

**IMPACT OF TRANSITION TO MARKET ECONOMY ON  
HUMAN DEVELOPMENT INDEX.  
COMPARISON OF THE KYRGYZ REPUBLIC AND  
OTHER CENTRAL ASIAN REPUBLICS.**

by

KANYBEKOV Elnur

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## **DECLARATION OF ORIGINALITY**

I, KANYBEKOV Elnur, hereby declare that this research paper is a result of my own original academic work under the supervision of Professor CORTEZ, Michael Angelo A. I certify that this master thesis has not previously been submitted anywhere for the award of academic degree. I also hereby certify that all reference sources have been acknowledged in appropriate way of referencing.

KANYBEKOV Elnur

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## **List of Abbreviations**

ADB	Asian Development Bank
CAR	Central Asian Republics
EBRD	European Bank for Reconstruction and
Development	
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GNI	Gross National Income
IMF	International Monetary Fund
HDI	Human Development Index
HDR	Human Development Report
WTO	World Trade Organization
UNDP	United Nations Development Program

## **Abstract**

The five Central Asian republics (CAR): Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan today are independent states. However, they have one common history: they were all former republics of the Soviet Union. Moreover, they encountered similar economic and social problems in the beginning of transition process. Each of these republics has been following their own political and economic course since achieving independence in 1991. These countries are situated in landlocked geographical place and have different natural resources.

This study attempts to determine the main factors, which yield for various levels of Human Development Index (HDI). It should be pointed out, that all CAR had a common economy within the Soviet Union and all sectors of the economy had close ties and were interrelated. With the dissolution of the Soviet Union, the CAR began transition process from planned economy to market-based economic system.

The aim of this research is to evaluate and compare the trends in the economy, education and health sectors of CAR since the beginning of the transition process. This research considers economic and social issues, which determine the dynamics of the main components of HDI, namely economy, education, and healthcare.

The research, by using cross-country analysis based on the case study method, defines and compares causal factors that determine the dynamics of HDI since the beginning of economic transformation. The study applied time-series analysis and pattern-matching analytic techniques in order to determine similarities and differences of CAR.

This study reveals that the transition process negatively affected HDI of CAR in the early phases of transition. Further analysis shows that the rising trend of the HDI, especially the income component is mainly determined by the export of the primary commodities and the labor force. In addition, market-based reforms together with liberal trade regime fueled the growth of HDI. This research shows that in general, the dynamics of CAR's HDI during the transition period was stipulated by natural resource abundance. At the same time, there is evidence that despite of resource scarcity some countries succeeded in conducting reform.

The lessons learned from this study can substantially advance further economic and social policy of these republics. Such advancement will contribute to the improvement of human development level.

# CHAPTER 1

## 1. INTRODUCTION

### 1.1. Background.

Today, the five Central Asian Republics, namely Republic of Kazakhstan (Kazakhstan), Kyrgyz Republic (Kyrgyzstan), Republic of Turkmenistan (Turkmenistan), Republic of Uzbekistan (Uzbekistan) and Republic of Tajikistan (Tajikistan) are independent states.

The present research focuses on these five states by reason of their common history as former republics of the Union of Soviet Socialist Republics (Soviet Union) and relatively similar cultural norms, beliefs, behaviors and languages (except Tajikistan whose language is a dialect of Persian). Also, these republics and Azerbaijan were the poorest among all Soviet republics in 1991 (Pomfret R. , 2010b).

While Kazakhstan covers over two-thirds territory of the region, Uzbekistan totals for almost half of the population of Central Asia (Barisitz, 2009).

It is generally known that in the Soviet Union, the whole economy was interrelated and interdependent. All fifteen republics had different natural resources and diverse industries, but had centralized and planned economic system of inherent in the Soviet Union. The Soviet economy compensated for deficient resources by redistribution.

After the breaking-up of the Soviet Union, the whole complicated system of unified economy was destroyed. All fifteen new states, including CAR, faced a number of challenges in a new environment. With the breakdown of the Soviet

Union in 1991, the republics were faced with serious problems of disintegration and break-up of economic ties.

New states started their own independence practically with the same economic and social challenges. Transition to market economy implied changes in economic administration.

The adverse implications of the transition were drastic economic slump and a pervasive damaging on the lives of a huge part of the population. These gave rise to social inequality, unemployment, poverty, and low salaries. In turn, it had negative impact on the material and moral foundation of human lives (Rodionova & Gordeeva, 2010). For example, human development in Romania was negatively affected during the transition period (Ioniță, 2010).

It is worth mentioning that in the beginning period of the transition, a crucial role in the socio-economic development of Kazakhstan, Uzbekistan, and Turkmenistan was played by their natural resources (Elma & Gurbanov, 2014). Natural resources endowment at the present time is still a main factor for economic prosperity.

According to the latest Human Development Report (2014), prepared by the UNDP, these republics have had different rankings in the Human Development Index (HDI) arrangement.

After the first issuance of the Human Development Report by UNDP, the ways and methods of calculating the HDI was changed. It is difficult to compare the HDI ranks of different periods since the methodology of calculating HDI has changed.

## **1.2. Problem statement.**

Each of the CAR have been making their own political and economic path since achieving independence from the Soviet Union. The transition process from planned economy to market economy of these republics is different. Clearly, this fact has resulted in various levels of human development.

Different indicators of the country's development, including HDI, stipulate investment potential of the country.

Research questions are:

- Why did Central Asian republics facing similar economic and social difficulties with transition to market economy, then experience different paces of economic and social trends as the main components of human development?
- What has been the dynamics in the transition process, and economic and human development in the Central Asia?
- What factors affected the economic and social trends?
- What are the similarities and differences in economic and social circumstances of Central Asian states?

Macroeconomic drivers as determinants of human development, as well as health and education indicators are considered within the present study.

### **1.3. Significance of research.**

This research seeks to understand the transition process of CAR in terms of economy, education and health as components of HDI. The findings of the study could help decision makers because it reveals positive and negative experiences of

fellow countries. The lessons stemming from transition process can be taken into account during policy planning. This could eventually lead to higher human development level in CAR. The results of this research can be useful in adapting human development across developing countries. The results of comparing the experiences in transformation to new economic system can help to adapt best practices model of fellow CAR. Likewise, the findings of this study might allow the recognition of the unique circumstances of Kyrgyzstan against CAR.

#### **1.4. Objective of the study.**

A case study about human development in CAR examined the reasons that countries faced similar economic and social challenges after gaining independence, and since experienced different economic and HDI trends.

The present study analyzes policy in conducting reforms in economy, education, and health sectors during the transition process. The objective of the study is not an assessment of current HDI status of countries. The aim of the research is an evaluation of the similarities and differences in the strategies adopted to improve economic, education, and health indicators as determinants of human development.

This research has the following objectives:

1. Determine causes and/or policies of the transition period that influenced the trend of HDI components,
2. Analyze the positive and negative impacts of these factors on the dynamics of the human development indicators,
3. Compare these trends between CAR,



4. Reveal the similarities and differences in economic and social circumstances of each country,

5. Find out successful experiences in the human development progress.

It is necessary to analyze the dynamics of the HDI components over at a certain time period. Likewise, it is essential to identify the main policies in human development issues.

The present cross-Central Asia study encompasses collecting simple, comparable, and generalizable information with the aim to find the best successful experiences and lessons learnt in the reforming process.

The results of the research might be practical to the Kyrgyz Government in implementing economic and social policies.

### **1.5. Methodology.**

In this paper cross-country analysis was conducted based on the methodology proposed by Robert K. Yin. In his book “Case Study Research”, Robert K. Yin described cross-case analysis and other related methods in carrying out of research. Cross-country analysis is applied to CAR in order to reveal the reasons for different indicators in HDI placement.

This study is not only qualitative research and analysis, but also it applies a composite of quantitative and qualitative evidence. Yin (2009) pointed out that some qualitative case study research might combine quantitative and qualitative evidence. Related descriptive statistics is applied as quantitative evidence.

As Yin (2009) argued, analytic derivations separately coming from several cases will be more robust than those coming from a single case. Therefore, the author

studied each country's path in transition to market economy and then compared them.

One of the objectives of the research is the consideration of the components of HDI and main socio-economic factors influencing on the rate of HDI. The impact of international trade activity of Kyrgyzstan on the economic component of HDI is also considered.

The study makes analytic generalization of collected data at the phase of analyzing of evidence. According to Yin (2009), in analytical generalization, a particular set of results might be generalized to some broader theory.

Time series analysis, as an analytic technique, is carried out in studying chronological events from the day of collapse of the Soviet Union. Also, pattern matching logic technique is applied for the analysis.

The present study uses a combination of the two above-mentioned analytic techniques. As patterns, the study compares trends or rates of growth in key economic and social indicators between CAR. Certainly, these indicators are components of HDI or closely associated with it.

Yin (2009) described the role of pattern matching technique as an instrument for making comparisons and contrasts of various results.

The trends of indicators that related to the HDI of each CAR are considered as a case study. These dynamics or paces of growth are then compared in the cross-country analysis section to underline differences and similarities between countries in the process of developing and implementing their reforms towards market economy.

Based on the above described analytic technique, the present study tries to determine the best ways of matching dissimilarities in economic and social policies of CAR. Also, the author tries to develop conceptually significant explanations for the diverse results derived from the research.

As well as pattern matching, time-series analysis provides a contrast of time-series patterns selected for diverse cases (Yin, 2009). Yin (2009) recommends identifying the specific indicator(s) to be considered over time and specific time periods to be covered. Also he suggested defining temporal relationships among events.

The case studies are not limited to static assessments of a particular situation and their main strength is a capability to trace fluctuations over time (Yin, 2009). As Yin (2009) states: “If the events over time have been traced in detail and with precision, some type of time-series analysis always may be possible, even if the case study analysis involves some other techniques as well”.

The present research contrasts time-series patterns of key economic and human development indicators postulated for each CAR. For example, the author graphed the dynamic of GDP per capita that covered a certain period of time. Then, this dynamic or trend of GDP per capita for each country of Central Asia was compared, taking into account their different economic conditions. Relevant findings of the country-by-country study are reflected as grounds for related socio-economic trends.

Yin (2009) highlights the need to apply similar replication logic if research covers several cases. Taking into account that point, the author studied trends of similar economic and social indicators in similar time intervals. Ultimately, the causal events that impacted on economic and social trends need to be revealed.

It is worth to mention that before gaining independence CAR had different socio-economic indicators, due to diverse economic structure and contribution made to the single economy of the Soviet Union.

Clearly, one of the reasons for the current diverse economic and social performance of CAR is the different socio-economic indicators including HDI which existed before independence. For this reason this study compared the trend or rate of changes (annual percentage change) in economy and social life of the countries rather than the absolute value of these indices. In some cases present research compares average growth rate.

### **1.6. Data collecting**

This research was based on secondary data analysis. In order to examine the reforms in transition period the author studied the available research papers prepared by UNDP and other international institutions as such as the World Bank, EBRD, and IMF. Likewise, books and academic articles were also used as sources of information.

In order to provide a descriptive statistic information, this study applied databases of the World Bank, ADB, and EBRD. Statistical data on economic indicators were drawn primarily from the World Development Indicators database of World Bank. With the purpose to ensure comparability between countries, single source of statistic data - World Development Indicators – were used.

After the first issuing of the Human Development Report by UNDP, the ways and methods of calculating of Human Development Index were changed. It was

difficult to consider and compare HDI ranks of different, because the methodology of computing HDI was changed. Thus, the present study considered certain years, that were comparable with each other.

In the process of compiling dynamic of different indicators, the present study faced some methodological difficulties. In some countries, namely in Turkmenistan and Uzbekistan, there was relatively scarce statistical data available on the economic and social indicators for certain time periods.

## **CHAPTER 2**

### **2. REVIEW OF THE LITERATURE**

The UNDP defines the HDI as “a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.”

In fact, HDI is not a comprehensive index of evaluating of the countries development. It is generally accepted that the entire concept of the human development cannot be assessed only by HDI (Pineda, 2012). In the literature there are many examples of criticism of HDI both from conceptual and technical point of view (Chowdhury & Squire, 2006). Lack of comparability over the given time is a disadvantage of HDI assessment, despite that new approach in calculations may have amended the HDI assessment (Low & Aw, 1997).

Various approaches have been proposed to solve the problem of the calculating of human development index.

Few researchers have addressed the problem of the measuring of HDI. Some of them offered additional or even alternative indicators to the HDI.

For example, it has been suggested, that unemployment factors should be considered in the Human Development Index (Taner, Sezen, & Mihci, 2011). They argued that HDI might be broader with taking into account unemployment issue (Taner, Sezen, & Mihci, 2011).

Similarly, sustainability-adjusted HDI suggested by Pineda (2012). He draws our attention to environmental factors in the evaluating of human development.

At the same time, Chowdhury & Squire (2006) claim that the current components of HDI are valid and thus, need to be retained. Shahabadi & Nemati (2014) concluded that peoples could get other opportunities if they have the three basic aspects of life expectancy, education and gross national income.

Human Development Index implements two main functions in the area of development economics: 1) as an instrument to promoting human development; 2) as a new option to measure degrees of development for comparison across countries as well as time (Stanton, 2007). Stanton (2007) highlighted the importance of these functions for policy-makers and development professionals in estimating trends in progress of human development and considering current and prospective socio-economic conditions. According to Stanton (2007), the UNDP has made improvements of HDI over time and should continue further revisions towards the best potential gage of human development.

Human development is might be one of the main objectives to achieve of any governments and states in the world. Some authors consider HDI as a factor to be considered in making decision.

The idea of human development is considered as the main issue of political and socio-economic planning (Rodionova & Gordeeva, 2010). Dervis & Klugman (2011) argued that the HDI is generating considerable interest from the governments in terms of planning and allocation process. In order to improve HDI ranking, national

governments should conduct “country-specific development-oriented strategies” (Bilbao-Ubillos, 2013).

Lind (2004) underlined that the government, by assessing rank in HDI, can distribute efforts for enhancement among its composite social indicators as long life, healthier life and enriched life. The crucial foundation of the human development in the medium and long term is an education (Ioniță, 2010).

On the other hand, Ricketts (2013) claimed that HDI could “miss important information about country-specific experiences over time”. He reaches the conclusion that HDI ranking might indicate right course of policy, but at the same time “contingent and country-specific case” might indicate the necessity of changes in policy.

As it can be seen, the UNDP has made improvements in terms of calculating of HDI over time and might continue further improvements if it is necessary.

After dissolution of the Soviet Union, it was created new area to research and study in terms of political, economic, social, and environmental issues.

It should be noted that economy of the republics of the Soviet Union was interrelated and interconnected. Each republic had own economic niche, which made contribution to the whole economy of the Soviet Union (Laruelle & Peyrouse, 2013). The collapse of the Soviet Union led to negative influence on those republics due to the structural interdependence between the periphery territories and the central government (Spoor, 1997). As Spoor (1997) described, dissolution of production and marketing chains, which were vertically compounded, had dramatic impact on industrial and mining sectors of CAR.



After the collapse of the Soviet Union, CAR faced challenges in terms of building own state with defining further directions of development. Obviously, these countries stood at the parting of the ways of transition to market economy or continue with planned economy. Ultimately they chose market system of economy.

The level of economic development of CAR was lower than other parts of the Soviet Union (Sacks, 1992). Central Asia was the most conservative region of the Soviet Union (Anderson & Pomfret, 2003). It should be pointed out that territory of Central Asia is landlocked and this fact certainly defines opportunities of international trade. Landlocked area is the negative factor for the economic prosperity of the CAR (Kalyuzhnova, 2003).

It was obvious, that views on political, economic, and social reforms of each country were considerably different. Also, each republic has its own peculiar economic capacity. However, despite this fact, economies of CAR have excessive dependence on exports of raw materials (Laruelle & Peyrouse, 2013). Even in Soviet period these republics were supplier of raw materials (Anderson & Pomfret, 2003).

Former Soviet republics in Central Asia pursued different economic strategies and underwent diverse macroeconomic results in the subsequent periods from equal primary conditions when the Soviet Union disintegrated (Anderson & Pomfret, 2003).

In his overview of development strategies for young CAR, Gharabaghi (1994) underlined that similar strategy of development cannot be implemented for every state of Central Asia. He claimed that diversity of each country should be taken into account in the process of formulation of development strategy.

Gleason (2001) highlighted that despite of signed common economic

agreements among CAR, domestic political conditions drove divergent socio-economic policies.

Thus, as a result, different policy yields to different stands in terms of economic success and HDI. It is worth mentioning that HDI components such as life expectancy, literacy, education, and standards of living are relatively high due to gained inheritance of the Soviet era (Laruelle & Peyrouse, 2013). In the process of considering HDI values it needs to take in account the risk of inaccurate numbers of statistical data. Government bodies might artificially boast some official statistic indicators (Laruelle & Peyrouse, 2013).

The transition to market economy of CAR has received much attention over the last two decades.

In general, academics recognized that CAR started its own independence practically with the same economic and social challenges (Olcott, 2000).

Pomfret (2006) argued that the entire five CAR, after collapse of the Soviet Union, had similar economic systems and similar economic structure to some extent. He stated that in spite of shared origin and common primary stipulations, the five republics have been passing different paths. He highlighted the considerable difference of their economic experience by the twenty-first century.

Pomfret (2006), described transition from planned economy to market economy by emerging inequality among population. The end of the Soviet Union was accompanied by hyperinflation and declining average living standards.

Aslund (2007) explains why some political and economic policies worked and others did not in the Post-Soviet countries, including CAR. He listed chain of key factors that should be properly implemented. They are in the following sequence:

idea, operative policy formulation, political breakthrough, political leadership, expertise, parliamentary support, measurement, and international standard setting and assistance. According to Aslund (2007), every Former Soviet country was weak at the one step and strong on the other step of transition and these facts yield the distinct results in development.

Olcott (2000) made the first research of human development in the Central Asia region and Mongolia. Her report was focused on development of political and economic rights of the countries. This report was background paper for HDR 2000 of UNDP.

UNDP (2005) published HDR with focusing on regional cooperation between CAR. The report highlights the necessity of cooperation in CAR in order to improve human development of the region.

Later UNDP (2014) published research paper, which provides up-dated information for previous report. The report also focused on international trade as one of the aspects of human development in Central Asia. Research paper considers policies of regional integration, which can support human development.

Elma & Gurbanov (2014) made comparative analysis between CAR as well as comparing with other countries of the world in terms of socio-economic and human development. The human development of CAR is considered from the perspective of globalization. Elma & Gurbanov (2014) argue that differences in HDI are determined by the income component (GNI). Oil and gas wealth made Kazakhstan and Turkmenistan better than other CAR.

Thus, so far no attention has been paid to comparative study of dynamics (trends) of HDI components in CAR.

