (2011) projected an unequal allocation of wealth among the provinces in the region in nations experiencing transformation. It was anticipated that regions with more advanced facilities and more qualified workers would emerge as leaders in this race, hence worsening the regional disparities within a particular country.

Previous research has predominantly employed two methods to examine the connection between disparities in regions and GDP expansion: sigma and beta integration, as well as Granger causality. Currently, there is a substantial divergence in the research approach employed to study this matter. Nguyen and Tran (2019) examined the cause-and-effect relationship and the changing connection between income inequality and economic development, specifically in middle-income nations, from 1960 to 2014. The present research utilizes the Granger causality test. Moreover, the study employs panel research. The writers of this research have empirically confirmed that income disparity has a detrimental effect on economic development across regions. This means that as disparity in income increases, economic growth decreases. Furthermore, these results are applicable to both fixed effects panel model and dynamic panel model circumstances, and they apply to two different samples—the complete group and the sample consisting solely of middle-income nations.

A study conducted by Ezcurra and Rapún (2006) examined the correlation between regional inequality and the degree of economic growth in 14 nations in Central Asia from 1980 to 2002. The study employed a semi-parametric technique to identify the occurrence of regional dispersion when a specific threshold of growth had been attained. Estimates indicate that the rise in geographic disparities is solely temporary. Therefore, once a certain level of per capita GDP is reached, regional inequality tends to diminish, resulting in a stabilization of territorial disparities throughout the latter phases of development. Furthermore, it is important to note that these findings remain strong and unaffected even when additional factors are taken into account in the research and when other measures are utilized to assess regional discrepancies.

3.3 Definition of Crisis

Crises can manifest themselves in a variety of ways, such as natural disasters, economic downturns, public health emergencies, social unrest, political instability, or technical failures (Berkmen, 2009). There are a number of characteristics that are often associated with a crisis, including the element of surprise, a sense of urgency, uncertainty, and the possibility of adverse effects if the crisis is not correctly managed (ibid: 31). In times of crisis, swift and decisive action is frequently required in order to reduce risks, restore stability, and minimize the amount of damage caused to affected entities. Strategic planning, efficient communication, resource mobilization, and the ability to respond to rapidly changing conditions are all essential components of successful crisis management (ibid: 35).

A serious interruption or downturn in the economy that leads to considerable negative effects for individuals, firms, and society as a whole is what is meant by the term "crisis" when it is used in the context of economics. When it comes to the economy, crises can manifest themselves in a variety of ways, including recessions, depressions, financial crises, and currency crises. In the context of the thesis, there is a need to address the covid – 19 crisis.

The COVID-19 crisis has left no corner of the world untouched by its economic repercussions. In each of the 179 countries surveyed, GDP growth in 2020 fell significantly below pre-pandemic expectations (Glocker & Piribauer, 2021). This global economic downturn underscores the far-reaching impact of the pandemic, affecting industries ranging from tourism and hospitality to manufacturing and retail.

Furthermore, the COVID-19 crisis has exposed and exacerbated existing socio-economic disparities within and between nations (United Nations, 2021). Vulnerable populations, including low-income workers, minorities, and marginalized communities, have borne the brunt of the economic fallout, experiencing job losses, income inequality, and limited access to essential services (Glocker & Piribauer, 2021).

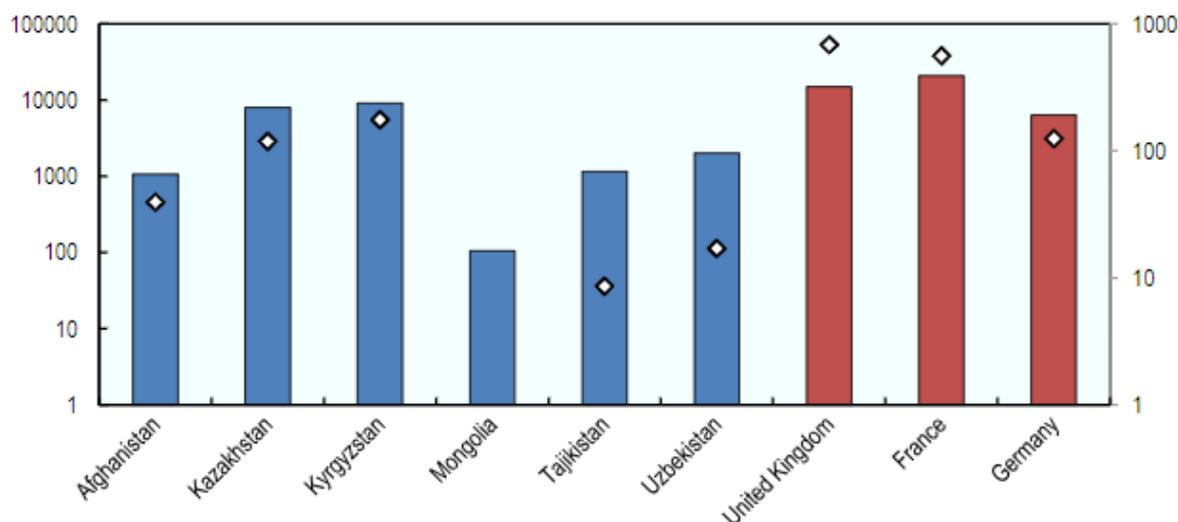
As countries continue to grapple with the challenges posed by the COVID-19 pandemic, effective crisis management strategies and international cooperation are imperative to navigate the path to recovery (World Bank, 2021: 31). The unprecedented nature of this crisis underscores the need for innovative approaches, resilient policies, and collaborative efforts to rebuild economies, strengthen social safety nets, and ensure a more inclusive and sustainable future for all (Glocker & Piribauer, 2021).

3.5 Covid – 19 Impact on Central Asia

The economy of Central Asia still being impacted by the ongoing COVID-19 outbreak. Regional expansion came to an abrupt end at the beginning of 2020. Trade continues to be heavily hindered by challenges related to both supply and demand. Consumption and investment have sharply declined, so there is a potential for disparities to deepen across the area. Women, migrants, irregular workers, and rural residents are all expected to be greatly impacted. Since fall 2020, the economic downturn had a more negative effect on the economics of the area compared to its effect on healthcare. Central Asia has managed to escape the high rates of illness and death observed in several OECD nations. According to government statistics, the number of infections and deaths in the region is rather modest. Apart from a few severe outbreaks in June and July, rigorous security precautions have effectively stopped the virus from spreading as extensively as in many OECD nations or neighboring regions. During the five-week period leading through the end of October, Kyrgyzstan was the only country that reported a notable increase in outbreaks. This resulted in a concerning growing pattern in the number of daily new cases in the entire nation. Regarding the number of fatalities per million people, only Kyrgyzstan ranks among the 50 nations most severely affected worldwide, occupying the 42nd position, followed by Kazakhstan in 61st place, Afghanistan in 86th place, and Uzbekistan in 109th place, according to the ECDC (2020).