The aim of this research is to study transition experience and its impact on human development. This study compares experiences in economic, education and health reforms of CAR during transition period. This research seeks to address how to improve human development in CAR.

## CHAPTER 3

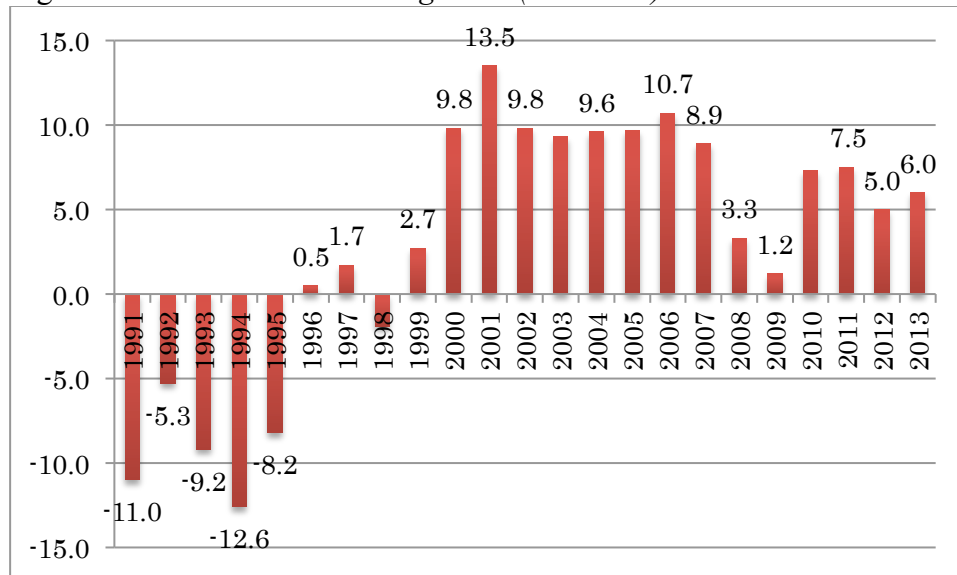
### 3. PRESENTATION OF MATERIALS

#### 3.1 Kazakhstan

##### 3.1.1. Macroeconomic development.

In 1991, Kazakhstan gained sovereignty and started a path of building a new state with a new economic system. With achieving independence, a country faced severe challenges of transition from a planned economy to a market model of economy. Due to break up of economic links with other former Soviet Union republics, new state experienced fall of GDP in first period of independence. In 1991, fall of GDP accounted for -11% and in 1994 it was -12.6% (See Figure 3.1.).

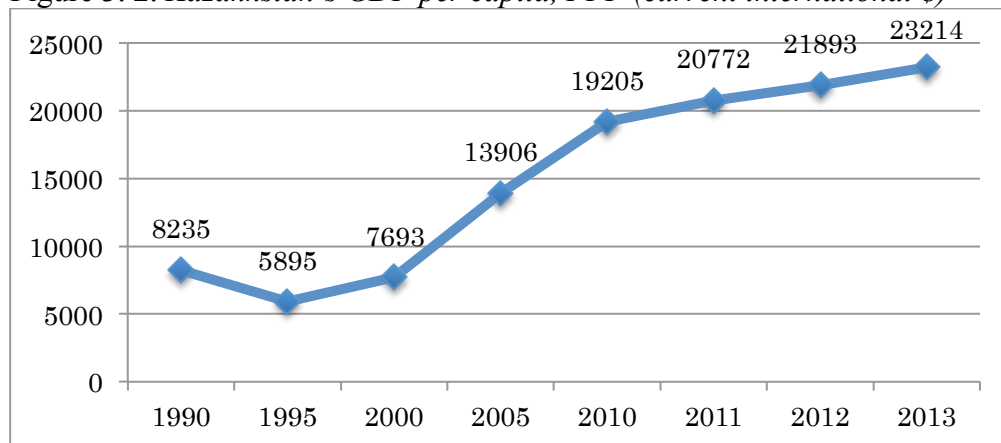
Figure 3. 1. *Kazakhstan's GDP growth (annual %)*



Source: World Bank. Compiled by the researcher.

Kazakhstan's GDP per capita decreased from 8235\$ in 1990 to 5895\$ in 1995  
 (See Figure 3.2.).

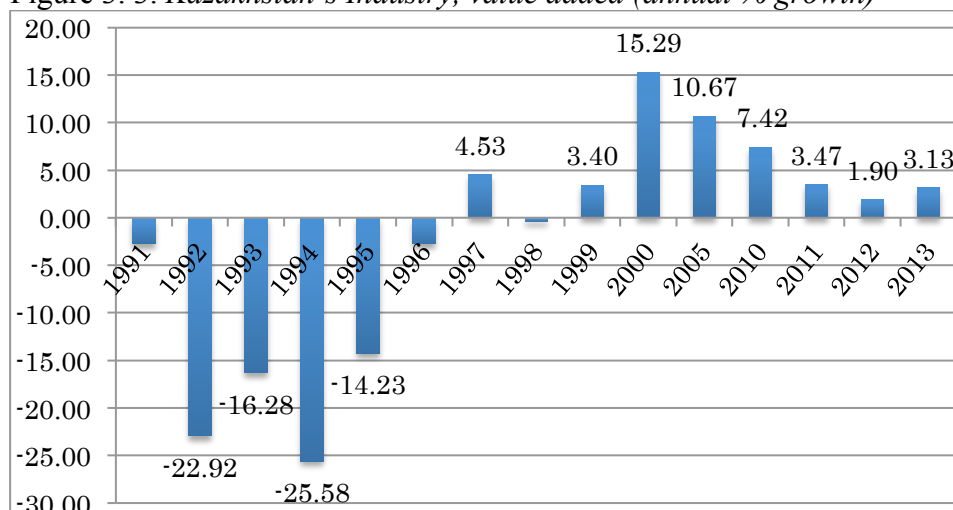
Figure 3. 2. *Kazakhstan's GDP per capita, PPP (current international \$)*



Source: World Bank. Compiled by the researcher.

Industry output has sharply dropped because of lost traditional markets throughout the Soviet Union. In 1992 declining of industrial production was -22.92% and in 1994 it was -25.58% (See Figure 3.3.)

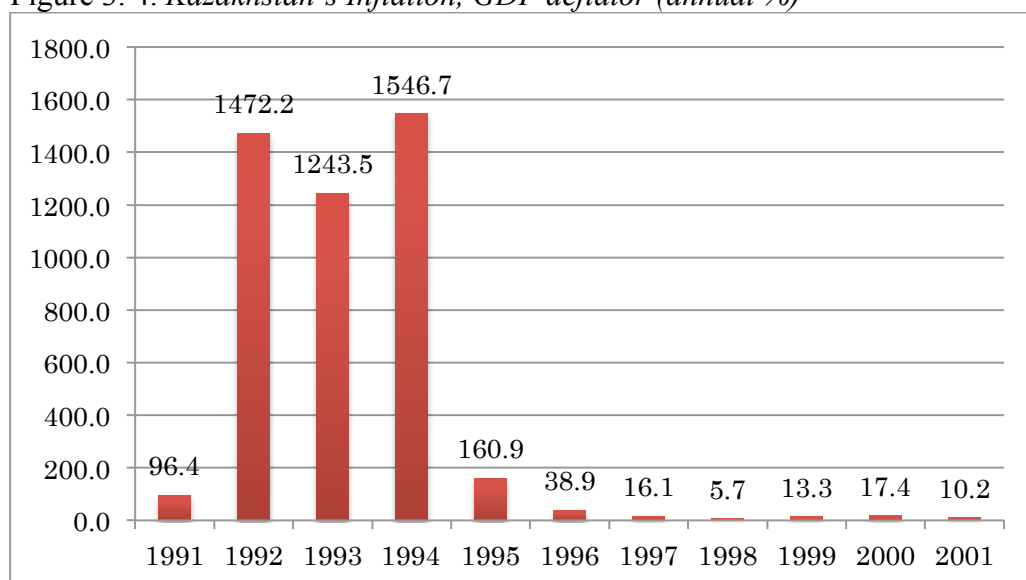
Figure 3. 3. *Kazakhstan's Industry, value added (annual % growth)*



Source: World Bank. Compiled by the researcher.

Extremely high rate of inflation was another sign of deterioration of the economic situation in the Kazakhstan during initial period of transition to market economy. In 1992, the inflation rate was 1472.2 % (GDP deflator) and then in 1994 it was 1546.7 % (See Figure 3.4.). Transition to the Kazakh national currency – the tenge – has been in November 1993. Introduction of its own currency was the condition for the conducting of more independent policy in realization of economic reforms (Koshanov, 1995).

Figure 3. 4. *Kazakhstan's Inflation, GDP deflator (annual %)*



Source: World Bank. Compiled by the researcher.

Kazakh government endeavored to stabilize economic situation through liberalization of the economy. Most prices, interest and exchange rates were liberalized. Government tried to create favorable trade regime through removal of several quantitative restrictions and optimization of import tariffs.

Authorities of Kazakhstan undertook active measures to attract capital investments to extractive industry. Government created free economic zones with

fiscal preferences and other favorable conditions for foreign capital (Koshanov, 1995). Along with it, government tried to provide employment assistance for well-educated citizens.

All small scale state-owned enterprises and most medium companies were privatized.

By mid-1999, 75.6% of Kazakhs' enterprises were privatized (Olcott, 2000). Ownership of 80.2% of small companies, 40.8% of medium-scale enterprises and 52% of sizeable companies was transferred to private sector.

In order to decrease the budget deficit, transfers from budget to enterprises and banks were limited.

From the mid-1990s, the government began fiscal reforms. Under these reforms fiscal system and administration were restructured. Formulation of the budget, as well as its implementation and monitoring has been tightened up. New Tax code was introduced in 1995. Tax code simplified and modernized the tax system of Kazakhstan.

Kazakh economy experienced significant structural changes and as result the portion of agriculture and manufacturing has diminished, while the share of mining sector as well as informal economy increased (World Bank., 2000).

Breakdown of agricultural and manufacturing segments and growth in the oil industry have fuelled anxiety that economy is becoming dependent on oil (Pomfret R. , 2005).

As it can be seen from the Figure 3.1, for the first time country's GDP growth became positive in 1996. GDP growth in this year amounted to 0.5% and in the next 1997 it was 1.7%.



However, financial crisis in Russia hit economy of Kazakhstan in 1998. Also, along with it, fall in oil prices and poor harvests in this year had negative impact on economic performance of the country.

Value of GDP has fallen to -1.9% in 1998. Likewise, industry output showed decreasing by -0.4%. In 1999 Kazakhstan experienced currency devaluation.

Along with upturn of oil industry, associated budget revenues have increased. For instance budget deficit in 1999 was -3.5% of GDP, while in 2000 it became -0.1% of GDP (See Figure 3.5.). At the same time, it is worth to mention that until 2000 collecting of budget revenues was weak although certain tax reforms were made. This fact also contributed to budget deficit.

All adopted stabilizing and structural measures managed to ensure relatively stable social protection. About 60% of total public expenses directed to social sector comparing to 54% in the western high-income countries (World Bank., 2000).

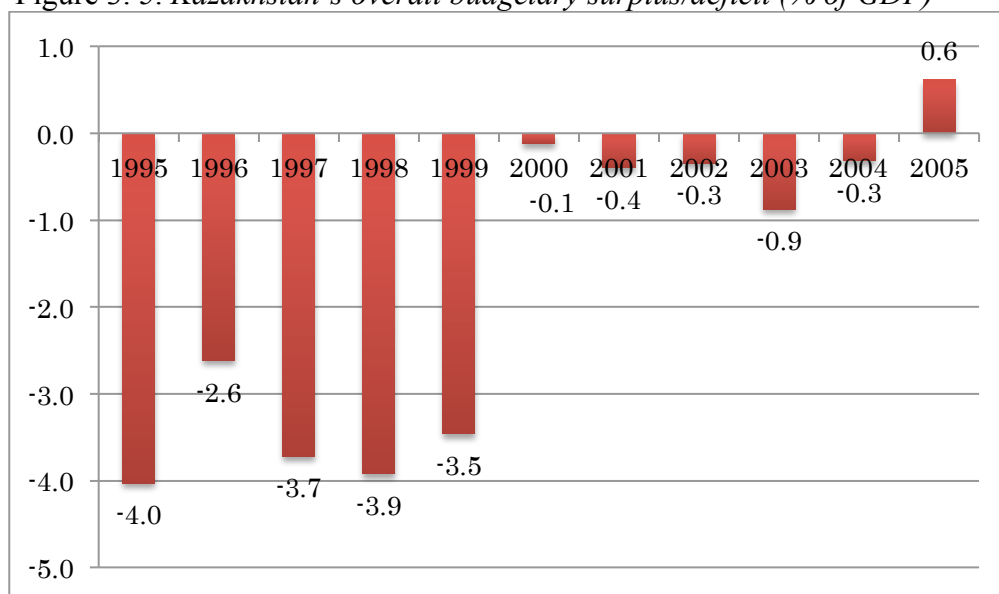
In 2000, in order to proper management of oil revenues and securing transparency, National Fund of the Republic of Kazakhstan was established. The aim of this institute, as an off-budget fund, is to save part of oil revenues for future generations and to ensure stability of the economy in light of volatility of oil income (IMF, 2013).

From 2000 to 2007 Kazakh economy enjoyed steady growth ensured by oil and metal extraction industry. Along with growing amount of extracted petroleum rising world commodity prices underpinned good economic performance. In the beginning of twenty-first century Kazakhstan witnessed boom period thanks to increasing of proven oil reserves and rising of oil prices (Pomfret R. , 2005).

It should be pointed out that significant oil, gas reserves and mineral resources were revealed in Kazakhstan in the beginning of the 1990s (Amin & Ainekova, 2012). Significant rise of the commodity prices along with the oil boom, also increased exports and boosted the coming in of foreign investments (Amin & Ainekova, 2012).

Oil boom and world rising in commodity prices had significant impact on the non-oil segments of the Kazakh economy. Financial, construction, food, and business services sectors underwent real upturn. This growth was the direct or indirect result of the appeared demand from oil investments and expending.

Figure 3. 5. *Kazakhstan's overall budgetary surplus/deficit (% of GDP)*

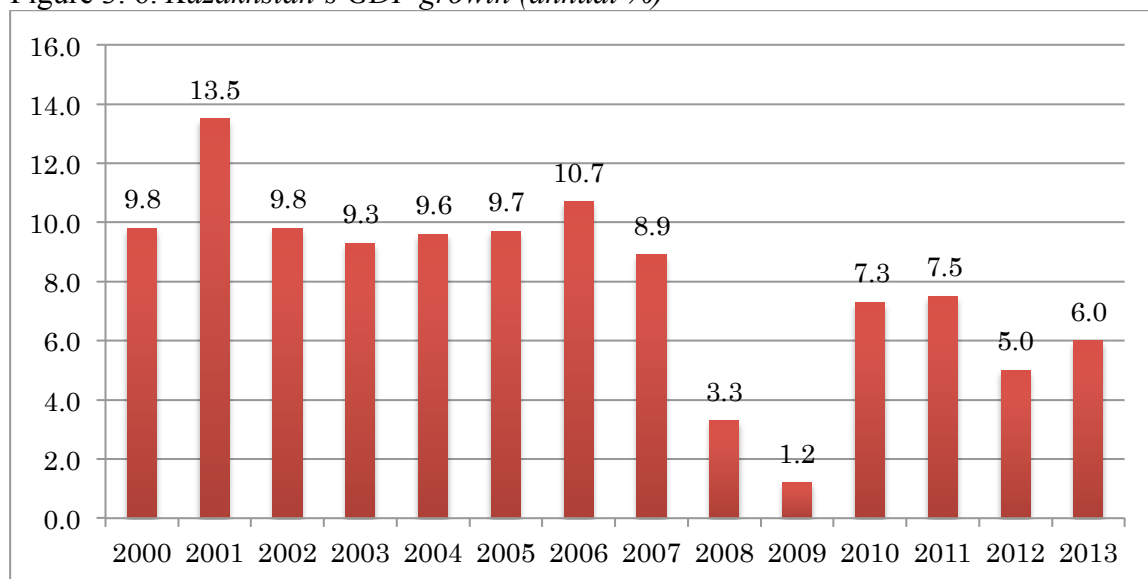


Source: Asian Development Bank. Compiled by the researcher.

Poverty headcount ratio of Kazakhstan decreased from 6.12% in 2001 to 0.02% in 2005 (See Figure 3.7.). Carneiro & Lederman (2013) highlighted strong correlation between decreasing of poverty and development of economy of the country in the period of 2001-2009.

In 2008, the world financial crisis hit Kazakhstan's economy, especially the banking sector. Weak financing habit of bank sector was the main reason of hard financial suffering (World Bank, 2012). As the World Bank (2012) described, Kazakh banks practiced excessive leveraging by using foreign funds, which significantly decreased with world financial crunch.

Figure 3. 6. *Kazakhstan's GDP growth (annual %)*



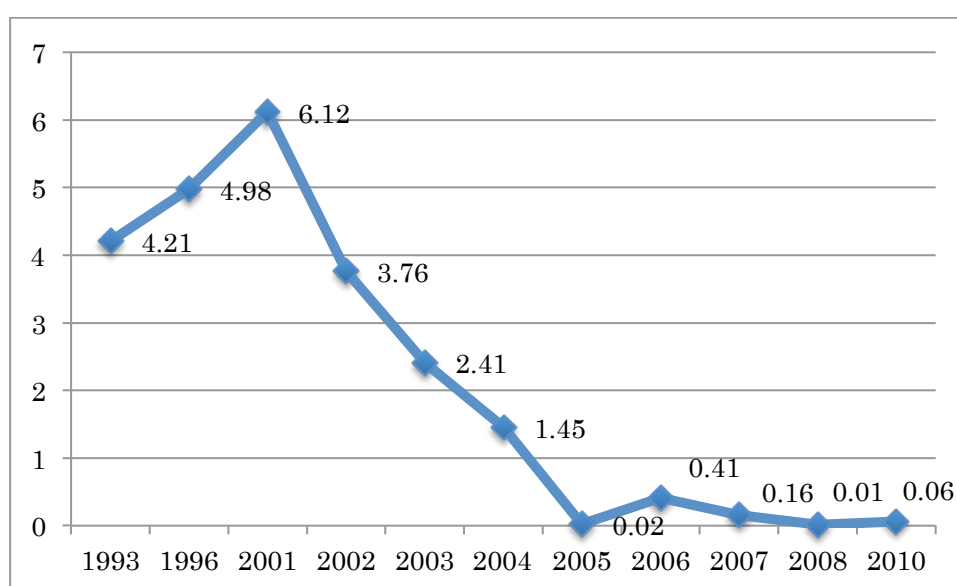
Source: World Bank. Compiled by the researcher.

During crisis period, GDP growth was only 3.3% in 2008 and 1.2% in 2009 while in 2007 it was 8.9% (See Figure 3.6.).

After financial shock period GDP growth became more sustainable and accounted for 7.3% in 2010. This growth was possible thanks to increasing world commodity prices and proper monetary strategy. Also, important role in stabilizing economy was played by National Fund of the Republic of Kazakhstan. Resources of the fund were used for fiscal stimulus for economy and financial bailout for domestic banks.

Rich natural resource endowment and economic reform-oriented strategies have lifted Kazakhstan's GDP per capita (Barisitz, 2009). Kazakhstan has shown considerable progress in its shifting towards market economy and now aspires to successful future owing to its oil endowment. Improving conditions for trade has reinforced economic growth of the country.

Figure 3. 7. *Kazakhstan's Poverty headcount ratio at \$1.25 a day (PPP) (% of population).*



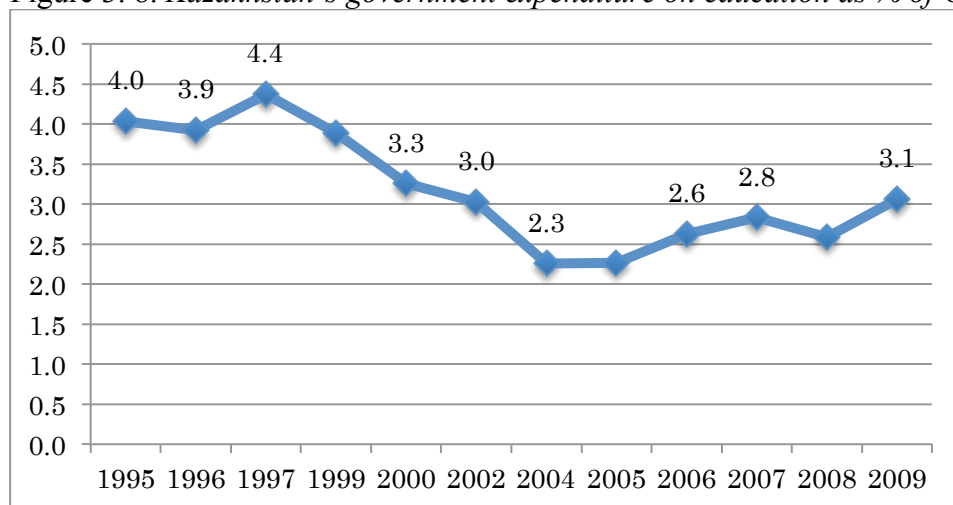
Source: World Bank. Compiled by the researcher.

### 3.1.2. Education.

As in all former Soviet republics, the Kazakh people used to have universal access to education in the beginning of sovereignty.

In the first years of independence, the government considered the education sector as one of the priority issues, but the budget deficit limited expenditures on this sector. In 1995, the government expenditure on education was 4% of GDP (See Figure 3.8.).

Figure 3. 8. *Kazakhstan's government expenditure on education as % of GDP.*



Source: World Bank. Compiled by the researcher.

Legislative framework for establishing private higher educational institutions was adopted in 1993.

During 1995-2000, in order to renovate higher education, changes in legal base were made. Administration and financing of the sector were decentralized as well as academic establishments were given more authorities in allocation process of own budget (World Bank, 2007).

In 1999, the government established an incentive scheme of providing grants and credits for institutions instead of direct subsidizing, which realized on trial basis. This measure has been undertaken as one of the steps of developing private sector of education.

In 2007, a new Law on Education was introduced. This law intended to create a competitive education system and optimizing state regulation of education sector. According to this law, obligatory general schooling period was extended to twelve years. Structural changes were made in professional training system. In higher graduate and post-graduate study area government founded a three-step system.

Kazakhstan is the first Central Asian republic that became a member of the European Higher Educational Area (Pak, 2010).

Also, the government had intentions to create a quality appraisal system. For instance, government introduced indicators of quality evaluation. Nation wide standards for education were adopted in 2007. 80 new schools were opened on September 1, 2008.

In 2011, Kazakhstan joined Bologna process, with the aim to engage in international education community.

According to Ministry of Education and Science of Kazakhstan, in the period of 2011-2014, a twelve-year experimental system of compulsory secondary education applied in 104 schools. These schools were supplied with experimental textbooks and teaching materials.

However, to date, full introducing of this model will be postponed due to financial considerations of Kazakh state budget.

### **3.1.3. Healthcare.**

Kazakhstan inherited Soviet system of healthcare, as well as other CAR after gaining independence. Soviet health sector was fully financed by state. This system, with a branched network, provided a wide range of health services for the population. Soviet medicine was free and accessible to all.

With the beginning of the transition and associated economic decline, health system of the Kazakhstan also started to undergo difficulties. With worsening of economy and increasing poverty health of population also deteriorated. State budget deficit decreased financing of health sector.

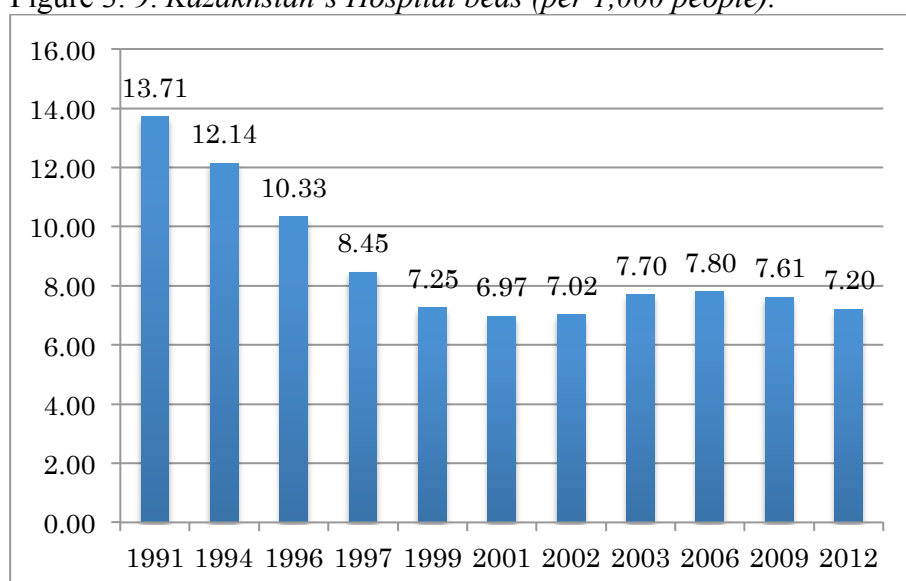
In the initial period of transition to market economy, privatization process of state assets also included certain medical facilities, as dental clinics and drugstores.

In order to reform healthcare sector, in 1991 Kazakhstan adopted Law on the Protection of the Population's Health. Based on that law, some strategic documents were adopted by Ministry of Health.

These documents provided main directs of reforms. First of all, it was introducing health insurance system. Health insurance mechanism revised financing system of medical services. Second, desired reforms should provide revise of health administration particularly in terms decentralizing of management. Projected changes also included such measures as focusing on primary care, decreasing hospital beds, developing private health services and retraining of health employees.

Hospital beds (per 1000 people) decreased from 13.71 in 1991 to 6.97 in 2001 (See Figure 3.9.). Reducing hospital beds was on of the elements of policy of shifting from inpatient care to outpatient care.

Figure 3. 9. *Kazakhstan's Hospital beds (per 1,000 people).*



Source: World Bank. Compiled by the researcher.

State program “Health of the Nation”, with implementation period 1996-2004 was the next strategic document of Kazakh government. Kazakhstan made effort aiming at reform health financing system by creating Mandatory Health Insurance Fund in 1996. However, in 1998 Kazakh authorities turned back to previous system of funding health sector and abandoned Health Insurance Fund. From 1999 healthcare system again started to fully finance from state budget.

In 1999 Kazakh authorities paid attention to primary healthcare in rural settlements by setting minimum standards of state health providing for rural population (Amagoh, 2013). With aim of reinforce healthcare in rural areas, the government exposed obligatory assigning of state-funded job-hunting graduates to rural parts of country. However, numerous medical employees could easily avoid this obligation.

From 2004 government of Kazakhstan by adopting National Health Reform and Development Program for 2005-2010, continued to focus on primary healthcare and paid more attention to outpatient care than inpatient. In primary health service capitation-based payment system was introduced. Above-mentioned program had the range of foremost goals like approaching to international standards, improving infant and maternal health, advancing health facilities. Also, new state-guaranteed basic benefits package of services was again adopted. That package was provided by state and was free. The package also included free pharmaceuticals for certain group of population.

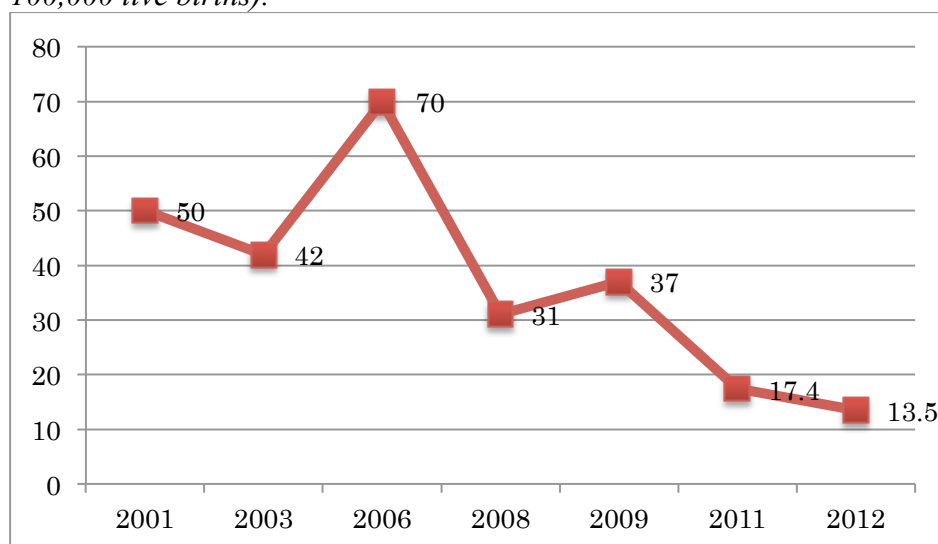
Next stage of reforms was started since 2010 with Salamatty program. Program focused on healthy lifestyle and promoting national pharmaceutical industry. Also,



state was intended to renew and construct facilities related to primary health service, and mother and child healthcare. The government from 2010 has been substituting payments per case for hospitals (a type of diagnosis-related group) by compensation of real expenses (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

Maternal mortality ratio has decreased from 70 in 2006 to 31 in 2008 (See Figure 3.10.). In 2012 this ratio became 13.5. That figure shows unstable change of maternal mortality ratio during 2001-2012.

Figure 3. 10. *Kazakhstan's maternal mortality ratio (national estimate, per 100,000 live births).*



Source: World Bank. Compiled by the researcher.

In contrast, infant mortality rate has sustainable declining trend from 2001 to 2013 (See Figure 3.11.). This indicator was 35.7 (per 1,000 live births) in 2001 while in 2013 it became 14.6 (per 1,000 live births).

In order to approach medicine to international standards, Kazakh government carried out certain measures. These initiatives include adoption quality indicators;

establishing body to consider grievances on quality of healthcare; and creating online database with medical information for convenience of patients (Amagoh, 2013).

Also, Kazakh authorities pay attention to improving human resources of health sector. Programs of educational establishments of health sector were changed in line with international standards. Continuous education and retraining of health workers as well as strengthening of capacity of medical educational establishments are permanent tasks of Kazakh government.

In terms of partnership Kazakhstan also made some efforts. For instance, health reforms supported government cooperation with civil society organizations, private industry and international institutions (Amagoh, 2013).

Figure 3. 11. *Kazakhstan's Mortality rate, infant (per 1,000 live births).*



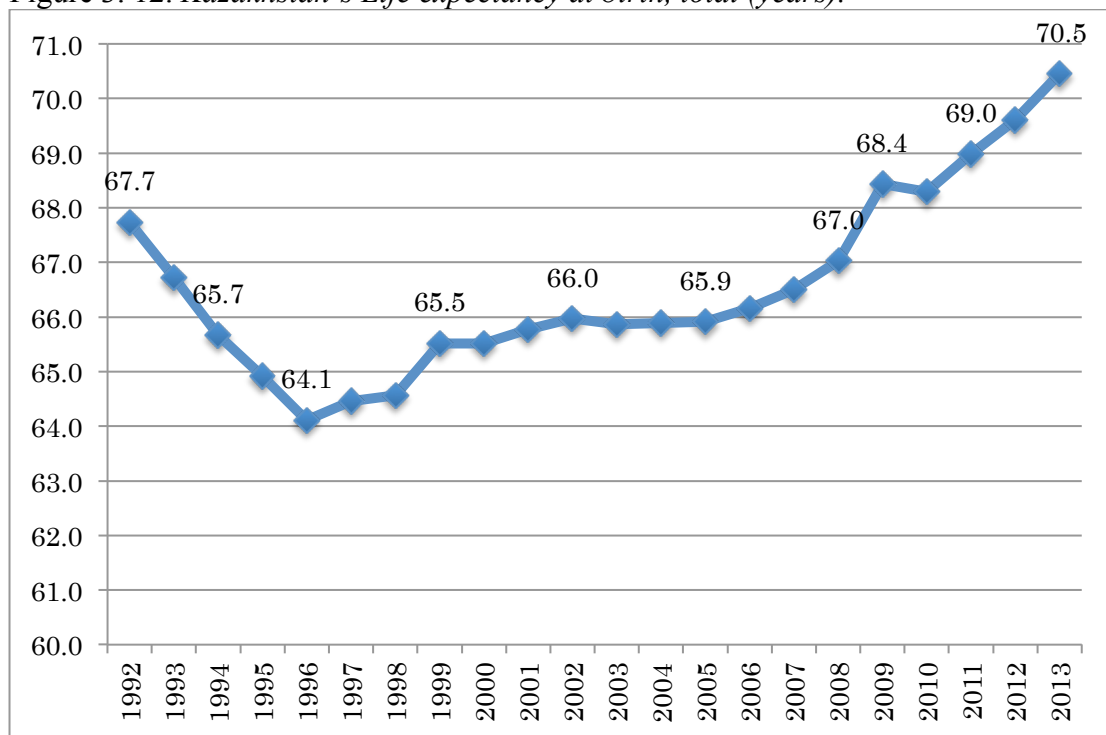
Source: World Bank. Compiled by the researcher.

Overall, Kazakhstan made significant efforts to reform healthcare sector. Reforms concerns such issues as financing system, quality of health care, capacity

building of medical workers (training and retraining), renewal existing and constructing new health facilities, introducing international standards and new information technologies and etc.

Clearly, all before-mentioned reform efforts made by Kazakhstan brought positive results. In fact, as it shows Figure 3.12., during 1992-1996 life expectancy at birth had steady declining dynamic. On the contrary, since 1997 this indicator has been improving. In 1997 life expectancy at birth was 64.5 years while in 2013 it became 70.5 years. It should be pointed out that achieving 70 years of life expectancy at birth of population by 2015 was made a Kazakhstan's goal (Ministry of Health, 2012), while this target has already been reached in 2013.

Figure 3. 12. *Kazakhstan's Life expectancy at birth, total (years).*



Source: World Bank. Compiled by the researcher.

## **3.2. Tajikistan**

### **3.2.1. Macroeconomic development.**

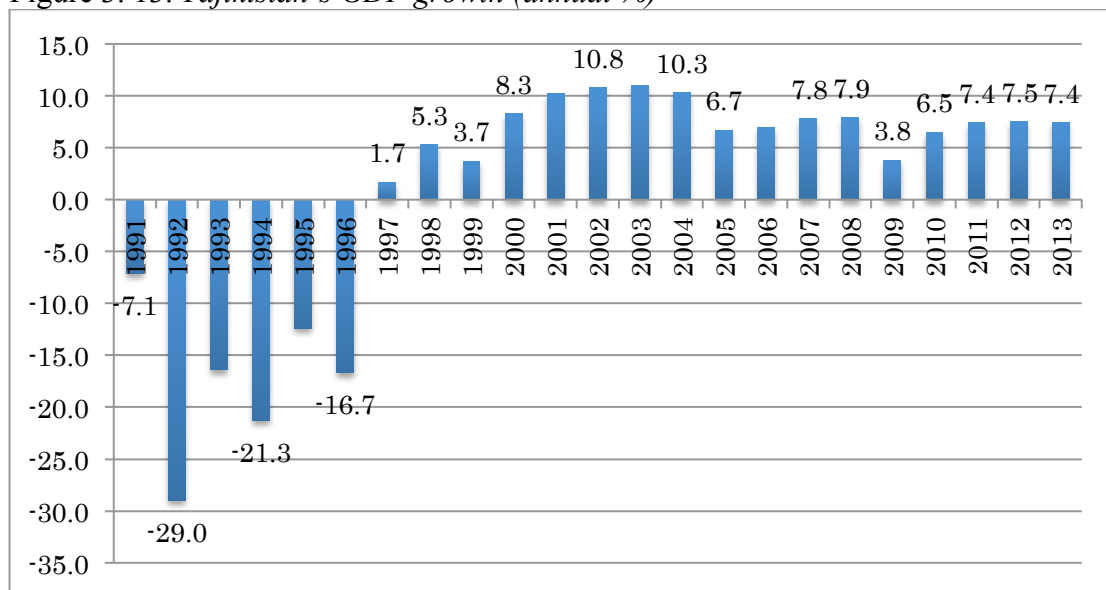
Tajikistan was the poorest republic of the former Soviet Union at the time of obtaining sovereignty (World Bank, 1996). But more tragic is the initial period of state building. Tajikistan is the state of Central Asian region, which experienced most dramatic political events after gaining independence. The civil conflict has erupted as a result of struggle for power among rival clans. Tajikistan is only one republic among fellow countries, which did not transform peacefully from Soviet republic to sovereign state under unchanged leadership (Pomfret R. , 2006).

The civil war that lasted from 1992 through 1997 postponed reforms towards market economy. The government could not fully concentrate on economic problems because of civil war and political instability.

Civil conflict resulted in severe economic damage and deteriorated social conditions of population. War that lasted for five years brought extensive destruction to the country's infrastructure. Large emigration of skilled labor force had also negative consequences for the economy.

GDP declined by -29% in 1992 and in 1994 fall amounted for -21.3% (See Figure 3.13).