The healthcare systems in Central Asian countries have been chronically underfunded and hampered by corruption. They lack adequate resources and are faced with major regional inequalities in terms of quality and accessibility. Moreover, households in Central Asia bear a substantial portion of medical expenses, which is among the highest globally. If the overall medical situation worsens, it might result in a long – run managerial and family burdens, especially considering the increasing levels of deprivation in the region (World Bank, 2021).

Figure 1: Total COVID-19 cases and deaths in Central Asia and selected OECD countries



Source: IMG (2021)

3.5.1 Economic Impact

Based on official statistics from the World Bank (2020) and the International Monetary Fund (2020), the latest projections suggest that the economies in the region are expected to contract by an average of 1.7% this year. However, there are notable variations across Central Asia, with Kyrgyzstan experiencing a decline of 12.6% while Turkmenistan sees a modest increase of 1.8%.

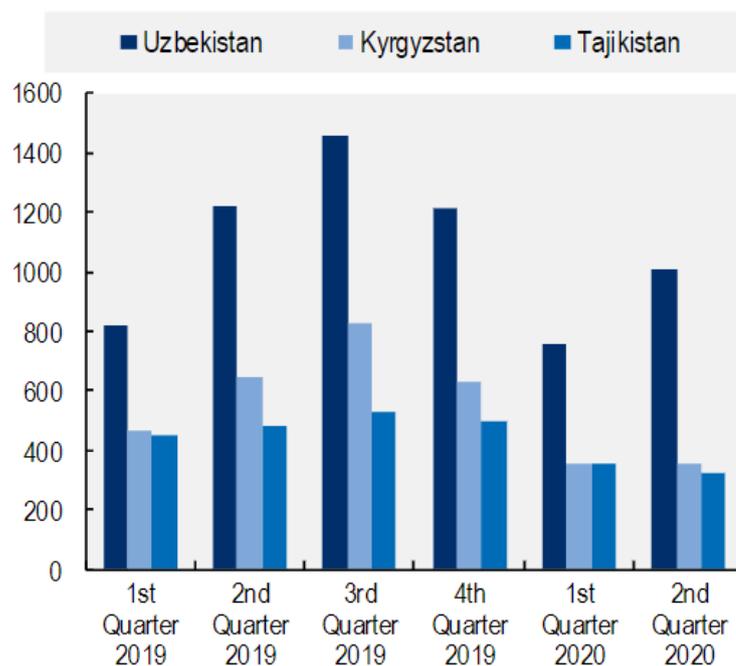
Given the trade dependence of the Central Asian economies, their immediate prospects were largely shaped by global trends. At that time, the OECD had expected global GDP to contract by 4.5% in 2020 under its baseline scenario. All G20 economies except China were projected to shrink that year, with the hardest-hit countries experiencing GDP declines of up to 10%. Globally, as many as 90 million people were estimated to have been pushed into extreme poverty in that year alone, marking a 14% increase from the previous year.

This baseline scenario had projected global growth of around 5% in the following year, bringing global GDP close to the level of end-2019 by the end of 2021. With reference to pre-crisis trends, this implied a loss of 7.5-8% of global GDP, equivalent to the economies of France and Germany. Under the downside scenario, the loss could have been as great as 13%. The protracted slowdown in trade and global demand had hit Central Asian economies,

given their reliance on tradable activities, particularly agriculture, mining, and tourism. However, China’s strength could have provided them with an important boost.

The domestic private sector was insufficiently developed and vulnerable to contribute significantly to economic growth. In fact, there was a possibility that the crisis might further hinder its progress. Given the significant contributions of trade revenues and remittances to domestic spending, job creation, and investment, the immediate future was bleak. For example, in Kyrgyzstan, where remittances had constituted about one-third of the country's GDP, the inflow of remittances experienced a sharp decline of 62% in April during the height of the first lockdown in Russia (National Bank of Kyrgyzstan, 2020). Despite a later recovery in remittances (albeit still down 7% year-to-date), the substantial and rapid decline once again highlighted the vulnerability of the country's external situation. Preliminary data from Russia has shown that Tajikistan and Uzbekistan have also seen comparable decreases, as reported by the Central Bank of Russia in 2020.

Figure 2: Migrant remittances from Russia to selected Central Asian countries, 2019-2020, million USD



Source: National Bank of Kyrgyzstan (2021).

3.5.2 Policy Responses Across Central Asia to Pandemic

The policy responses to COVID-19 throughout the area differed significantly and were mostly based on governments' evaluations of the health condition and their financial capabilities (Table 1). Kazakhstan, Mongolia, and Uzbekistan were the first nations to react

promptly to the issue. They did so by rapidly imposing stringent confinement measures, sealing their borders, and devising substantial relief packages. As the situation deepened, they introduced more sanitary and budgetary measures, which were later phased down throughout the summer. A subsequent group of nations (Afghanistan, Kyrgyzstan) promptly recognized the predicament, although with a delayed response, partially attributed to constraints in public capabilities and slower, more intricate policy procedures. The limited scale of replies was constrained by a tight budgetary space, since public finances rapidly deteriorated and there was an increased demand for foreign emergency relief. Tajikistan and Turkmenistan, who belong to the third group of nations, originally implemented restricted and targeted policy actions in response to COVID-19. Over time, these measures were gradually expanded and refined. With regards to limitations on international travel, Afghanistan is the only country that has fully reopened its borders for civilian traffic. However, travel to Turkmenistan and Mongolia remains largely restricted, and travel to Kazakhstan, Kyrgyzstan, and Tajikistan is only permitted for specific nationalities and subject to stringent quarantine regulations (IATA, 2020).

Table 1: Policy responses have widely differed across Central Asia countries

Country	Policy response	Containment measures	Health support	Income support	Financial	Taxation
KZ	Highly responsive	Yes	Yes	Yes	Yes	Yes
MG	Highly responsive	Yes	Yes	Yes	Yes	Yes
UZB	Highly responsive	Yes	Yes	Yes	Yes	Yes
KG	Constrained response	Yes	Yes	Limited	Limited	No
TAJ	Limited response	Limited	Limited	No	No	No
TURK	Limited response	Limited	No	No	No	No

Source: OECD analysis (2020)

4. Practical Part

4.1 Short Overview of Kyrgyz Republic

Kyrgyzstan is a geographically isolated nation situated in the hilly region of Eastern Central Asia. Having a population of 7.2 million, its economy is characterized by its modest size and openness, as well as its restricted availability of resources. Kyrgyzstan has a limited amount of arable land, with just 7% of the total land area suitable for cultivation, according to the World Bank (2023). The majority of the country, over 50%, is situated at elevations ranging from 1,000 to 3,000 meters, while an additional 30% is located at altitudes more than 3,000 meters above sea level (World Bank, 2023).

Picture 2: Map of Kyrgyzstan



Source: (World Bank, 2023).

The primary driver of the economy's expansion in the last ten years has consisted of the service industry, particularly trade. However, the contribution of the industrial sector has been inconsistent due to the significant presence of industries related to processing natural

resources. The increase has not been enough to support the development of a substantial and prosperous middle class with stable sources of income that are adequate to meet the family's living expenses and ensure appropriate living conditions, including education and social security. Instead, the bulk of the population continues to work in low-wage, low-efficiency occupations. The distribution of wealth in Kyrgyz culture is very equitable, as evidenced by Kyrgyzstan's ranking among the top 5 nations in the world based on the Gini index, according to World Bank statistics. However, it is important to note that living conditions in the country are relatively poor.