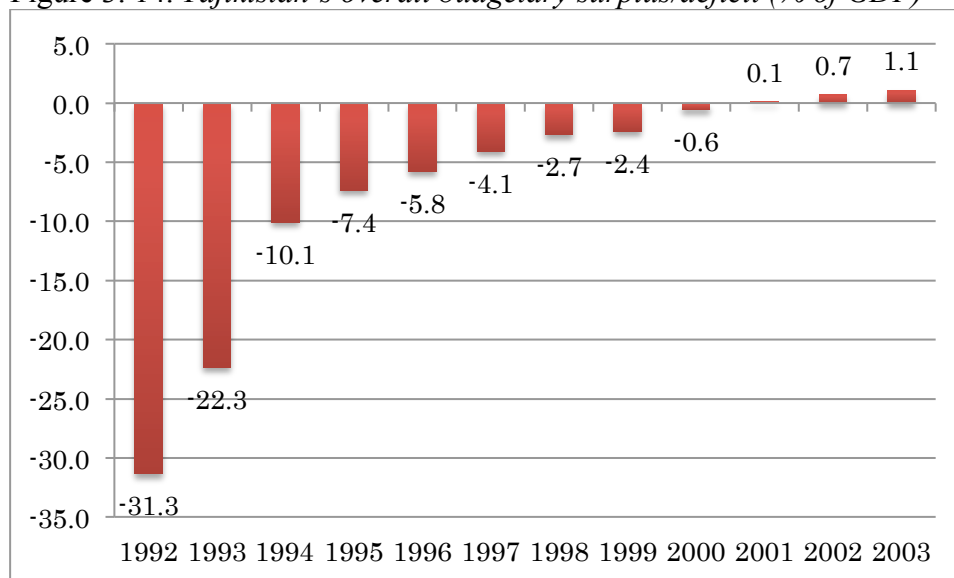
Figure 3. 13. *Tajikistan's GDP growth (annual %)*



Source: World Bank. Compiled by the researcher.

With the break-up of the Soviet Union all subsidies from the central Union budget abruptly stopped. Central budget transfers from Moscow constituted significant part of republican budget. Budget deficit accounted for -31.3% of GDP in 1992 (See Figure 3.14).

Figure 3. 14. *Tajikistan's overall budgetary surplus/deficit (% of GDP)*

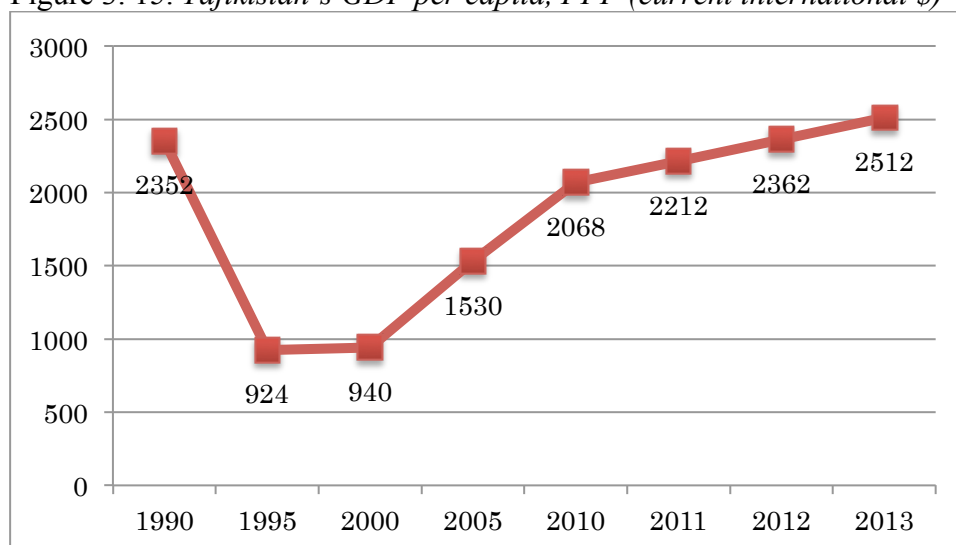


Source: Asian Development Bank. Compiled by the researcher.

Together with civil conflict severe flooding in 1992 and 1993 yields major destruction to infrastructure and productive assets of Tajikistan.

GDP per capita decreased from 2352\$ in 1990 to 924\$ in 1995 (See Figure 3.15.).

Figure 3. 15. *Tajikistan's GDP per capita, PPP (current international \$)*



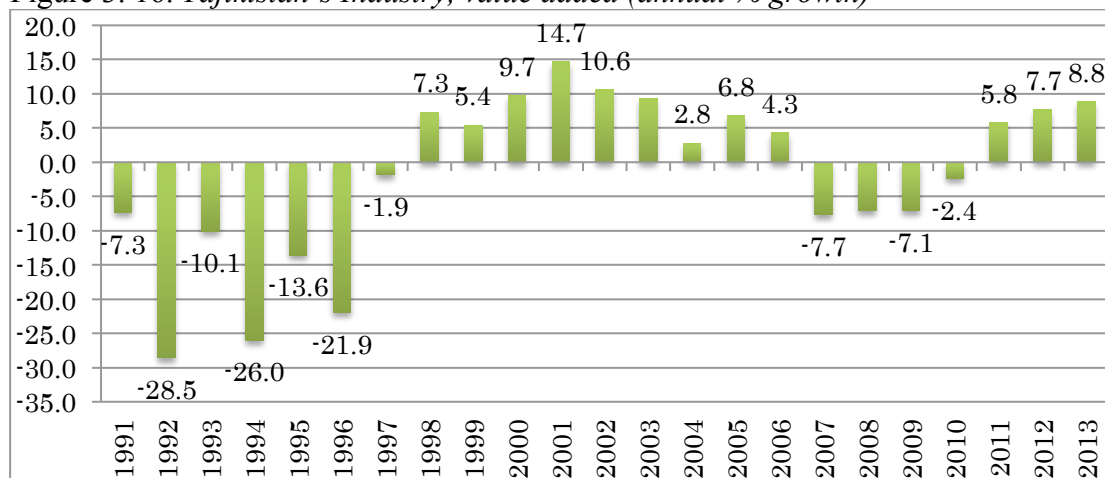
Source: World Bank. Compiled by the researcher.

Industry output decline was -28.5% in 1992 and in 1996 this indicator showed -21.9% (See Figure 3.16.). Average decline during 1992-1996 accounted for -20%.

In the first years of independence the government controlled and subsidized retail prices as well as retained state orders.

State orders were eliminated in 1996 including obligatory sales to cotton crop (Jeffries, 2003).

Figure 3. 16. *Tajikistan's Industry, value added (annual % growth)*

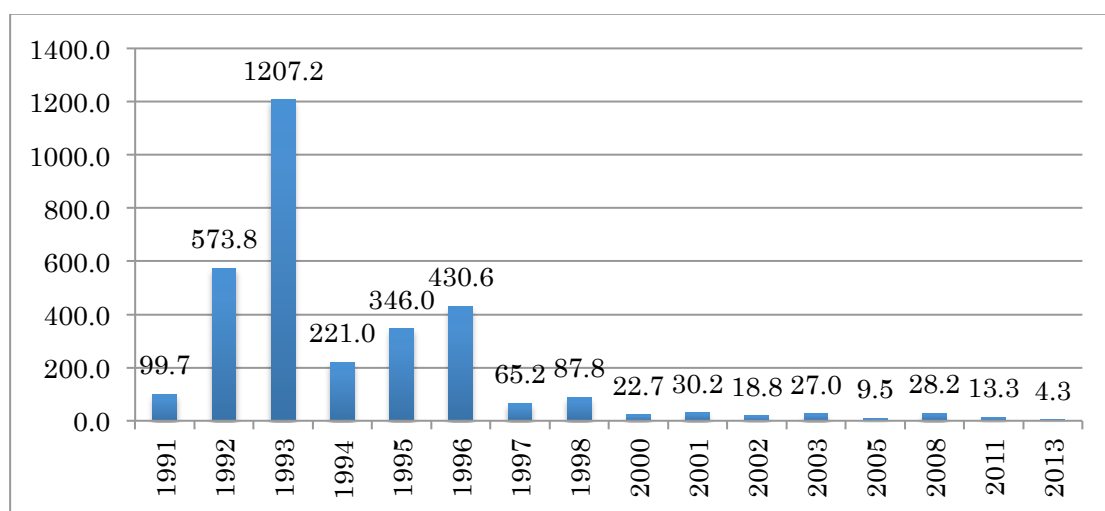


Source: World Bank. Compiled by the researcher.

Tajikistan was in monetary union with Russia and used its rubles until 10 May 1995. On this day Tajikistan introduced own national currency – the Tajik ruble - and was the last former Soviet republic, which made it (Jeffries, 2003).

Inflation rate in 1992 was 573.8% and then it sharply soared to 1207.2% in 1993 (See Figure 3.17.). In 1994 inflation declined to 221% but in the next two years it had rising trend and in 1996 it was 430.6%. Such high inflation rate was due to inflation level and monetary developments in Russia, and excessive monetary supply after introducing of the Tajik ruble (World Bank, 1996).

Figure 3. 17. *Tajikistan's Inflation, GDP deflator (annual %)*



*Source:* World Bank. Compiled by the researcher.

New economic program, which contemplated structural reforms, was started in late 1997 with assistance of IMF (Jeffries, 2003).

After introduction of national currency in 1995 the government liberalized most of prices and interest rates. Export restrictions were lifted with the exception of quotas on main export commodities (cotton and aluminum).

The report of World Bank (1996) listed two factors, which hampered reform efforts of Tajik government during first half of the 1990s. First factor is the limited capacity of the government to conduct structural changes. It was difficult for the government to solve a number of problems at once. Second, existing influential political pressure to retain public expenses and to detain structural changes that would detriment interests of powerful political elites.

After the end of war Tajik economy started to grow. In 1997 GDP growth was 1.7% against -16.7% of GDP decline in previous year. In 1998 this indicator of economic activity showed growth at 5.3%. Probably growth of economy could be higher, but Russian financial crisis of 1998 and fall of world cotton prices seriously affected the Tajik economy. Industry production began rise in 1998 with 7.3%.

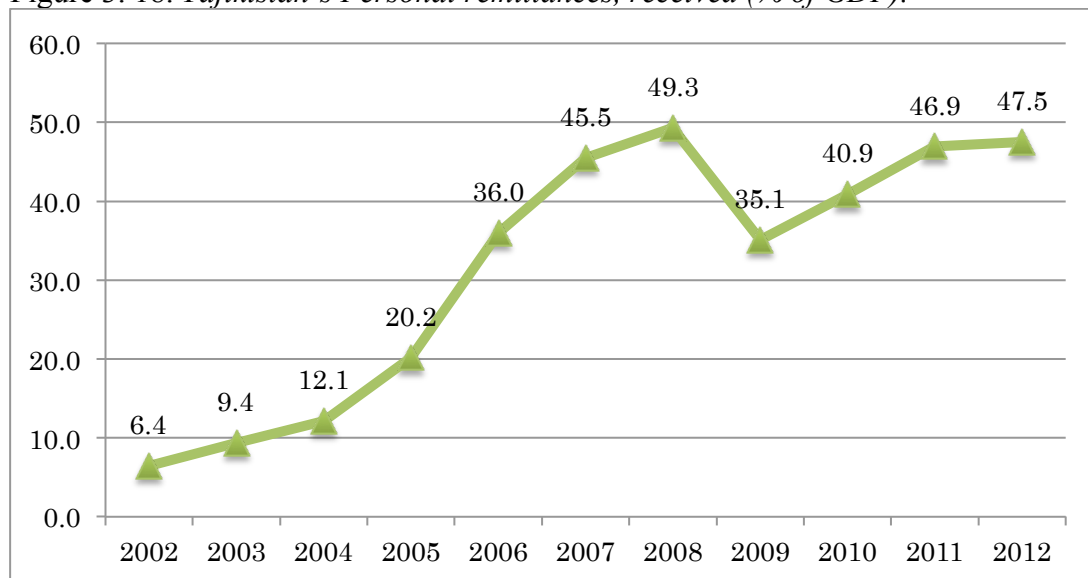
Structural reforms began in 1998. Tajik government undertook measures to create liberal trade regime for import-export activity. Authorities began to develop legal base for non-banking institutions, which can provide medium-term credits.

Steady growth of economy began in 2000 with 8.3%. Average GDP growth per year for the period of 2000-2005 was 9.5%. Main drivers of economic growth were rise of aluminum production and cotton harvest as a result of macroeconomic



stability and structural reforms. Remittances of labor migrants as well as reform efforts of the government underpinned domestic demand (World Bank, 2003). Received personal remittances were 6.4% of GDP in 2002 (See Figure 3.18.).

Figure 3. 18. *Tajikistan's Personal remittances, received (% of GDP).*



Source: World Bank. Compiled by the researcher.

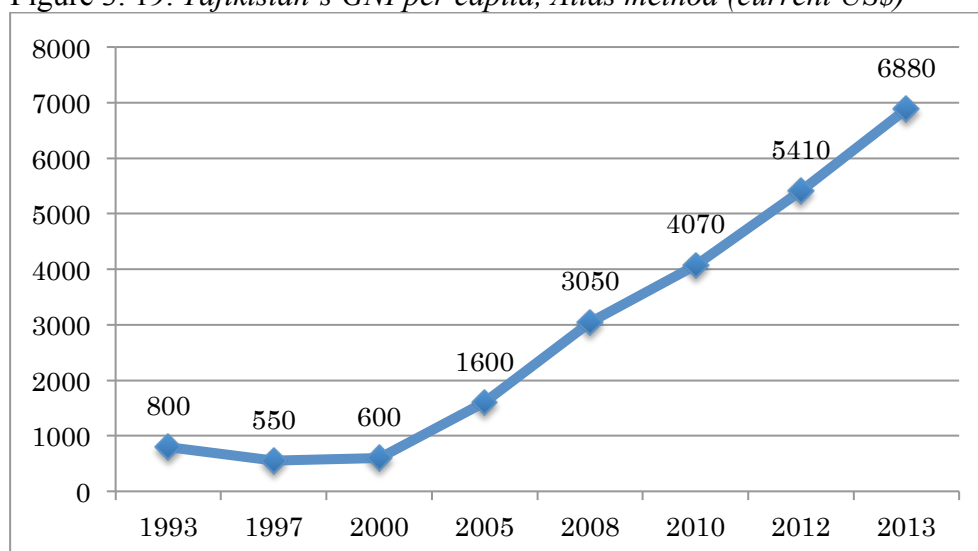
Since 2000 the government began tight monetary policy. Such policy has resulted in 22.7% inflation rate in 2000 while in 1998 inflation was 87.8%.

Improvements in revenue collection and optimizations in expenditures provided relatively good budget discipline (World Bank, 2003). As a result of these measures the government achieved budget balance in 2001. In this year Tajikistan witnessed budget surplus in 0.1% of GDP while in 2000 there was budget deficit in -0.6% of GDP. State revenues in 2001 primarily came from cotton and aluminum export taxes (World Bank, 2003).

Personal remittances increased to 20.2% of GDP in 2005, from 6.4% in 2002. GNI per capita also increased from 600\$ in 2000 to 1600\$ in 2005 (See Figure 3.19.). Fast growth of Russian economy increased demand for Tajik labor force.

Rising world commodity prices for main export items – cotton and aluminum – also was favorable condition for stable growth of Tajik economy during 2000-2008 (World Bank, 2010). In addition to this, economic growth of other main trading partners contributed to GDP growth during this period.

Figure 3. 19. *Tajikistan's GNI per capita, Atlas method (current US\$)*

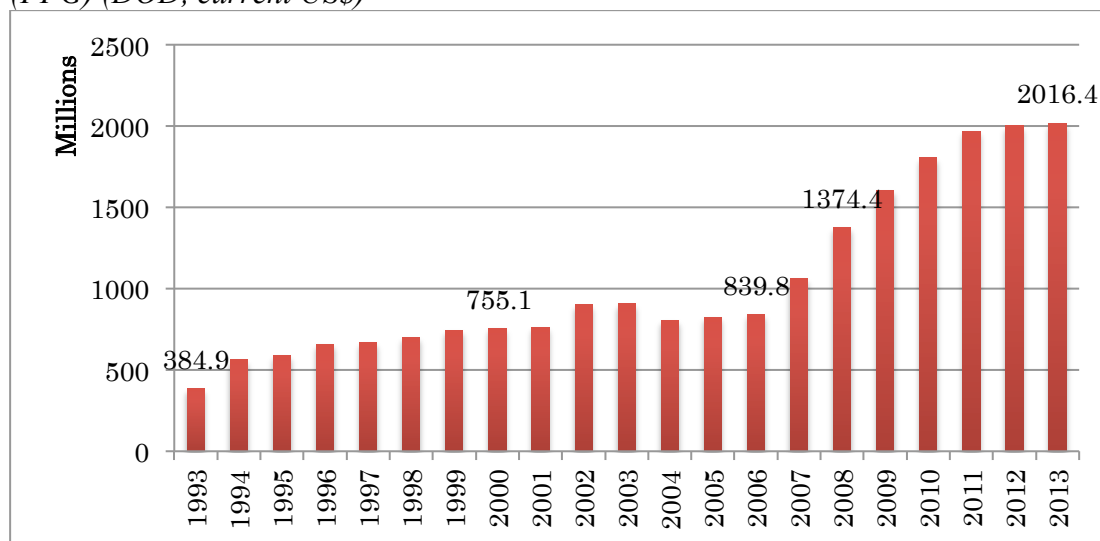


Source: World Bank. Compiled by the researcher.

Tajikistan introduced new business regulation laws in order to create favorable climate for entrepreneurship.

Air access was liberalized in the framework of reforms in the aviation sector. This reform resulted in growing passenger turnover.

Figure 3. 20. *Tajikistan's External debt stocks, public and publicly guaranteed (PPG) (DOD, current US\$)*



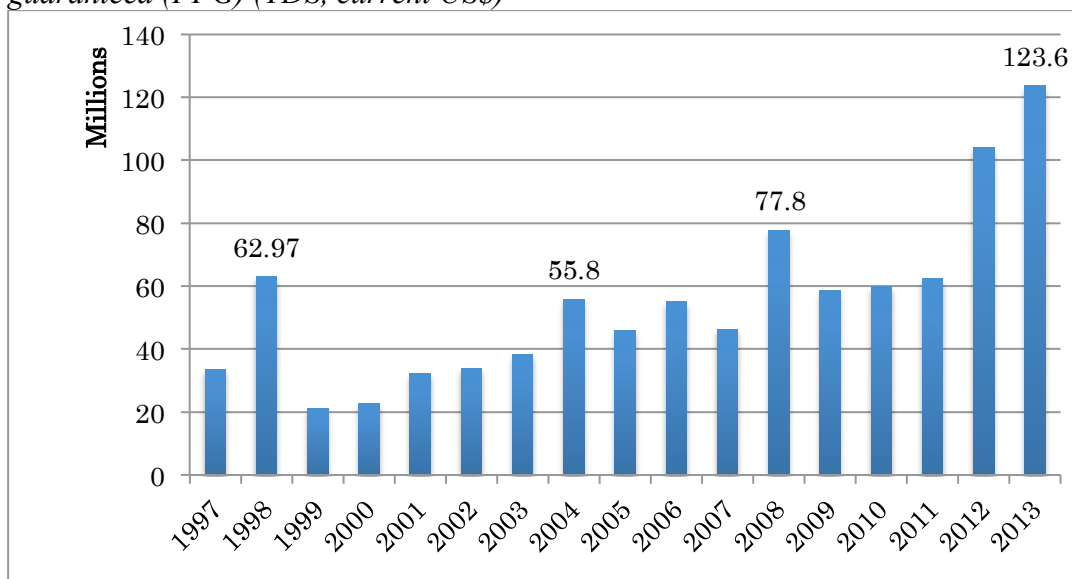
Source: World Bank. Compiled by the researcher.

External public debt increased significantly since 1993 (See Figure 3.20.). In 2006 it became 839.8 million \$ against 384.9 million \$ in 1993.

Debt burden on budget reflected in Figure 3.21, which shows debt service on external public debt. In 2004 the government spent 55.8 million \$ on external debt service and in 2008 this service amounted for 77.8 millions \$.

Budget deficit widened in 2007 to -8.1% of GDP (See Figure 3.22.) due to increased public investment programs. Also, external debt increased in 2008 because of launch of infrastructure projects based on Chinese and other credit sources.

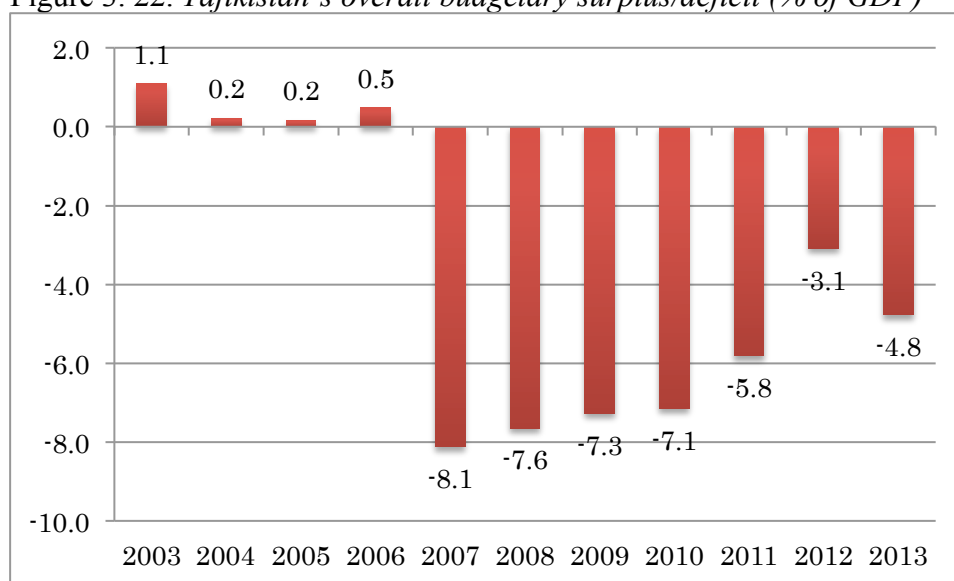
Figure 3. 21. *Tajikistan's Debt service on external debt, public and publicly guaranteed (PPG) (TDS, current US\$)*



Source: World Bank. Compiled by the researcher.

Industry production experienced decline during 2007-2009 owing to weak performance in manufacturing and agriculture sector. Deficit of electricity and drought were main factors of such performance. In addition to this, weakening demand for cotton and aluminum also contributed to industry output decline.

Figure 3. 22. *Tajikistan's overall budgetary surplus/deficit (% of GDP)*



Source: Asian Development Bank. Compiled by the researcher.

Boost in world oil and food prices during 2007-2008 also negatively affected macroeconomic indicators of Tajikistan (World Bank, 2010).

Global financial crisis of 2008 had unfavorable impact on Tajik economic performance. Especially it was witnessed in remittances inflow from labor migrants. Personal remittances growth fell from 49.3% of GDP in 2008 to 35.1% in 2009 (See Figure 3.13.).

Drop in volume of cotton and aluminum export together with lower global prices was another adverse effect of world downturn on Tajik economy (World Bank, 2012). Owing to these developments, GDP growth fell from 7.9 percent in 2008 to 3.8 percent in 2009.

In order to motivate economic activity of private sector authorities weakened tax burden (reducing VAT and income tax) in 2009. This measure led to fall of fiscal revenues. At the same time, international financial institutions provided budget support for increase of social expenditures in the framework of anti-crisis measures of the government (World Bank, 2010). Public expenditures on social support, education and health were maintained in order to minimize effect of the downturn on vulnerable part of population (World Bank, 2012).

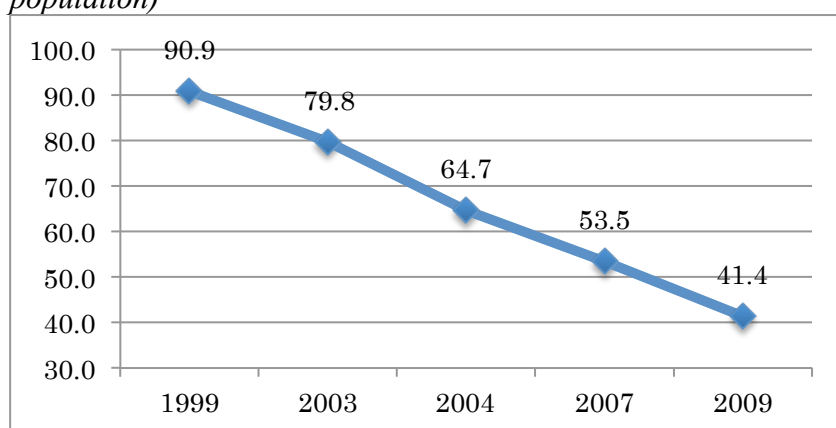
Since 2010 growth of GDP again increased to 6.5% in 2010 and in the next 2011 year to 7.4%. The GDP increase was owing to raised export activity and remittances, and contribution of service sector.

In 2011 agriculture sector made contributions to growth of industry output, which growth was 5.8% against decline trend -2.4% in 2010 (See Figure 3.16.). This year cotton crop was largest in 20 years (World Bank, 2012). Also, industry growth

was underpinned by developments in chemicals, food, and textile processing sectors (World Bank, 2012).

With steady economic growth during 2000-2013 poverty also experienced significant reduction. Poverty decreased from 90.9% in 1999 to 41.4% in 2009 (See Figure 3.23).

Figure 3. 23. *Tajikistan's Poverty headcount ratio at \$2.5 a day (PPP) (% of population)*



Source: World Bank. Compiled by the researcher.

### 3.2.2. Education.

The process of state building also touched education system of new sovereign Tajik state. With beginning transformation from communist ideology and type of society changes in education area also began. However, civil conflict delayed crucial reforms in that sector.

As reconciliation and stability took place in 1997, background became favorable to start changes in education area of Tajikistan.

The Law on Education was adopted in 1993 and further this law was revised and introduced in new edition in 2004. It was basic legislative framework for

education sector of Tajikistan. One of the basic principles of legislation was equal access to education.

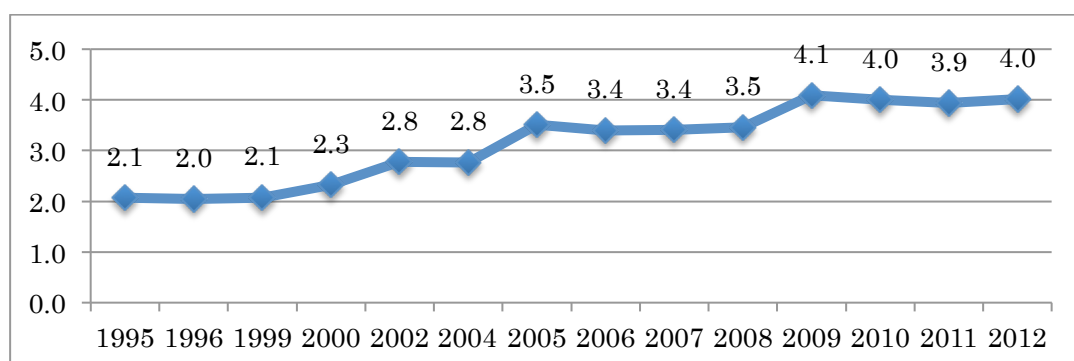
Private sector has been allowed to provide education for population. The government introduced new state educational standards as well as renewed curricula at all stages of education.

Introducing Law on higher education and postgraduate higher education established legislative base for higher education in 2003. Consequently, this law was revised in 2009. In higher education bachelor and master degrees were adopted. At the same time some higher education institutions still continue the old Soviet system of conferring the specialist diplomas.

Practice of regulating of education services was adopted. Such regulation envisages state certification and accreditation of educational establishments as well as licensing of educational activities. Foundation of the state quality monitoring procedure for education was created.

With economic recovery public expenditures on education also rose. Government expenditures on education increased from 2% of GDP in 1996 to 3.5% in 2008 (See Figure 3.24).

Figure 3. 24. *Tajikistan's Government expenditure on education as % of GDP*



Source: World Bank. Compiled by the researcher.

Budget social expenditures gradually increased in order to improve basic state social services. Authorities built new and made refurbishment of some existing schools.

States higher education institutions were given authorities in use their state funds and off-budget funds from other sources.

In 2005, the government began project of per capita financing in some educational institutions with further widening throughout the republic.

School enrollment rate had rising tendency during period of 2000-2006 (World Bank, 2010).

The National Testing Center was established in order to provide new scheme of entrance examination for common higher education institutions.

The government paid attention on labor migrants and introduced life skills training programs for them.

Tajikistan concluded a number of agreements on higher education with respective educational establishments in the former Soviet republics, Asian and European countries and the USA. Treaties on mutual recognition and equivalence of educational degrees were agreed with Russia, Belarus, Kazakhstan, Kyrgyzstan, and Tajikistan in 2001.

Approaching of national higher education to international standards and integration into the worldwide educational process became one of the main ideas of Tajik state educational policy.

Tajikistan actively cooperated with international institutions in education reform issues as well as received technical support. According to data of Tajik government (2012), 14 credit-grant agreements with international organizations were



signed with total amount of 159.7\$ during 2000-2010. With the backing of international donor organizations, some educational establishments were equipped with computers and training materials.

The authority's decision on the introduction of quotas for girls from remote rural areas was important step towards providing equal gender access for higher education.

Various centers of extracurricular education of children and special facilities for children with disabilities have established.

In order to give opportunities to get education in foreign educational institutions the government established special presidential scholarship for talented students.

Poorness in terms of natural resources and demographic rise create difficulties in mobilizing more financial resources for education sector.

### **3.2.3. Healthcare.**

Health care sector was not exception for delayed reforms due to civil war in Tajikistan. Apparently, this tragic evidence also had direct adverse effect on health reform issue of Tajik state. Tajikistan did not enjoy a support for health care reforms from international donor organizations in the initial stages of independence. Dynamic of reforms in Tajik health sector was much slower than in Kazakhstan or Kyrgyzstan (Mirzoev, Green, & Newell, 2007).

The government efforts in health reforms were directed to eliminate irrational expenditures, focus on primary care and introduce of guaranteed services package

(Khodjamurodov & Rechel, 2010). The latter envisaged health service for vulnerable people.

Tajik health system also inherited Soviet model of healthcare service with highly centralized and hospital-based system.

Law on health care protection was adopted in 1997. In 2001 Tajikistan introduced legislation on Pharmaceuticals and Pharmaceutical related Activities. In the next 2002 year country adopted legislative base for reproductive health as well as legislation for private medical practice was established.

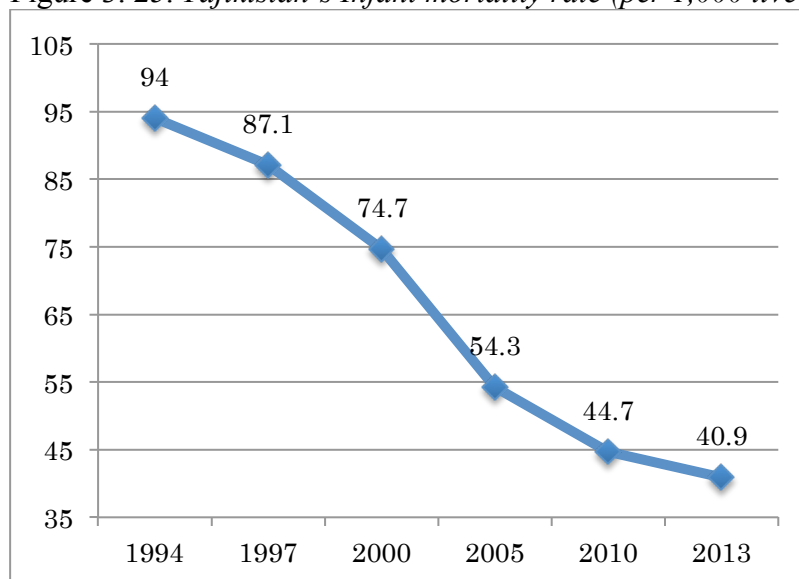
In 2003 law on providing the population with sanitary and epidemiologic safety was introduced. It is worth to mention that deterioration of population's health in the mid-1990s can be also explained by outbreak of infectious diseases due to lack of sanitary-epidemiological service (Mirzoev, Green, & Newell, 2007).

Basic benefit package was reintroduced in some parts of country on pilot basis in 2007. At the same time, per capita financing was introduced in certain pilot districts. In 2008 health insurance system was adopted.

State funded health establishments were given some autonomy and began use additional financial sources. Shift from budget-funding mechanism to financial provision based on capitation and cases began by presentation the basic benefit package and co-payments.

Reduction in poverty together with improved maternal health care resulted in significant fall of infant mortality rate. This rate declined from 87.1 in 1997 to 54.3 in 2005, and further declined to 40.9 in 2013 (See Figure 3.25.).

Figure 3. 25. *Tajikistan's Infant mortality rate (per 1,000 live births)*



Source: World Bank. Compiled by the researcher.

Nonetheless, because of budget constraints and as a result underfinancing, health reform policy implementation was stretched and did not reach the envisaged aims (Khodjamurodov & Rechel, 2010).

In order to concentrate efforts in developing primary care and rationalizing the hospital sector, the government reduced number of beds in hospitals. This number declined from 11.4 hospital beds per 1000 people in 1992 to 4 beds in 2012. That measure was taken with aim to save funds and consolidate resources. However, Ministry of Health was not authorized to reallocate savings to primary care and eventually lost funds devoted to that beds (Mirzoev, Green, & Newell, 2007)

Also, the government abolished less efficient per-bed financing formula in hospital sector.

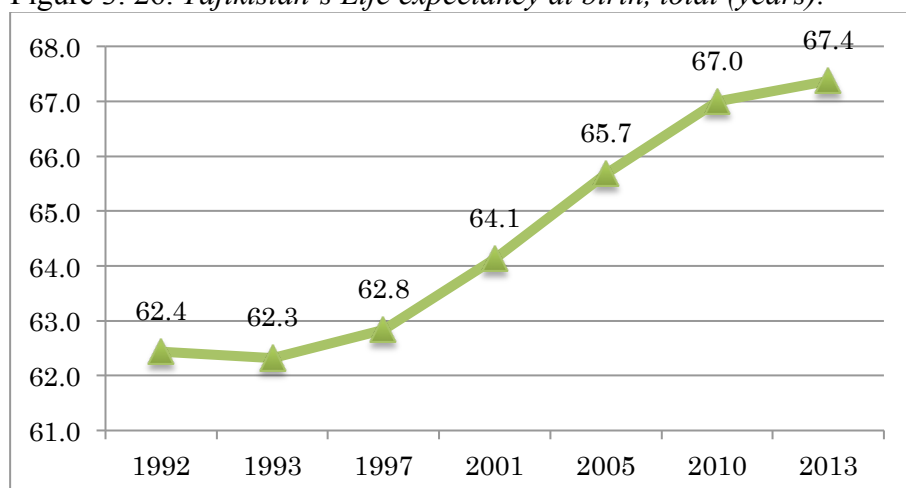
Retraining of medical workers as well as increasing salaries was in agenda of authorities. The problem of migration of high-skilled professionals to other sectors or countries had adverse affect on Tajik health sector.

Authorities also tried to improve information, communication and education activities for population aiming at ensure awareness and knowledge in healthy lifestyle as well as family planning issue.

Another important aspect in health of population is access to safe water and sanitation facilities. In this respect, Tajikistan made efforts and has relatively good results. In fact, according to World Bank 94.4% of Tajik population had access to improved sanitation facilities in 2012 while in 1993 this indicator was 89.5%. Also, certain work was done in providing access to improved water sources and this indicator also significantly increased from 58.2% in 1993 to 71.7% in 2012. At the same time it should be pointed that access to safe water in rural areas considerably differ from urban districts. The problem for this is the lack of sufficient funds.

Tajikistan has been trying to show transparency and desire to improve coordination of external assistance by publishing its foreign aid information (Mirzoev, Green, & Newell, 2007).

Figure 3. 26. *Tajikistan's Life expectancy at birth, total (years).*



Source: World Bank. Compiled by the researcher.

Conducted reforms in Tajikistan since gaining independence also impacted on dynamic of life expectancy at birth. This indicator rose from 62.3 years in 1993 to 67.4 years in 2013 (See Figure 3.26).

The role of international donor organizations in health reforms was considerable and probably will continue to be so (Mirzoev, Green, & Newell, 2007).

### **3.3. Turkmenistan**

#### **3.3.1. Macroeconomic development.**

In the beginning of the 1990s Turkmenistan made a moderate changes towards market economy.