4.1.1 Covid – 19 and Its General Impact on Kyrgyzstan

The COVID-19 epidemic has exposed the underlying issues in the country's economic and social progress, including the prevailing socioeconomic disparities and the worsening condition of women. The Republic of Kyrgyzstan promptly addressed the COVID-19 outbreak upon the declaration of a pandemic by the World Health Organization. The initial instances of COVID-19 were recorded in Kyrgyzstan among individuals who had traveled back to the country following their vacation to Saudi Arabia for Umrah. On March 22, 2020, the authorities issued a state of emergency and imposed lockdown measures, as well as limitations on travel and commerce. Certain critical public services, like as daycare and assistance to elderly and handicapped individuals, were inaccessible to citizens. The COVID-19 pandemic has emphasized the significance of care and illuminated the interconnectedness of the care industry with economic and social disparities. The COVID-19 pandemic response has heavily relied on care labor. Therefore, the provision of care services will aid in the nation's economic resurgence and tackle its pressing social and economic challenges.

The COVID-19 pandemic had a swift and significant impact on the global economy, resulting in a 5.9% decline in GDP from January to July. This decline was the most severe in Central Asia during that period, as reported by the World Bank (2020). Despite some relaxation of limitations, economic activity remained restrained, with workplace activity experiencing a 30% decline compared to the start of the year, and retail activity facing a 20% decrease. The reduced trade deficit concealed the worsening external situation of Kyrgyzstan. Apart from a slight uptick in gold exports, overall commerce saw a substantial decline, with foreign trade plummeting by 22% in the first half of the year, accompanied by

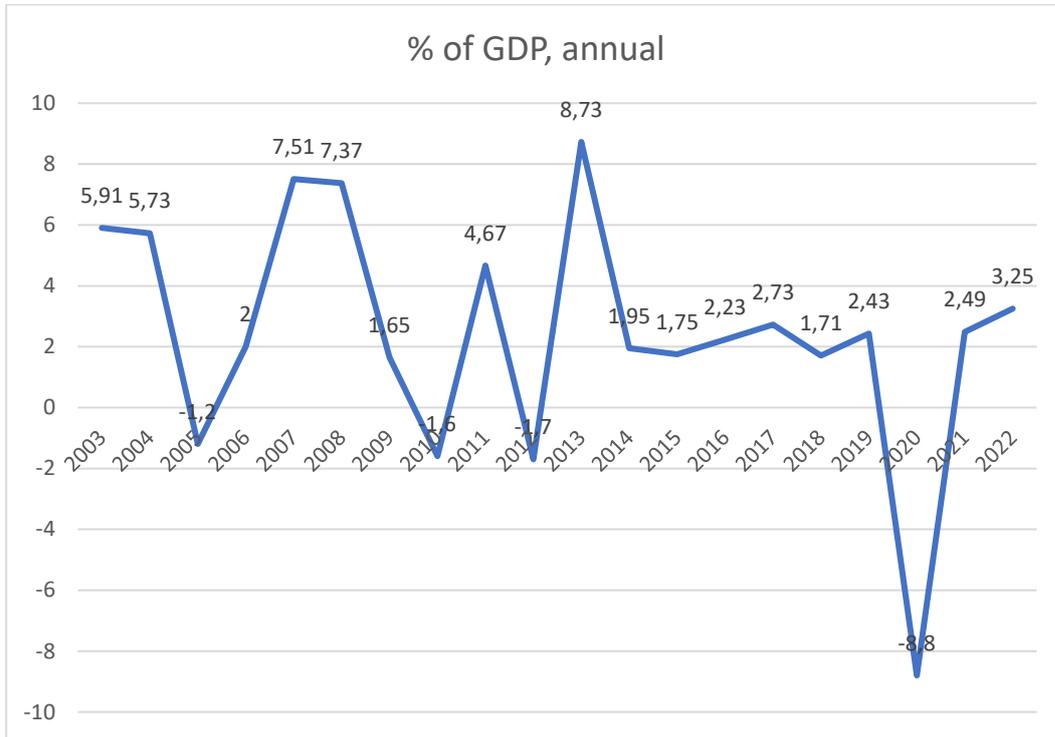
a notable 33% decrease in shipments to China. Kyrgyzstan's tourism sector suffered near-total collapse during the pandemic, witnessing a staggering 90% decline. Simultaneously, imports fell by over 50% in the initial seven months compared to the same period in 2019, amounting to just USD 825 million. Reduced trade, lower commodity prices, decreased domestic consumption, and mobility restrictions imposed to contain the virus collectively led to a significant decrease in domestic tax collection and customs income. In mid-May, the Ministry of Finance projected a 20% reduction in income for the year, attributed to increased expenditure on health and social assistance, resulting in the fiscal deficit soaring to 7.4% of GDP in the first half of 2020, up from 0.3% previously.

The decline in remittances was less severe than initially feared, but there was still a significant 13% decrease in inflows compared to the previous year 2019. This decline adversely impacted household finances and heightened the risk of poverty for many individuals. The return of migrant workers and reduced domestic economic activity contributed to a rise in unemployment, with worst-case scenarios indicating a potential increase of up to 21%.

4.1.2 Development of Economy

The data provided offers insights into the annual GDP growth or decline of the Kyrgyz Republic from 2003 to 2022, See Graph – 1. Over this period, the economy exhibited a mix of positive growth and contractions. Positive growth rates were observed in the early 2000s, with peaks in 2007. However, the global economic downturn in 2008 and 2009, along with subsequent fluctuations, reflected periods of economic instability. Notably, negative GDP growth occurred in 2005, 2010, and 2012. External shocks, such as the global financial crisis and the COVID-19 pandemic, significantly impacted GDP, as evidenced by the sharp decline of -8.8% in 2020. Recovery was observed in 2021 and 2022, indicating resilience and potential for growth. Potential downfalls include vulnerability to external factors, policy challenges, dependency on external factors, and social-political instability. Addressing these challenges requires sustained efforts to improve governance, diversify the economy, enhance infrastructure, and strengthen social safety nets for inclusive and sustainable growth.

Graph 1: Annual change of GDP, in %.



Source: World Bank (2024).

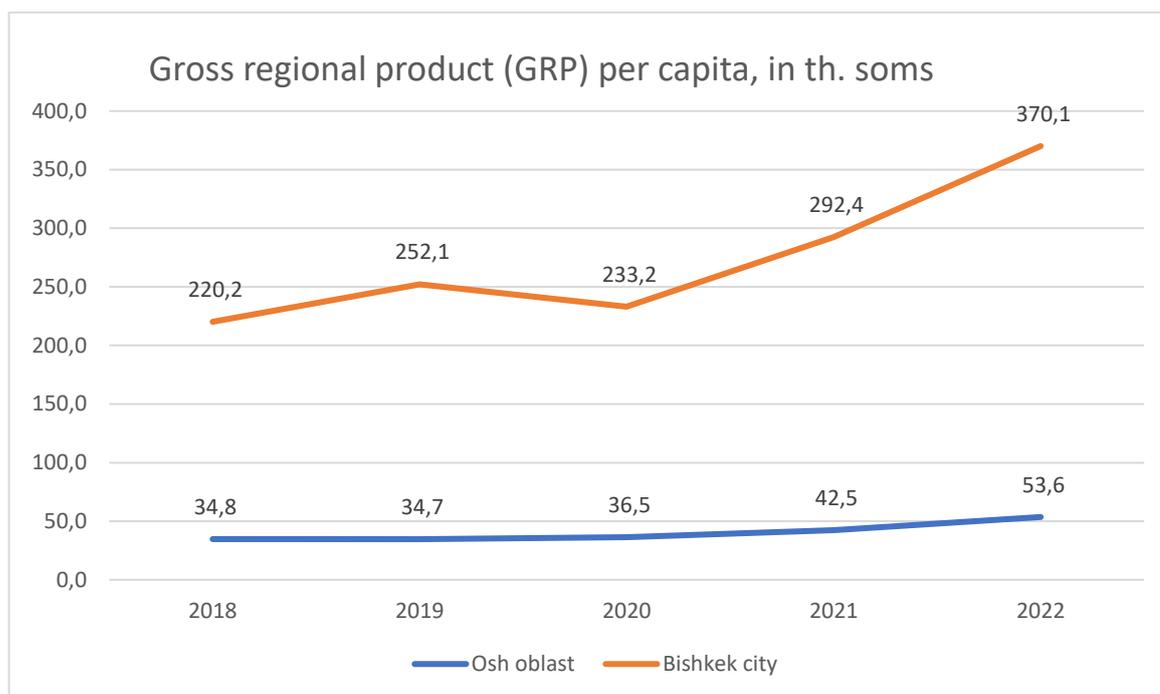
The Kyrgyz Republic has experienced complex supply shocks that have affected economic activity, including several variables. These shocks involve periodic border restrictions with neighboring China, which obstruct the importation of vital machinery, inputs, and consumer items, making them either unavailable or more expensive. In addition, the complete closure of all borders, which includes limitations on the mobility of individuals, has hindered the entry of foreign laborers and international visitors, possibly for a prolonged duration. The repatriation of Kyrgyzstani migrant workers as a result of the pandemic, combined with the devaluation of the som, has worsened the situation by raising import expenses and increasing financial risks and debt servicing costs. As a result, the financial sector's ability to offer new loans has been limited. Moreover, the implementation of lockdown measures in major cities such as Bishkek and Osh, in addition to social distancing protocols and stricter cleanliness standards, have significantly hindered business activity and performance. This has worsened the supply shocks experienced by the country.

4.2 Comparison of chosen macroeconomic indicators

4.2.1 GDP per capita 2018 – 2022 in selected regions

The following Graph depicts the Gross regional product per capita of Kyrgyzstan from 2018 – 2022, in thousands of som.

Graph 2: Gross regional product (GRP) per capita, in th. som



Source: National Statistical Committee of the Kyrgyz Republic (2024).

The GDP per capita dynamics of Osh and Bishkek cities in the Kyrgyz Republic exhibit contrasting trends, particularly evident in the year 2020 amidst the COVID-19 pandemic. Bishkek City, as the capital, saw consistent growth in GDP per capita from 2018 to 2019, with a notable increase from 220.2 to 252.1. This growth continued into 2020, albeit at a slower pace, reaching 233.2. However, in 2021, Bishkek experienced a significant rebound, with GDP per capita surging to 292.4, indicating a robust recovery. By 2022, the city's GDP per capita further increased to 370.1, highlighting its economic resilience and potential for growth. In contrast, Osh City followed a similar growth trajectory from 2018 to 2019, albeit at a slower rate compared to Bishkek. However, in 2020, Osh City experienced a notable decline in GDP per capita, dropping from 114.8 in 2019 to 109.6. This decline reflects the adverse impact of the COVID-19 pandemic on the city's economy, as restrictions and economic disruptions took their toll. Despite this setback, Osh City showed signs of recovery in 2021, with GDP per capita increasing to 124.1, though still below pre-pandemic levels.

By 2022, the city's GDP per capita continued to rise, reaching 165.7, signaling a gradual but steady recovery.

Overall, while both cities faced challenges posed by the COVID-19 pandemic in 2020, Bishkek demonstrated greater resilience and a quicker rebound compared to Osh. The decline in GDP per capita in Osh City underscores the vulnerability of local economies to external shocks and the importance of effective mitigation strategies during crises.

4.2.2 Unemployment rate

The table illustrates the unemployment rates across different regions of the Kyrgyz Republic from 2019 to 2022, reflecting the repercussions of the COVID-19 pandemic on employment. Overall, the Kyrgyz Republic experienced a notable increase in unemployment, rising from 20.1% in 2019 to 33.2% in 2022, indicating economic challenges.

Table 2: Unemployment rate of Kyrgyzstan across regions

Region	2019	2020	2021	2022
Kyrgyz Republic	20.1	25.3	33.3	33.2
Batken Region	32.6	34.7	40.7	48.5
Jalal-Abad Region	26.9	37.2	43.2	47.1
Issyk-Kul Region	24.4	27.9	38.1	31.2
Naryn Region	28.1	36.8	39.2	42.0
Osh Region	14.0	18.8	23.8	19.9
Talas Region	13.3	12.5	23.5	23.9
Chui Region	19.1	25.4	27.0	26.1
Bishkek city	11.9	16.8	35.8	35.7
Osh city	20.7	14.7	28.6	26.6

Source: National Statistical Committee of the Kyrgyz Republic (2024).

Bishkek City initially had a relatively low unemployment rate of 11.9% in 2019 but witnessed a sharp increase, reaching 35.7% by 2022, indicating significant economic strain likely exacerbated by the pandemic.

Osh City started with a higher unemployment rate of 20.7% in 2019, which decreased to 14.7% in 2020, possibly due to localized economic factors. However, it surged to 28.6% in