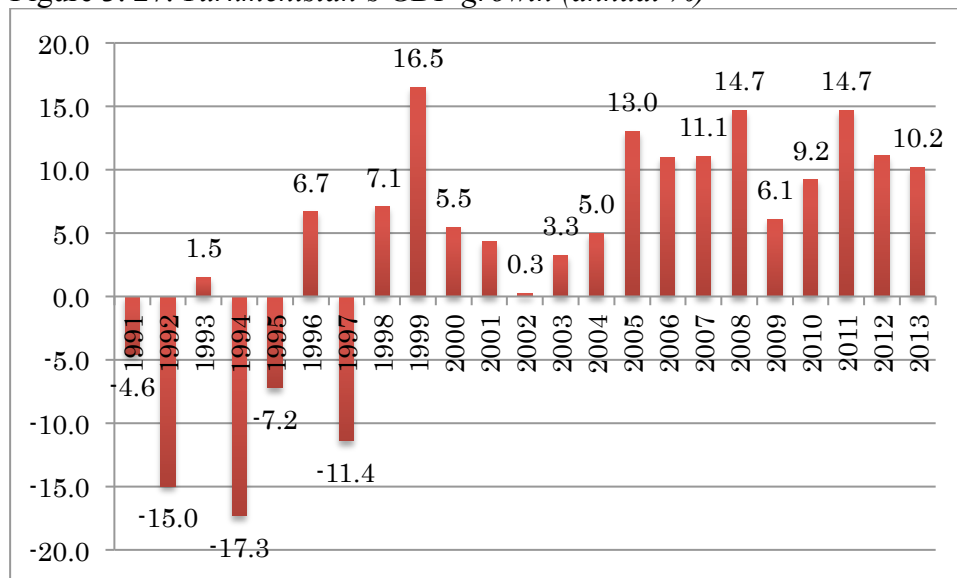
Turkmen economy was predominantly based on production of gas and cotton. In the early part of nineties Yolotan huge natural gas deposits were discovered. Exporting of gas was crucial activity of the Turkmen economy. In 1994 natural gas rents was 63.4% of GDP.

The economy, as well as other fellow Central Asian economies, deteriorated in the wake of the breakup of Soviet state. In 1992 GDP decline amounted to -15% (See Figure 3.27.). Economic ties with former Soviet republics were broken off. With declaring of sovereignty border issues has emerged between new states. These issues further led to trade and customs restrictions in export/import activity of the former Soviet republics.

Also, international trade issues were accompanied with loss of access to European gas markets. The reason of loosing traditional markets was in pipeline routes, which were laid through Russian territory. In fact, these pipelines belonged to Russia. Before these challenges, Turkmen gas was exported to Poland, Hungary,

Czechoslovakia, Yugoslavia and Romania. Arrears for consumed gas were another problems in gas export activity.

Figure 3. 27. *Turkmenistan's GDP growth (annual %)*



Source: World Bank. Compiled by the researcher.

Hyperinflation in 1992 accounted for 3100% of GDP deflator (See Figure 3.30.). It was very high rate of 1992 year among CARs. The government maintained providing credits to industrial and agricultural enterprises. These credits were based on highly subsidized rates. Easy accommodative monetary policy of Turkmen government and price policy changing in Russia were the reasons of such hyperinflation.

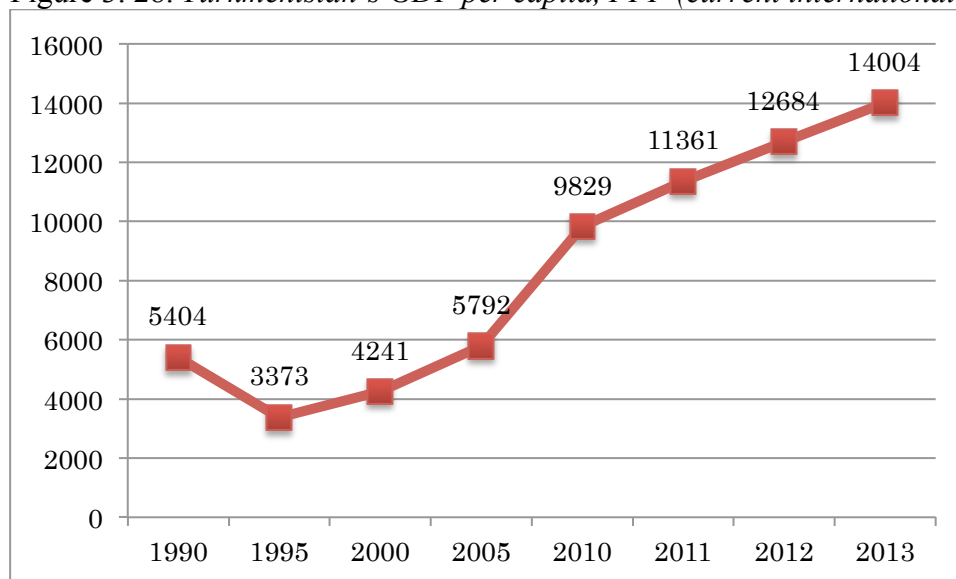
In order to social support of poor part of population, the government set low fixed prices to a number of essential food products. The government retained price controls combined with fixed prices for 10 essential food items. Also, authorities provided unpaid supplies of electric energy, water, natural gas, and edible salt to population. State orders on some important goods were retained.

In order to maintain price controls, the government subsidized enterprises, which were required to sell important food and medicine items at regulated wholesale prices. These subsidies were as compensation payments for set prices.

Trade and foreign exchange regimes were controlled in tightly manner. Privatization process was conducted in very slow pace.

Transfers to Turkmenistan from central Soviet budget were terminated, that had negative impact on republican budget. At the same time, gas revenues from export began to come directly to republic. This helped the republican government to balance a budget. Additionally, Turkmenistan gradually began to export gas at world prices.

Figure 3. 28. *Turkmenistan's GDP per capita, PPP (current international \$)*



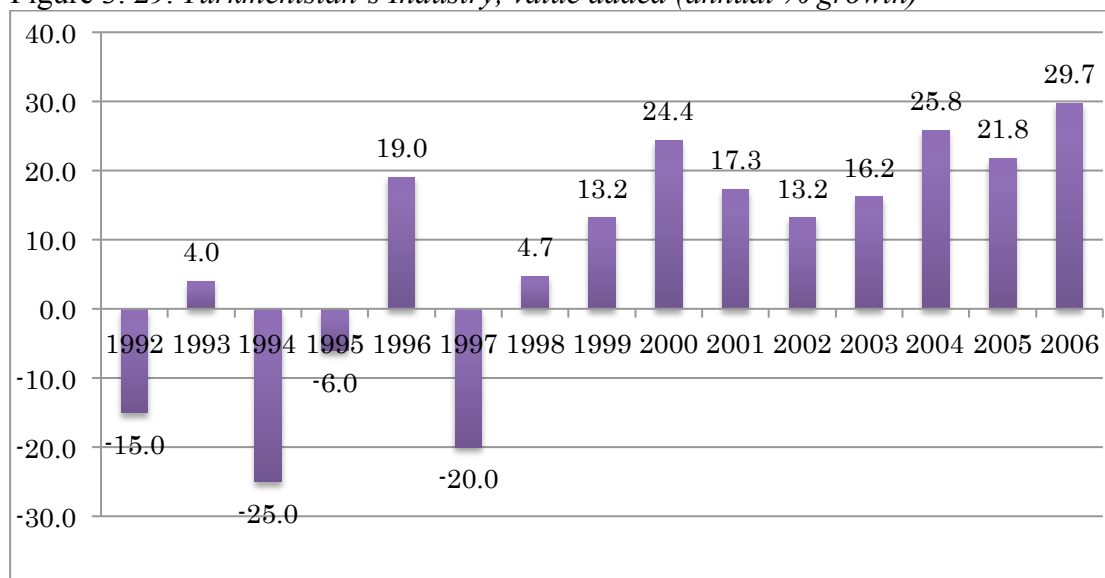
Source: World Bank. Compiled by the researcher.

During 1994-1997, the Turkmen government maintained pervasive subsidization program and paying allowances practically for each Turkmen citizen. Obviously, families with low income received significant support from the state. The

government centrally controlled all spheres of socio-economic issues. Foreign exchange and trade regimes also were under strict state regulation. In addition, state orders on main food and agriculture products were maintained. Prices on number of consuming goods continued to be under control as well as fixed prices on 10 important food items were retained (World Bank, 1997).

Although, Turkmen authorities made efforts to support enterprises, they arrears to each other have grown significantly. It is reasonable that this fact led to bankruptcy of some enterprises. One of the factors of such poor performance of Turkmen enterprises was the inability of managers to operate in a new economic environment.

Figure 3. 29. Turkmenistan's Industry, value added (annual % growth)



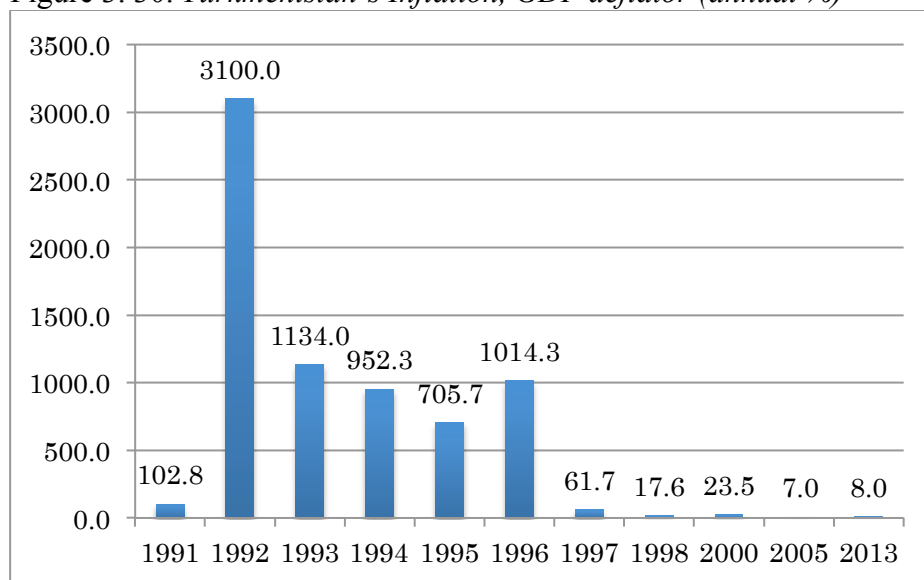
Source: World Bank. Compiled by the researcher.

In order to ensure food self-sufficiency, the government began program of growing grain on land, which before used to cultivating the cotton.



Main arrears for exported gas have been effectively rescheduled at the end of 1995. Joint venture with Russia was established in order to get access to European customers of Turkmen gas.

Figure 3. 30. *Turkmenistan's Inflation, GDP deflator (annual %)*



Source: World Bank. Compiled by the researcher.

In 1996 gas export has increased while agriculture production experienced decline. Unfavorable weather conditions and pest occurrence were the main reasons of such agriculture performance. Also poor management of irrigation systems led to negative output in agriculture.

Within land reforms framework, collective lands were divided into plots, which further leased to households. Leased land could be privatized if there was effective production.

During 1997-2000, the Turkmen government made significant public investments in infrastructure, energy sector, weaving industry and food processing. Many of these investment projects were financed from extra-budgetary resources such as the Foreign Exchange Reserve Fund. Important issue of these public

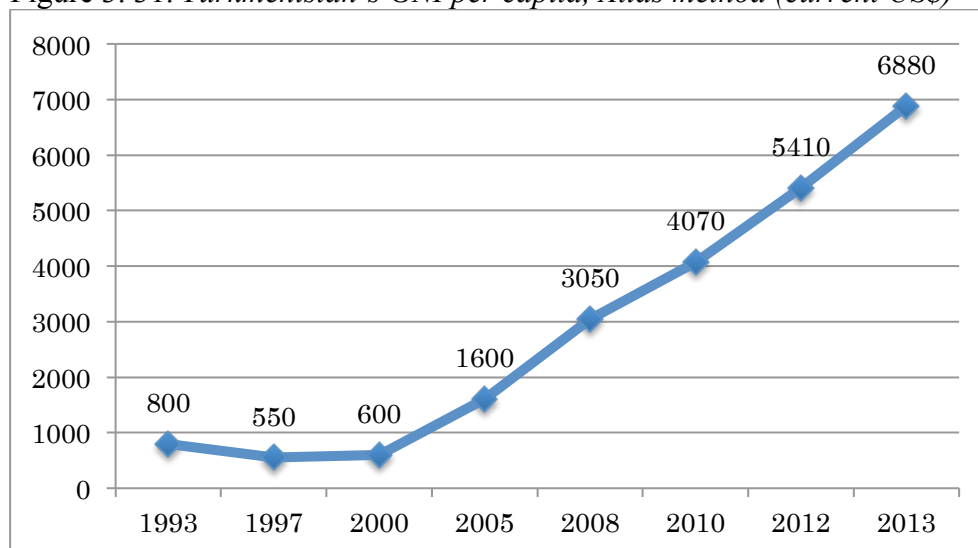
investments was the lack of verified economic and financial rates of return of such capital expenditures (World Bank, 2000).

The economy rose significantly in that time. In 1997 GDP fall was -11.4%, while in the next 1998 year GDP growth has become 7.1% and in 1999 this indicator amounted for 16.5% (See Figure 3.27.). Drop of world prices and poor yield related to cotton sector were among the main factors of negative GDP performance in 1997. Additionally, cessation of gas supplying to Ukraine contributed to GDP decline of that year. As for economic performance in following years, recovery in agriculture production and export of energy sources contributed to economic growth of the country.

Turkmen agriculture consumed huge water sources, and it became evident that the republic was greatly dependent on regional cooperation on water issues (World Bank, 2000).

From 2000 Turkmen economy experienced steady growth, driven by energy extracting industry. Average cumulative growth of GDP during 2000-2013 was 8.5%. GDP per capita increased from 4241\$ in 2000 to 9829\$ in 2010, and in 2013 this indicator has become 14004\$. GNI per capita was 6880\$ in 2013, compared to 600\$ in 2000 (See Figure 3.31.).

Figure 3. 31. Turkmenistan's GNI per capita, Atlas method (current US\$)



Source: World Bank. Compiled by the researcher.

Impact of the 2008 world financial crisis on Turkmen economy was largely through poorer demand for exported natural gas and oil. In the following years beginning of gas export to China and public steady investment accelerated the growth of GDP.

Significant amount of foreign direct investments attracted to hydrocarbon sector. Construction sector as well as non-metallic minerals and textiles sectors witnessed growth.

The government made investments in many enterprises, which provide social services, including pharmaceutical firms. Budget programs targeted to vulnerable parts of population.

Since 2006 Turkmen state has been providing population with key utilities (natural gas, electricity and water) for free. Important food items are still under state control. Additionally, the government has been continuing to subsidize prices of crucial foodstuffs.

It is obviously that all above-mentioned state measures have created favorable social conditions for Turkmen people.

### **3.3.2. Education.**

Enlightenment in Turkmenistan is free and available for all parts of population. Soviet typed free education system was kept in order to favor social well-being.

The government began first reforms in education sector of Turkmenistan in 1993 with the program “Bilim” and several presidential decrees. Also, first Law on Education and some presidential decrees were adopted in this year.

According to new legislative base for education, duration of schooling was decreased to a nine-year program. Authorities commenced shifting Turkmen alphabet from the Cyrillic to the Latin character. Quantity of hours for some school subjects was curtailed.

However, the government did not provide financial and technical base for new reduced schooling period. Also, converting to Latin script was accompanied with challenges in the process of teaching. There was a lack of related textbooks and prepared teachers for new curricula.

The quantities of secondary vocational schools as well as the count of students were decreased. These developments had negative affect on secondary vocational training sector.

In the higher education area the Turkmen authorities made several changes. The government has cut period of university schooling from five years to two years. After finishing two-year study, students had to do internships for two years in public

organizations according to their specializations. Once internship has been finished, they can be conferred on document on degree of higher education.

In 2003, the Turkmen authorities made decision, according to which, higher education establishments were allowed to enroll only entrants that have two-years work experience. Turkmen policy of reducing the number of higher educational institutions together with above-mentioned obligation led to decrease of number of entrants.

After 2003, education changes, there were no private schools in Turkmenistan, although Law on education allowed private education establishments. The Soviet legacy, correspondence schools and evening schools were closed down.

Existence of some Turkish schools had positive effect to some extent on giving knowledge to population. Students of those schools could get more quality knowledge than their fellows from Turkmen schools. However, Turkish schools had tuition fees and therefore not every Turkmen child can afford study in these education establishments.

The authorities cut of subjects of Turkmen national literary heritage, as well as natural and humanitarian subjects from curriculum. These disciplines were replaced by compositions of president Saparmurat Niyazov and by other subjects related to his activity.

As a whole, it was obvious that ideological disciplines prevailed over vocational and general subjects in Turkmen school curricula (Turkmenistan Helsinki Initiative, 2004). In order to convince in the success of education reforms, schools showed good academic progress of students. In general pupils practically received

good marks from teachers, showing well academic successes. Apparently, this fact was one of the elements of strong ideology in favor of president.

Due to reduced school duration and abolished certain disciplines number of related teachers was fired. Reduction of staff was painful process for the schoolteachers of retirement and pre-retirement age. This category of teaching staff was most experienced professionals.

Another negative aspect of education reforms in Turkmenistan related to studying abroad. According to introduced new rules, not every diploma of Turkmen specialists that graduated from foreign educational establishments should be recognized. Thus, these professionals had to seek job in other countries, and this development resulted in “brain drain” from Turkmen economy (Turkmenistan Helsinki Initiative, 2004). State Library and Academy of Science were closed in 2000 and in 2001 respectively.

It was obviously, that education programs were predominantly concentrated on the presidential personality cult (Pomfret R. , 2006). He highlighted that the Turkmen authorities considered educational establishments as breeding-ground of dissent.

In 2007, the new President of Turkmenistan re-launched education reforms, which provided essential changes in system.

Nine-year school program was again replaced by ten-year program. Two-year work internship requirement was eliminated in higher education and period of study became five years. Academy of Science of Turkmenistan was reestablished.

The new Law on Education was introduced in 2009. The new legislative re-introduced correspondence and evening education systems. Public education

continued to be free of charges. Also, according to this law, foreign organizations or foreign nationals can set up educational institutions in Turkmenistan.

In education program previously abolished humanitarian and natural disciplines were again included.

The government raised wages of teachers and began building new schools.

In 2012, authorities began process of further shifting from ten-year school curricula to twelve-year program. Six years old children became eligible to enter to primary school.

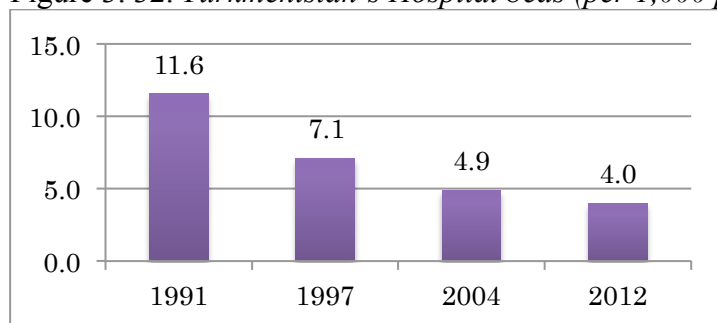
### **3.3.3. Healthcare.**

In the beginning of independence Turkmen health care sector had Soviet health system with excess hospital beds and high rate of hospitalization. Soviet model of health care was mainly concentrated on curative service rather than preventive method (European Observatory on Health Care Systems, 2000).