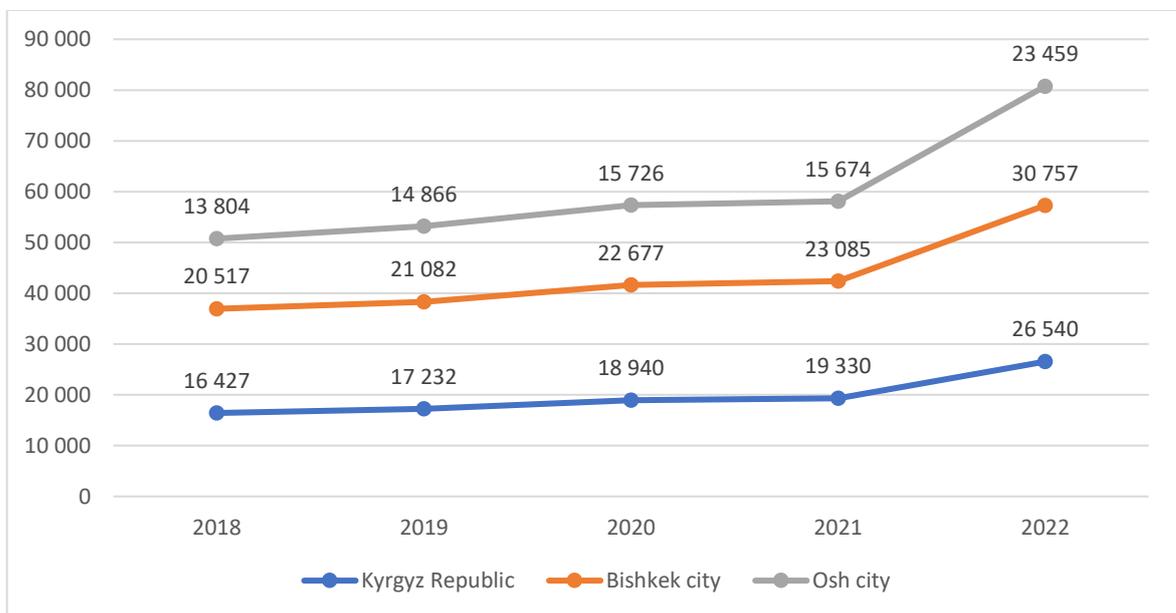
2021 before slightly declining to 26.6% in 2022, suggesting ongoing economic challenges, potentially influenced by pandemic-related disruptions.

The years 2020 and 2021 saw widespread spikes in unemployment across all regions, coinciding with the onset and successive waves of the COVID-19 pandemic. This underscores the vulnerability of both urban and rural areas to external shocks and emphasizes the necessity for targeted interventions to alleviate the impact of future crises on employment and livelihoods.

4.2.3 Average Income Across Selected Regions

The Graph – N, illustrates the average salary trends and deviations for the Kyrgyz Republic, Bishkek city, and Osh city from 2018 to 2022. Over this period, the Kyrgyz Republic witnessed steady growth in average salaries, rising from 16,427 soms in 2018 to 26,540 soms in 2022. Deviations from this trend suggest fluctuations in economic conditions within the country.

Graf 1: Average Income across selected regions



Source: National Statistical Committee of the Kyrgyz Republic (2024).

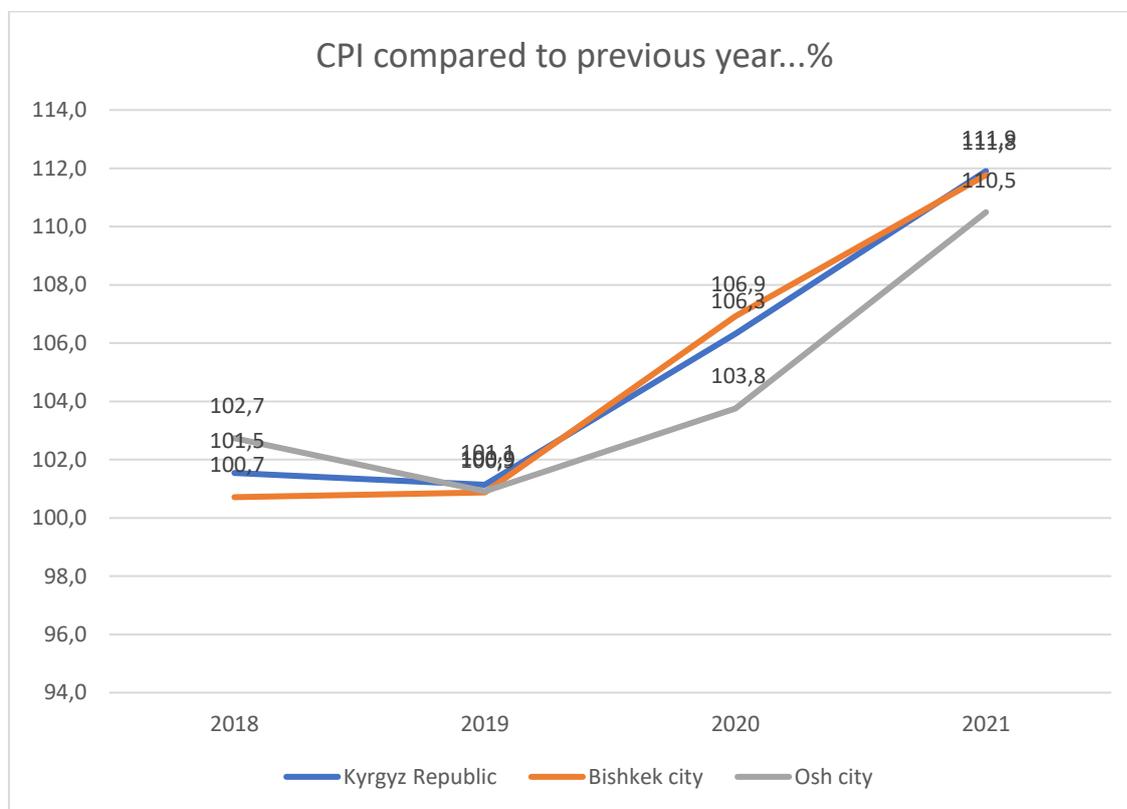
Bishkek city, being the capital and economic center, showed higher average salaries compared to other regions. Salaries in Bishkek increased steadily from 20,517 soms in 2018 to 30,757 soms in 2022, with deviations reflecting changes in economic activity or shifts in the local job market. Despite starting with lower average salaries, Osh city experienced

significant growth in earnings over the years, with salaries increasing from 13,804 soms in 2018 to 23,459 soms in 2022. Deviations from this trend provide insights into fluctuations in economic stability or challenges within the city. Still, it is seen how Osh region lags behinds compared to its average salary.

4.2.4 Inflation Rate Across Selected Regions

The table presents the Consumer Price Index (CPI) data for the Kyrgyz Republic, Bishkek city, and Osh city from 2018 to 2021.

Graf 2: CPI in %.



Source: National Statistical Committee of the Kyrgyz Republic (2024).

Overall, CPI trends show a general upward trajectory across all regions, indicating inflationary pressures over the period. However, the years 2019 to 2020 saw notable spikes in CPI values, suggesting the immediate impact of the COVID-19 pandemic on consumer prices. In the Kyrgyz Republic, the CPI increased from 101.5 in 2018 to 111.9 in 2021, with a significant rise from 2019 to 2020, possibly reflecting disruptions in supply chains, changes in consumer behavior, and economic uncertainties induced by the pandemic. Similarly, Bishkek city's CPI increased from 100.7 in 2018 to 111.8 in 2021, with a noticeable spike

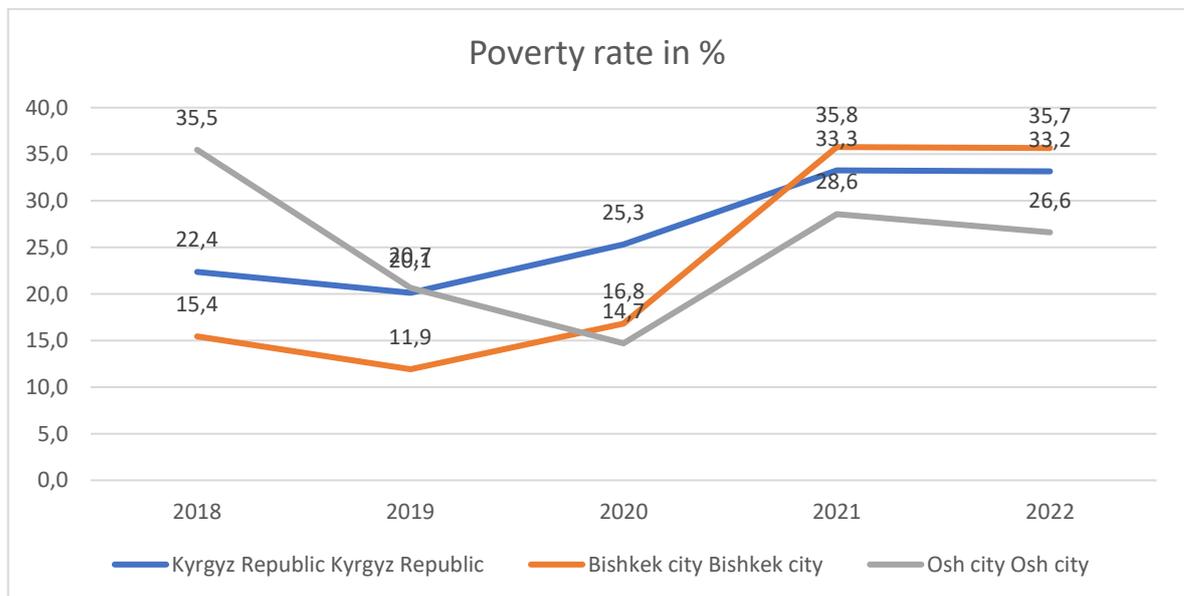
from 2019 to 2020, indicating the pandemic's influence on consumer prices within the capital city.

Osh city exhibited similar trends, with a CPI rise from 102.7 in 2018 to 110.5 in 2021. The impact of COVID-19 is evident in the CPI increase from 2019 to 2020, suggesting inflationary pressures influenced by pandemic-induced disruptions. In summary, while all regions experienced inflationary trends, the years 2019 to 2020 witnessed significant CPI increases, reflecting the immediate impact of the COVID-19 pandemic on consumer prices, supply chains, and economic stability across the Kyrgyz Republic.

4.2.5 Poverty Rate Across Selected Regions

The table presents poverty rates (%) for various regions of the Kyrgyz Republic from 2018 to 2022, highlighting the impact of the COVID-19 pandemic on poverty levels across different areas.

Graf 3: Poverty rate across selected regions, in %.



Source: National Statistical Committee of the Kyrgyz Republic (2024).

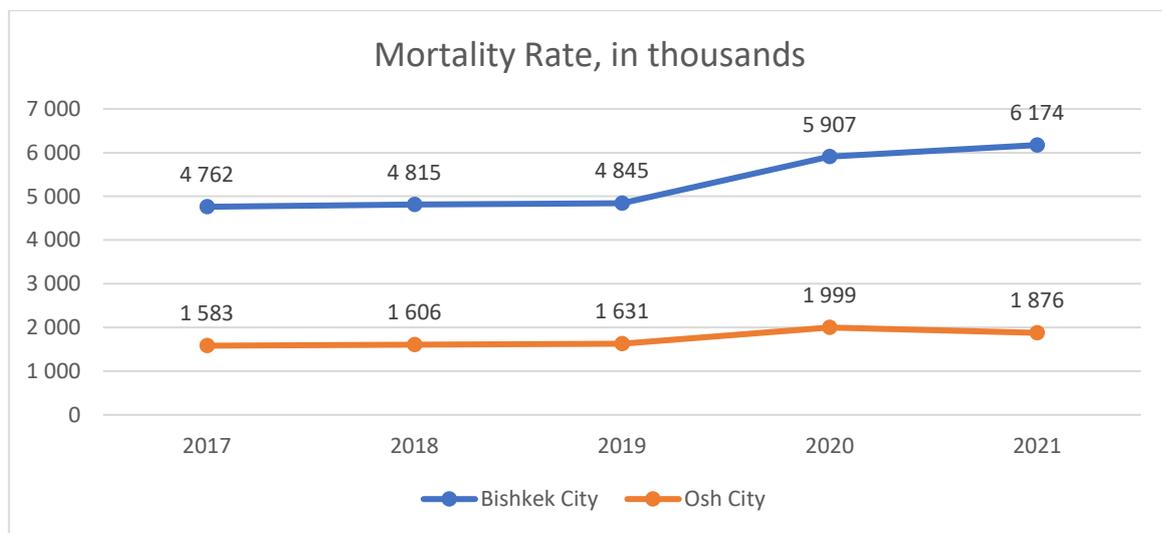
Urban centers presented contrasting trends. Bishkek city, starting with a modest poverty rate of 15.4% in 2018, witnessed a dramatic rise to 35.7% by 2022, underscoring the severe pandemic impact on urban areas. Conversely, Osh city, initially facing a higher poverty rate of 35.5% in 2018, displayed a downward trend in subsequent years, possibly due to localized economic factors, as those regions are strictly focused on agricultural production.

The years 2020 to 2021 marked a significant increase in poverty rates across most regions, aligning with the onset and subsequent waves of the COVID-19 pandemic. The pandemic-induced job losses, income reductions, and disruptions in economic activities significantly contributed to the rise in poverty levels across the Kyrgyz Republic.

4.2.6 Mortality Rate Across Selected Regions

The Graph – N, illustrates the mortality rate of selected regions, from 2017 up to 2021.

Graph 3: Mortality rate in th.



Source: National Statistical Committee of the Kyrgyz Republic (2024).