First steps in reforming Turkmen health system were made in 1995 with adopting state health program. The main goals of the adopted program were extending and healthy life expectancy and health gain. The program posed following tasks: combination of financing channels for health services; adopting voluntary medical services; introducing primary care based on family medicine; optimizing of hospital beds number; developing the private medicine and training of health workers.

Hospital beds (per 1,000 people) were reduced from 11.6 in 1991 to 7.1 in 1997 and further decreased to 4 in 2012 (See Figure 3.32).

Figure 3. 32. *Turkmenistan's Hospital beds (per 1,000 people).*



Source: World Bank. Compiled by the researcher.

The government enhanced some areas of health sector during first reform period. Family planning service was improved to some extent, as was up-graded process of medical workers retraining. The authorities also paid more attention to primary healthcare.

Introducing voluntary medical insurance and patient fees were supplementary finance resources for health sector of the country.

However, despite initiated reforms, health statistics of the country showed disappointing picture in 1997 (World Bank, 2000). World Bank highlighted main components of weak health sector performance: low water quality and sanitation; negative life-style factors and poor quality of medical services.

In 1999 state health program was renovated with further directions of reforms. Decentralization of health care sector and further enhancing primary health service and preventive health care were elements of subsequent reforms.

Due to budgetary constraints in 2004 there was reduction of medical staff. Additionally, health specialists who graduated from foreign education institutions after 1993 were forced to pass additional state examination in order to regain their licenses.



Training of health employees was suffered under the first president of Turkmenistan. For example, 6 nurses per 100 000 graduated in 2007, compared with 49 nurses per 100 000 in 1989 and pretty lower the Central Asian average of 91 (Rechel, Sikorskaya, & McKee, 2009).

In 2005, all district hospitals were shut down and changed into diagnostic centers, which cannot provide long-lasting care for local population (Horák & Šír, 2009). They pointed out that only provincial centers were able to provide surgery and internal medicine and more advanced medical care is offered in the capital of Turkmenistan. In addition to this, number of patients from rural area due to financial constraints could not afford travel and staying in hospitals of capital and other large cities.

With coming new president to power in 2007, several health reforms began in Turkmenistan. Extensive closure of health establishments has been abolished and policy of building of new health facilities adopted. Authorities began also pay attention to maternal and child health, by enhancing respective medical facilities in regional and rural areas.

Pervasive unofficial payments became obstacle for poorer part of Turkmen population in access for health care, as these became in throughout territory of the former Soviet Union.

### **3.4. Uzbekistan**

#### **3.4.1. Macroeconomic development.**

Performance of the Uzbek economy during the first decade of transition to market economy exceeded all negative expectations (Ahrens & Hoen, 2013). Many observers saw dynamic of the Uzbek economy during this period as a paradox for its good performance along with gradualism (Pomfret R. , 2006). At the same time, Pomfret (2006) highlighted that Uzbekistan made comparatively more progress in market reforms than Belarus and Turkmenistan. Well output performance during initial period can be explained by mixture of low initial industrialization, cotton cultivation and energy self-sufficiency (IMF, 1998). Uzbek authorities tried to maintain the state as the key administrator of economy (Gleason, 2003).

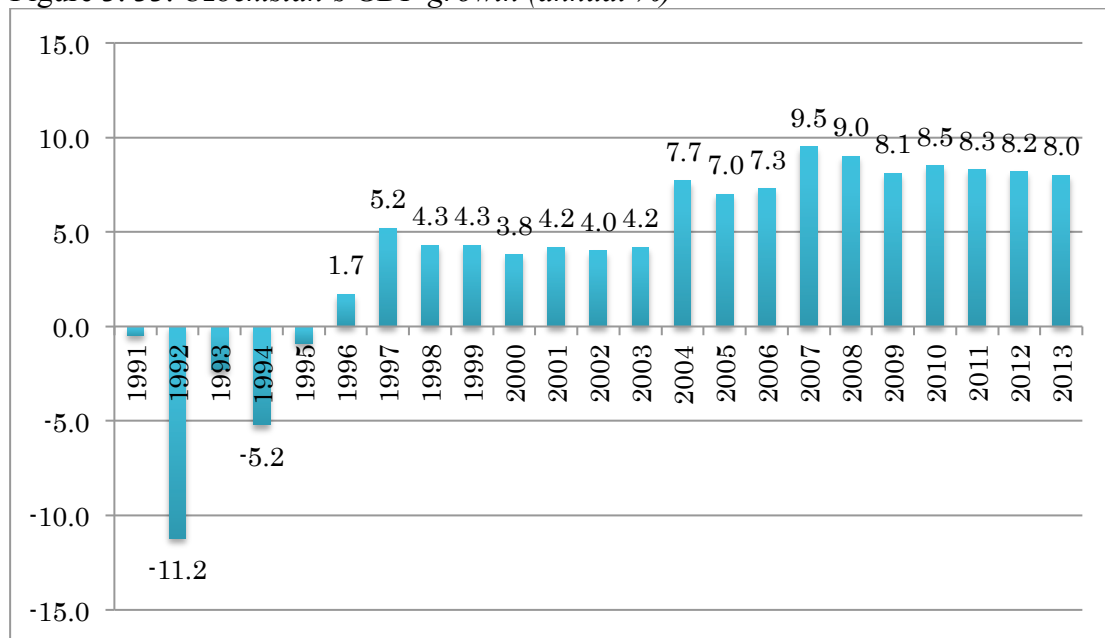
In the beginning of the independence, the Uzbek economy was relatively more diversified than the fellow CAR economies (Gleason, 2003). Nevertheless, the economy was highly dependent on cotton cultivation. Uzbekistan received from Soviet legacy significant assets like civil airplane fleet and substantial military equipment (Pomfret R. , 2006).

In the first half of the 1990s, the government made efforts to avoid the drastic decline in output and income decrease of population. GDP declining in 1992 was -11.2% and in next 1993 year it was only -2.3% (See Figure 3.33.). In 1995, this indicator was -0.9% while in next year it began to growth and accounted for 1.7%. Figure 3.34, presents dynamic of GDP per capita from 1990 to 2013. That indicator declined from 1969\$ in 1990 to 1621\$ in 1995.

During this period, cautious economic reforms combined with tight state control helped Uzbekistan to mitigate economic shocks accompanied with the collapse of the Soviet Union. Additionally, specializing in agriculture, especially in cotton production and export, and energy sector minimized the negative impact of

disintegration of former Soviet unified economy (World Bank, 1994). State orders and subsidies were removed in very slowly pace.

Figure 3. 33. *Uzbekistan's GDP growth (annual %)*

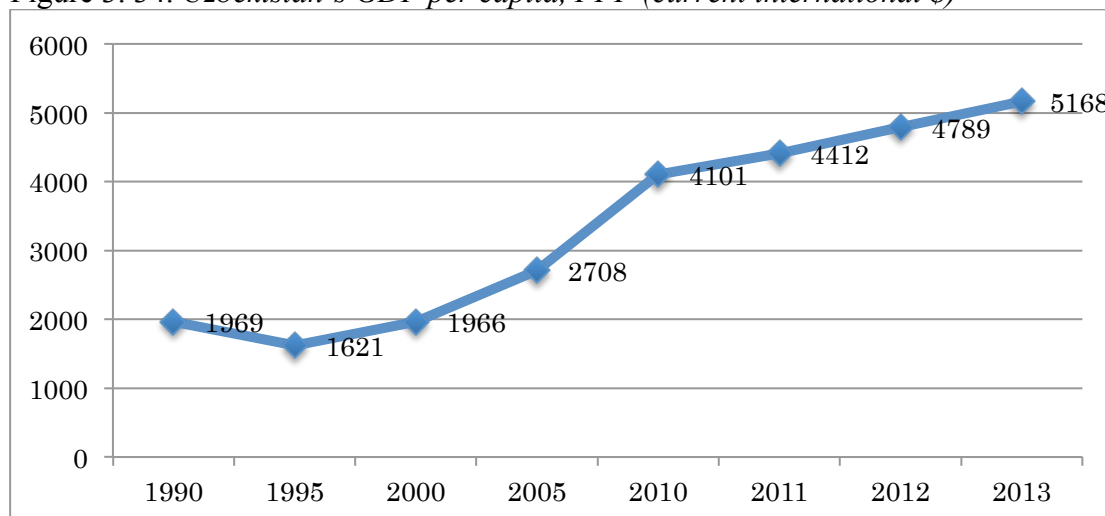


Source: World Bank. Compiled by the researcher.

Easy tradable (through international agents) and transportable cotton together with rising world prices, gave significant benefits for Uzbekistan during initial period of independence.

Termination of subsidies from central Soviet government and enlarged expenses for transfers led to budget deficit (World Bank, 1994).

Figure 3. 34. *Uzbekistan's GDP per capita, PPP (current international \$)*

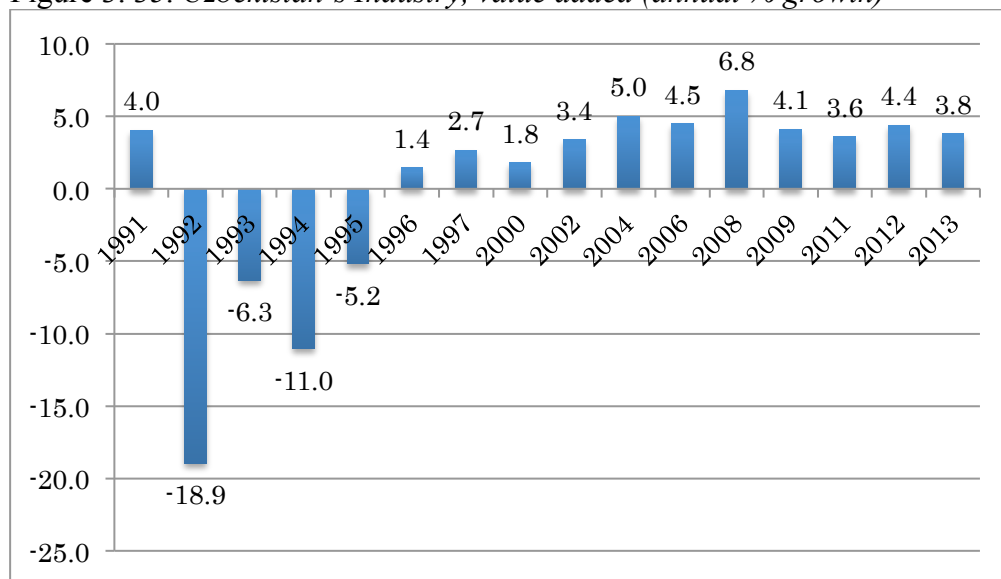


Source: World Bank. Compiled by the researcher.

Inflation rate amounted to 712.1% (GDP deflator) in 1992 and in 1994 it became 1238.6% (See Figure 3.36.). Inflation was additional factor for breakup of payments system of trade activity between former soviet republics. In November 1993, the government introduced Sum coupon as national currency and in July 1994 this currency was replaced by Sum.

The government moderately liberalized prices and conducted privatization of accommodation. However, key consumer goods and services were under strict state price control. The Uzbek authorities introduced some new taxes and to some extent created legislative base for market transition. During 1992-1995 following new laws were introduced: on Foreign investment; Company; Competition; Pledge; Securities; Bankruptcy; Telecommunications. Also, in 1994 Stock exchange was established.

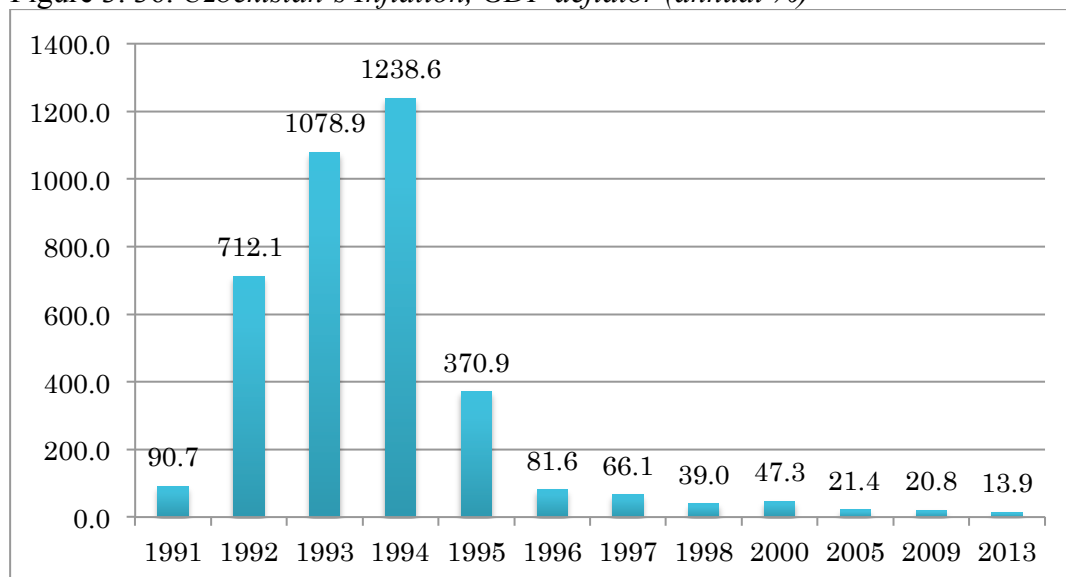
Figure 3. 35. *Uzbekistan's Industry, value added (annual % growth)*



Source: World Bank. Compiled by the researcher.

In the second half of the 1990s, GDP growth began and in 1995 it amounted to 1.7%. Strict monetary policy allowed downsizing the inflation rate, which as a result declined from 370.9% in 1995 to 81.6% in 1996.

Figure 3. 36. *Uzbekistan's Inflation, GDP deflator (annual %)*



Source: World Bank. Compiled by the researcher.

The government introduced rigid foreign currency control in September 1996. This system of currency control has been adopted in order to use deficient foreign

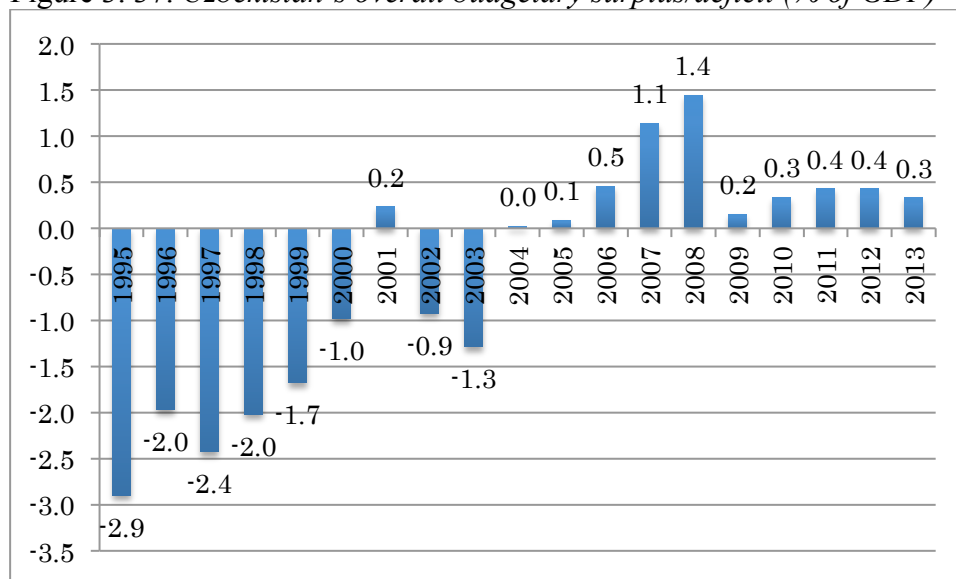
currency predominantly to import capital rather than purchase consumer commodities (Gleason, 2003). Nonetheless, Gleason (2003) lists several reverse sides of that system. Particularly he underlined the limited accessibility of foreign currency for all sectors of economy and obstacles for foreign companies to doing business. Additionally, foreign currency control can bring to unfavorable conditions of trade activity (Gleason, 2003). Ahrens & Hoen (2013) also underlined negative side of Uzbek foreign exchange control by bloom of shadow export activity.

Since 1997, Uzbekistan introduced import substitution strategy based on state interference and foreign currency control. Also, limiting external trade regime was one of the elements of that strategy. Import barriers for some commodities were introduced by raising customs tariffs and excise taxes.

From the mid-1990s, world prices for cotton and gold, important export commodities began to fall. Apparently, this fact along with Russian financial crisis of 1998 had negative affect on economic growth of Uzbekistan. At the same time prices for gas had rising dynamic in world market, and this factor obviously helped to maintain moderate increase of GDP. Average annual growth of GDP during 1996-2003 was 4% (See Figure 3.33.). Inflation level declined from 66.1% in 1997 to 47.3% in 2000.

Budget deficit also decreased from -2.9% (of GDP) in 1995 to -1% in 2000 and in 2001 this indicator had positive sign with 0.2% (budget surplus).

Figure 3. 37. *Uzbekistan's overall budgetary surplus/deficit (% of GDP)*



Source: Asian Development Bank. Compiled by the researcher.

One of the factors contributing to decrease budget deficit was the state procurement for cotton. The state by ordering and purchasing cotton in low prices and then selling for more high prices in world market had significant revenues for its budget. Additionally, difference in world prices and state procurement prices was disguised by foreign exchange control (Pomfret R. , 2006).

Due to strict foreign currency control international financial organizations limited cooperation with Uzbekistan. In 2000 Uzbek authorities devaluated the official exchange rate related to state transactions by a half and setting regular alterations of the exchange rate based on market dynamics (Gleason, 2003). Later, by the end of next year, exchange rate was devalued for all state transactions. The government adopted convertibility of national currency on 2000.

In 2003 state order of cotton and wheat was raised from previous 30% to 50% of yield, but was used to real crop against previous expected yield (Pomfret R. , 2006).

Providing convertibility of national currency and speedup of transferring of state owned farms to private sector reinforced GDP growth in 2004. This indicator was 4.2% in 2003 while in 2004 it became 7.7%. During 2005-2006 growing export performance provided significant trade surplus. Also, drastic growth of foreign exchange and gold reserves ensured external current account surplus in that period.

Fund for the Reconstruction and Development of Uzbekistan was established in 2006. Aims of the Fund were providing economic stabilization and making investments to main national strategic projects. Revenues of the fund were provided in the result of positive world commodity prices.