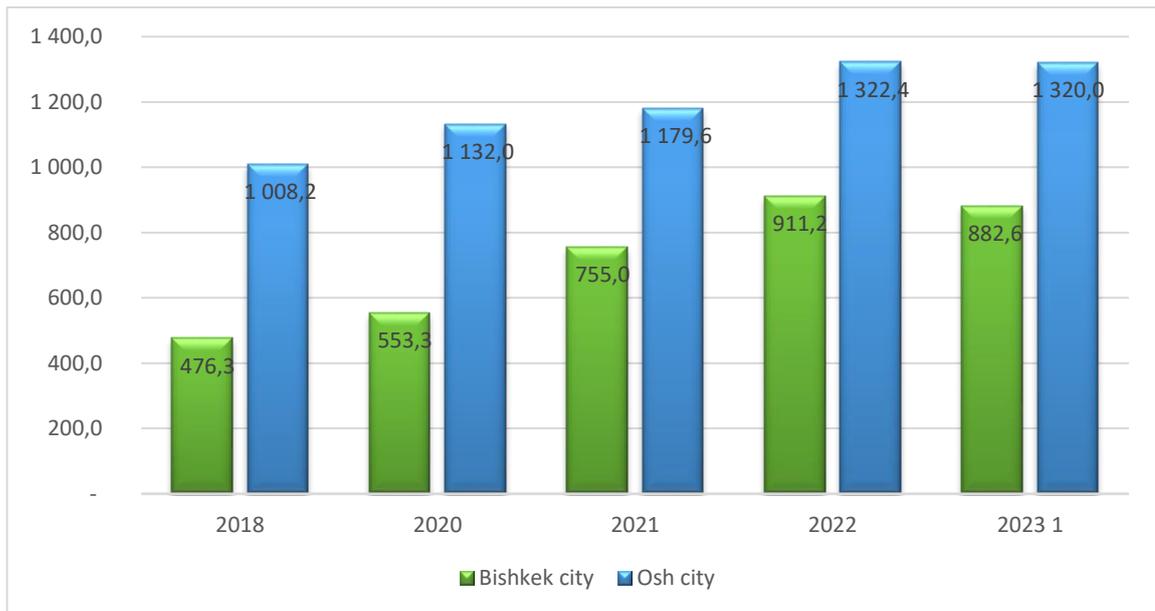
The mortality rates for Bishkek City and Osh City from 2017 to 2021 indicate fluctuating trends possibly influenced by various factors, including demographic shifts and health-related issues. In Bishkek City, mortality steadily rose from 4,762 deaths in 2017 to 6,174 deaths in 2021, while Osh City saw an increase from 1,583 deaths in 2017 to 1,876 deaths in 2021. These trends suggest evolving population dynamics and healthcare considerations within these urban areas. The COVID-19 pandemic likely played a significant role in shaping mortality rates during this period. In Bishkek City, mortality surged notably from 2019 to 2020, coinciding with the pandemic's onset, with a continued increase in 2021. Osh City experienced a similar spike in mortality during the same timeframe, suggesting the pandemic's direct impact on population health. The subsequent stabilization or slight decrease in mortality rates in 2021 may reflect efforts to mitigate the pandemic's effects on healthcare systems and public health responses. Overall, the observed fluctuations in mortality rates underscore the complex interplay of factors, including the COVID-19

pandemic, demographic changes, and healthcare infrastructure, shaping mortality outcomes within urban settings like Bishkek City and Osh City.

4.2.7 Agricultural Production Across Selected Regions

The table provides data on the production of agricultural, forestry, and fishery products for Bishkek City and Osh City from 2018 to 2023.

Graf 4: Products of agriculture, forestry and fisheries (in current prices)



Source: National Statistical Committee of the Kyrgyz Republic (2024).

The production figures for Bishkek City show a steady increase over the years, rising from 476.3 units in 2018 to 882.6 units in 2023. This suggests consistent growth in the production of agricultural, forestry, and fishery products within the urban center. Similarly, Osh City also demonstrates a consistent upward trend in production, with figures climbing from 1,008.2 units in 2018 to 1,320.0 units in 2023. This indicates ongoing growth in the production of agricultural, forestry, and fishery products in the city.

Overall, both Bishkek City and Osh City have experienced positive growth in the production of agricultural, forestry, and fishery products over the specified period, reflecting the development and expansion of these sectors within the urban areas without any effect of COVID – 19.

4.2.8 Development of Enterprises

The table – N, tracks the dynamics of enterprises in Bishkek City and Osh City categorized by size (small, medium, and large) from 2018 to 2022, offering insights into their fluctuations and the impact of COVID-19.

Table 3: Development of enterprises in selected regions, 2018 - 2022

Year	2018	2019	2020	2021	2022
Bishkek city	1503	1553	842	1229	1268
Small	1457	1501	804	1187	1222
Medium	41	47	34	38	41
Large	5	5	4	4	5
Osh city	249	246	148	195	162
Small	241	237	141	187	154
Medium	7	8	6	7	7
Large	1	1	1	1	1

Zdroj: National Statistical Committee of the Kyrgyz Republic (2024).

In Bishkek City, the number of small enterprises demonstrated a generally increasing trend, with a slight decline in 2020, possibly due to COVID-19. Medium-sized enterprises remained relatively stable, showing minor fluctuations, while large enterprises maintained a low and steady count throughout the period. Similarly, Osh City experienced an increase in small enterprises over the years, with a notable decline in 2020 likely influenced by the pandemic. Medium-sized enterprises remained relatively constant, while large enterprises remained consistent at one throughout the period.

Overall, the COVID-19 pandemic appears to have had a significant impact on small enterprises in both cities, as evidenced by the declines in 2020. In contrast, medium and large enterprises showed more stable trends, suggesting they may have been less affected by the pandemic's economic disruptions.

4.3 Socio economic consequences

The economy has suffered the most severe and initial effects of the pandemic. Only a portion of the costs were associated with actively controlling the infection and providing care for

patients in need. The losses resulting from business closures inside and between the countries were far larger in magnitude. The dependency of small and weak economies, like Kyrgyzstan's, on daily labor, remittances, and foreign trade has made them especially vulnerable.

The epidemic in Kyrgyzstan had a direct impact on the economy, and one of its early consequences was a significant decline in the quality of life. According to estimates provided by the World Bank, the overall poverty rate in Kyrgyzstan increased from 20% to 31% in the year 2020 (24.kg, 2021). This evidence is supported by further figures. As a result, the gross domestic product of the nation decreased by 8.6% in the year 2020 (Azattyk, 2021). Since the beginning of the 1990s, this was the most significant economic decline imaginable. To put this into perspective, the economies of Russia and Kazakhstan both had a decline of 3.1% and 2.5% in the year 2020, respectively, but the economy of Uzbekistan experienced a gain of 1.6%.

It appears that the majority of the responsibility for the aforementioned figures lies with three different policy approaches to the pandemic. The disturbance to international trade and travel is the first issue to be addressed. On March 13, 2020, before to the first incidents of COVID-19, the leaders of the country discussed the adverse effects that the closing of the border with China would have when it was implemented. For the manufacture of its goods, the garment industry, which is one of the most important employers in the country, is dependent on textile supplies purchased from China. The closing of the border prevented the sector from gaining access to the Russian market for exports and deprived it of raw supplies. As a result of the epidemic, construction companies were unable to continue their work since financial resources suddenly stopped flowing and supply lines for essential supplies like pipes were disrupted. According to the OECD (2020: 18), Kyrgyzstan's tourism industry "nearly vanished" with a fall of one hundred percent, indicating that even more difficult times were to come for the country.

Last but not least, the lockdown in Russia was found to have a significant influence on the psychological well-being of families in Kyrgyzstan OECD (2020: 18). In contrast to the estimated population of Kyrgyzstan, which is approximately 6.5 million, the number of Kyrgyz residents who are employed in Russia is estimated to be anywhere between 700,000

and one million. Remittances are responsible for over thirty percent of Kyrgyzstan's gross domestic product, making them one of the highest in the world. In April of 2020, remittances experienced a decrease of 47% (Akchabar, 2020). Although there was a recovery in the amount of money transfers near the end of the year, the overall volume was not as high as it had been in previous years.

An additional effect that will be felt over a longer period of time is the deterioration of the situation regarding social equality and development. Equality between the sexes is a prime instance. It is important to note that "industries with a greater percentage of female employment were impacted especially hard," as stated in research conducted by the OECD (2020: 5). Examples include the tourism industry, the textile industry, and the clothing business. Many businesses have also moved their operations online as a result of the pandemic. This modification was beneficial for certain areas of the economy; but it is highly probable that it would exacerbate the so-called "digital split," which will be detrimental for those parts of the economy as well as individuals and organizations that are less equipped for a digital environment. The epidemic of that year saw an increase in the number of cases of domestic violence, with women becoming the most common victims (Kulikova, 2021). With that being said, there are significant worries in the nation over the effects on human growth that would result from spending a complete school year in an online environment (Dzhamankulova, 2020).

4.4 Relief Measures Taken by Government

The government of the Kyrgyz Republic took the country's financial situation very seriously and came up with a full economic response plan with a number of different steps. These included talks with governments like the People's Republic of China as well as additional supporters to get foreign aid and look into the possibility of reorganizing payments on debt in accordance with the G20's decision to give economies with lower incomes assistance on debt service by 2020 (Kulikova, 2021). The government also put in place tax relief measures that helped both big businesses and small to medium-sized ones. Also, relief processes were set up for taxpayers whose property taxes were impacted by COVID-19-related "force majeure" incidents. But there needed to be a more in-depth look because these taxpayers tended to come from wealthier parts of the country.

The Anti-Crisis Fund was created to help businesses in the Kyrgyz Republic (Dzhamankulova, 2020). Its areas of responsibility are meant to be similar to those of the country's Financing Agriculture program. Its importance lies in making sure that all financial actions related to the pandemic are carried out in an integrated manner. All government resources, besides those worth more than \$200 million that comes from the Russian-Kyrgyz Development Fund (some of which has been invested abroad), should either be entirely included in the government's overall funds or closely linked to fiscal activities. This is especially important for helping small businesses when working with the Russian-Kyrgyz Development Fund (Dzhamankulova, 2020).. Also, the Anti-Crisis Fund must keep its budget completely open, so that residents and development partners can see exactly how much money it makes and how much it spends. Given the dire need for means and the generally low effectiveness and efficiency of tax breaks, some tax relief plans may need to be carefully looked over OECD (2020: 13). When this fund gives money to investments, these investments should try to fit in more distant objectives for sustainable development, mainly those that have to do with digitalization, good work, and long-term management of natural resources.

5. Results and Discussion

The analysis provides comprehensive insights into various aspects of regional development in Kyrgyzstan, with a particular focus on Bishkek City and Osh City, and the impact of the COVID-19 pandemic on different economic indicators.

5.1 GDP per Capita:

Bishkek City exhibited consistent growth in GDP per capita from 2018 to 2022, experiencing a slight slowdown in 2020 but rebounding significantly in 2021 and 2022. In contrast, Osh City's GDP per capita followed a similar trajectory but experienced a notable decline in 2020, indicating the pandemic's adverse effects on the city's economy.

5.2 Unemployment Rate:

The unemployment rates across various regions of Kyrgyzstan, including Bishkek and Osh cities, saw substantial fluctuations from 2019 to 2022, with widespread spikes in 2020 and 2021 coinciding with the onset of the COVID-19 pandemic. Bishkek City experienced a sharp increase in unemployment, reaching 35.7% by 2022, while Osh City showed a similar trend, albeit with slightly lower rates.

5.3 Average Income:

Bishkek City demonstrated higher average salaries compared to other regions, showing steady growth over the years despite deviations reflecting changes in economic activity. Osh City, though starting with lower average salaries, experienced significant growth in earnings over the years, indicating a positive trend in income levels despite challenges.

5.4 Inflation Rate:

The Consumer Price Index (CPI) trends across Kyrgyzstan, Bishkek City, and Osh City showed general upward trajectories, with notable spikes in 2019 to 2020 attributed to the pandemic's immediate impact on consumer prices. Despite variations, all regions experienced inflationary pressures, reflecting disruptions in supply chains and changes in consumer behavior induced by the pandemic.

5.5 Poverty Rate:

Urban centers, particularly Bishkek City and Osh City, exhibited contrasting trends in poverty rates, with Bishkek experiencing a significant rise to 35.7% by 2022, while Osh City displayed a downward trend after an initial high in 2018. The years 2020 to 2021 saw widespread increases in poverty rates across most regions, underscoring the pandemic's socioeconomic impact.

5.6 Mortality Rate:

Mortality rates in Bishkek City and Osh City fluctuated from 2017 to 2021, likely influenced by various factors, including demographic shifts and health-related issues. The COVID-19 pandemic contributed to spikes in mortality rates from 2019 to 2020, particularly evident in both urban areas.

5.7 Agricultural Production:

The production of agricultural, forestry, and fishery products in Bishkek City and Osh City showed steady growth from 2018 to 2023, indicating positive developments in these sectors despite the absence of COVID-19 effects.

5.8 Development of Enterprises:

Small enterprises faced significant challenges during the pandemic, as evidenced by declines in 2020 across both Bishkek and Osh cities. Medium and large enterprises showed more stable trends, suggesting better resilience to the economic disruptions caused by COVID-19.

In summary, while both Bishkek City and Osh City faced economic challenges induced by the COVID-19 pandemic, Bishkek demonstrated greater resilience and quicker recovery in some economic indicators compared to Osh. The analysis underscores the importance of targeted interventions and policy measures to mitigate the socioeconomic impacts of future crises on regional development.

6. Conclusion

This bachelor thesis has provided a comprehensive examination of the regional economic landscape of the Kyrgyz Republic, particularly in light of the unprecedented challenges brought about by the COVID-19 pandemic. The analysis has underscored the profound and multifaceted impact of the pandemic on various facets of the country's economy, from macroeconomic indicators such as GDP per capita and unemployment rates to socio-economic aspects like average income levels and poverty rates.

The COVID-19 crisis has exacerbated pre-existing vulnerabilities within the Kyrgyz Republic, amplifying regional disparities and laying bare structural weaknesses in the economy. The sudden disruption of global supply chains, the downturn in key sectors such as tourism and hospitality, and the imposition of lockdown measures have all contributed to significant economic upheaval. Moreover, the strain on healthcare systems and the loss of livelihoods have inflicted immense social and human costs on the population.

In response to these challenges, the government has implemented a range of relief measures aimed at mitigating the economic fallout of the pandemic. However, the efficacy and reach of these measures have been hampered by institutional constraints and resource limitations. Moving forward, it is imperative for policymakers to adopt a multi-pronged approach that prioritizes both short-term economic stabilization and long-term resilience building.

Furthermore, the pandemic has underscored the importance of regional cooperation and international solidarity in addressing global crises. As the world grapples with the ongoing health and economic ramifications of COVID-19, it is crucial for countries like the Kyrgyz Republic to forge partnerships and leverage external support mechanisms to navigate these turbulent times.

In conclusion, while the road to recovery may be fraught with challenges, the resilience and adaptability of the Kyrgyz people, coupled with prudent policy interventions, offer hope for a brighter and more prosperous future in the post-pandemic era.

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