Economy growth in 2007 was mainly motivated by trade activity and services sector. Low tax rates and favorable business environment were drivers in increasing private investment. High salaries and raised remittances contributed to consumption growth.

Transferring of large collective farms “shirkats”, which were under the state control, to private sector was completed in 2007.

Lowering tax burden, as one of the anti-crisis measure, muffled impact of global financial crises of 2008 on banking sector. Also, prudent attitude towards foreign financial resources mitigated negative affect of world crisis. In the framework of the anti-crisis program, the government also offered fiscal benefits to support domestic industry.

The government paid attention to investments aiming at industry modernization and infrastructure development. Consequently, that investment projects provided steady GDP growth. During 2007-2013 average GDP growth was 8.5%.



### **3.4.2. Education.**

Uzbekistan in first period of sovereignty with its less reformed economy had also least reformed higher education system. Education sector was centralized and under state control.

However, during initial period of independence the government well directed budget revenues to provide state funding on health and education sectors comparing to Russia and Kazakhstan (Pomfret R. , 2006).

In 1997 Education law and National Program for Personnel Training were adopted. These documents implied structural changing in secondary and higher education systems. These changes aimed to give new skills necessary in a world economy (World Bank, 2006).

Eleven-year general schooling period was replaced by nine-year schooling and followed by two-year colleges. These colleges prepared students for further higher education study in universities or provided vocational technical training. In 1999 state budget provided financial resources to construct new colleges.

New western type of degree namely bachelor, master and Ph.D. was introduced. At the same time Soviet type higher degree also existed. Also, in 1997 Umid Presidential Scholarship Program for Talented Youth was launched. This scholarship for young students gave opportunity to study in foreign education institutes.

Standards of education had tendency to deteriorate with declining of state funds for education sector.

Later in order to improve skills of future labor-market participants, the government extended the period of obligatory education from nine years to twelve years (World Bank, 2006).

The typical problems in quality of teaching/studying were low level of teachers' proficiency and obsoleted class equipment.

In 2004 Uzbekistan adopted new School Education Development Program, which concentrated on general education. The program aimed to building and restoration the schools, supplying with study materials and facilities and preparation the teachers.

Before 2004, Uzbek authorities more focused investments to secondary professional education rather than general school education (World Bank, 2006).

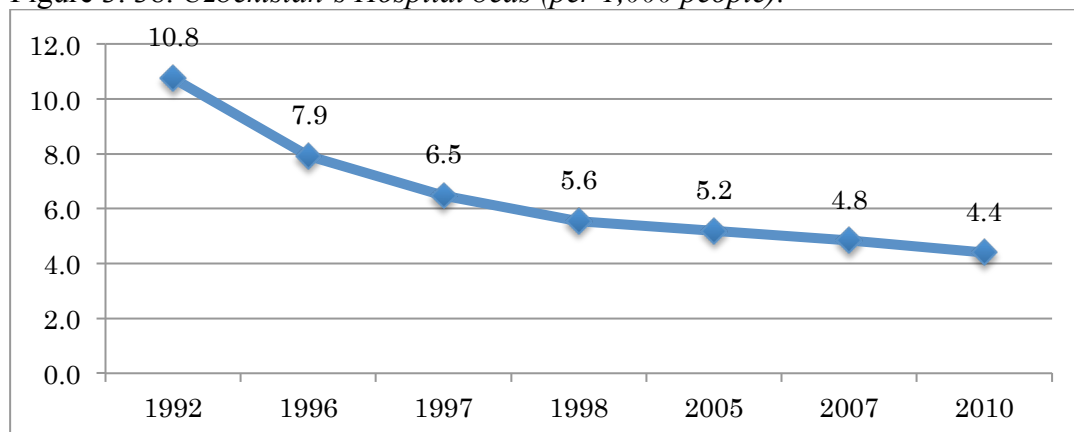
### **3.4.3. Healthcare.**

The first reform of Uzbek health sector began in 1996, with the aim of transferring attention from inpatient care to primary health care. These changes also implied decreasing of capital-intensive hospitals, which were legacy of Soviet healthcare system.

In 1998, the government introduced Healthcare Reform Program for the period up to 2004. In the consequent years Uzbekistan preferred outpatient care than operating hospitals with costly beds. Number of beds (per 1000 people) amounted for 6.5 in 1997 against 10.8 in 1992, and then in 1998 this became 5.6 (See Figure 3.38.).

The state-guaranteed basic benefit package was adopted.

Figure 3. 38. *Uzbekistan's Hospital beds (per 1,000 people).*



Source: World Bank. Compiled by the researcher.

Focusing on primary health care and polyclinic-based service, the government allocated more budget resources for these segments (Olimov & Fayzullaev, 2011). With the financial support of World Bank, Uzbek authorities constructed new and restored existing primary care facilities (Borowitz & Atun, 2006). Also, in primary health care introduced capitation-based payment, which is applied progressively in Uzbekistan (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

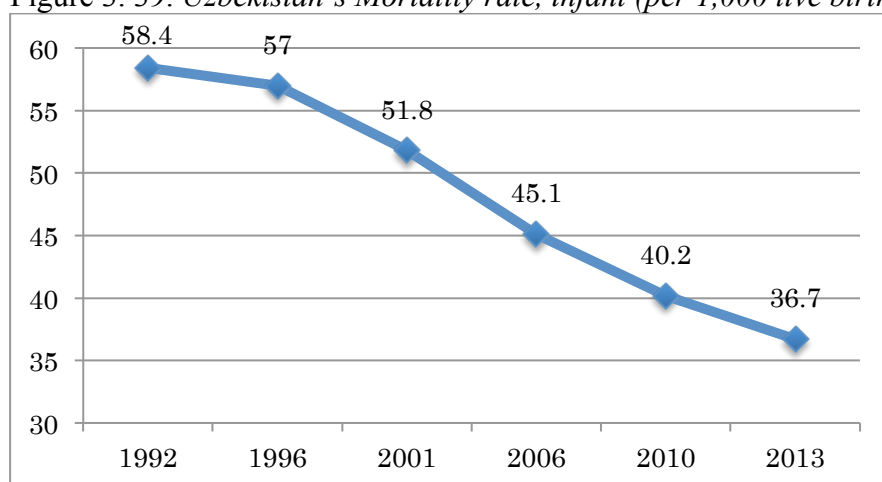
In rural districts primary healthcare moved to central regional hospitals and rural physician points (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

The government's policy in health sector reforms concentrated on the following areas: expansion of primary healthcare in rural districts; attention on reproductive and maternal and child health; proper nutrition and providing clear water and sanitation (Olimov & Fayzullaev, 2011).

Infant mortality declined from 51.8 in 2001 to 36.7 in 2013 (See Figure 3.39).

Although, state made efforts in establishing a satisfactory milieu for the birth and nurture of healthy generation, several negative factors remained in child mortality issue. These reasons concerned low-qualified health workers in rural and remote areas and outdated equipment in medical facilities.

Figure 3. 39. *Uzbekistan's Mortality rate, infant (per 1,000 live births).*



Source: World Bank. Compiled by the researcher.

### 3.5. Kyrgyzstan

#### 3.5.1. Macroeconomic development.

The collapse of the Soviet Union had negative influence on socio-economic situation of Kyrgyzstan. With disintegration of Soviet Union all previous economic ties were broken off and traditional markets were lost. This beginning period can be characterized as the most problematic period for economy and social welfare of the country. For this reason new environmental challenges were the issue for the post-Soviet Kyrgyzstan against the background of economic slump.

In 1992, rate of inflation was 830% (GDP deflator, annual growth) and budget deficit was 13.89% of GDP. The reason of budget deficit was the loss of budgetary

allocations and subsidies from Soviet Union, and decrease of tax revenues.

Inflation and budget deficit were main elements of economic recession in Kyrgyzstan.

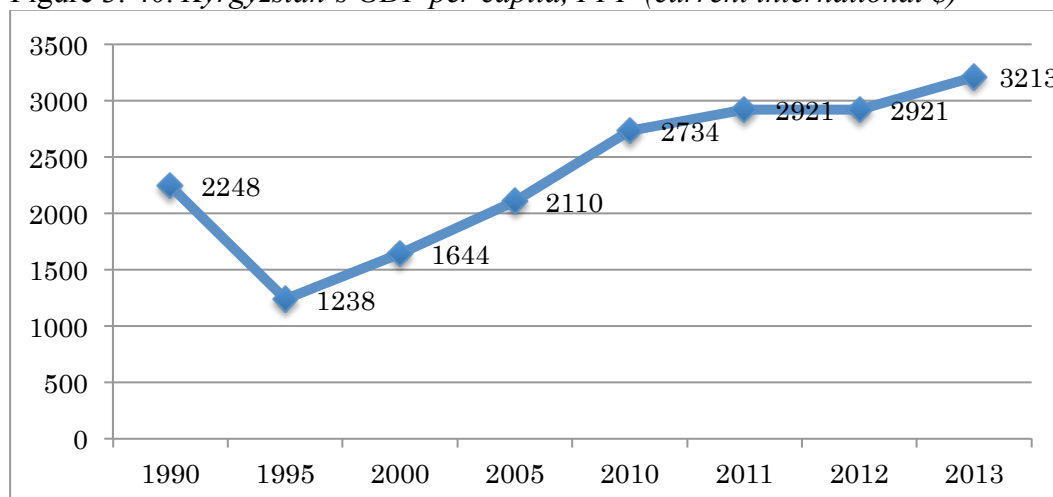
Gross Domestic Product per capita significantly decreased. It fallen from 2248\$ in 1990 to 1238\$ in 1995 (See Figure 3.40.).

Industrial output had declined by almost three quarters (See Figure 3.41.). Decreasing of output continued until 1995. Also there was insolvency of many manufacturing and trade enterprises due to loss economic links. There were challenges with sale of finished products due to problems in altering manufacture to the new circumstances of demand and both domestic and outside rivalry.

Fiscal stability was aggravated by economic downturn and variations in economic structures (the privatization of enterprises and substitution of large enterprises by smaller ones).

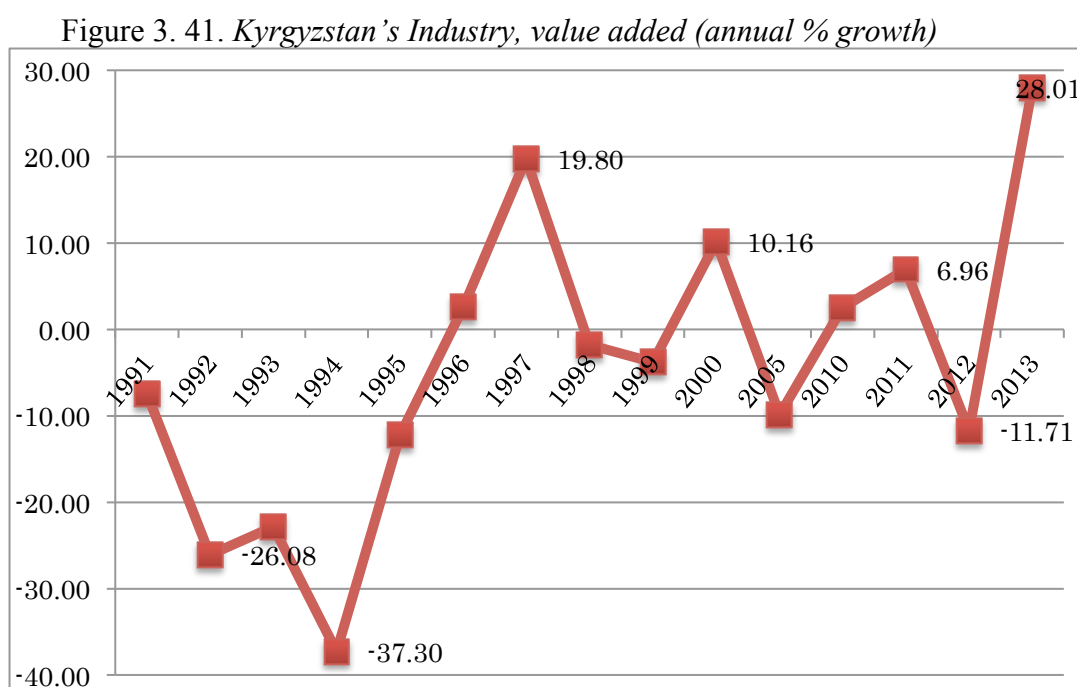
These were reason for follow-up increasing poverty among population.

Figure 3. 40. *Kyrgyzstan's GDP per capita, PPP (current international \$)*



Source: World Bank. Compiled by the researcher.

In order to respond to these negative tendencies of economy, Kyrgyz authorities began reforms aimed to lay the foundation of the economic growth. First of all, there was necessary to liberalize prices and trade, creating favorable conditions for entrepreneurship, including competitiveness. The government conducted privatization of state assets, including land and manufacturing enterprises. Key economic legislative base for transformation to market-based economy was introduced.

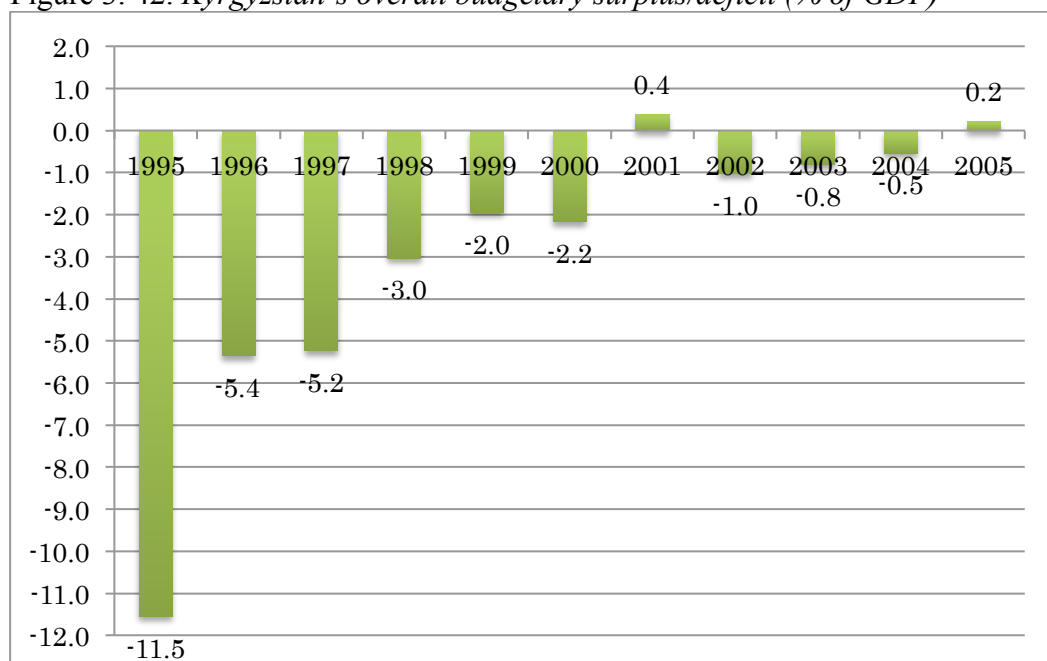


Source: World Bank. Compiled by the researcher.

Budget policy was focused on declining the budget deficit. Such measures like cutting financing the loss-making manufacture and agriculture enterprises (via reduced net borrowing), limitation of wage rise and cutting down of public sector's staff, rising of utility tariffs for population and enterprises. The government closed big loss-making state banks.

Since the middle of the 1990s, the Kyrgyz economy has started to recover. The government began structural reforms, including land reform. Also privatization process continued. Kyrgyz authorities in order to liberalize of foreign trade, constituted low import/export tariffs, thereby creating favorable conditions for entering to World Trade Organization (WTO). It should be noted that Kyrgyzstan was the first post-Soviet republic, which were accepted to WTO in 1998. GDP per capita rose by 1644 \$ in 2000 against 1238 \$ in 1995 (See Figure 3.40.). Sustainable growth was observed in agriculture, gold mining and trade sectors. However, other segments of economy, especially manufacturing still were in stagnant situation.

Figure 3. 42. *Kyrgyzstan's overall budgetary surplus/deficit (% of GDP)*

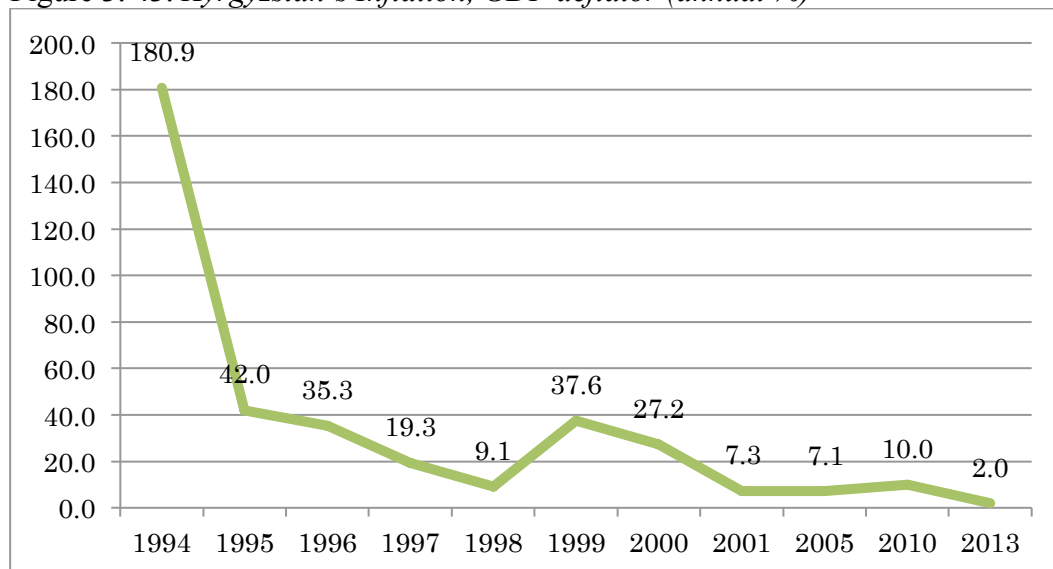


Source: Asian Development Bank. Compiled by the researcher.

Government by cutting expenditures and rising non-tax revenues provided substantial reduction of budget deficit. It has been reduced from -11.5 (% of GDP) in 1995 to -2.0 (% of GDP) in 1999 (See Figure 3.42.). Also, cash deficit decreased from 10.8 (% of GDP) in 1995 to 3 (% of GDP) in 1999. For this reasons and steady

monetary policy, inflation was falling and declined from 180.9% in 1994 to 9.1% in 1998 (See Figure 3.43.).

Figure 3. 43. *Kyrgyzstan's Inflation, GDP deflator (annual %)*



Source: World Bank. Compiled by the researcher.

Supporting small and medium-size enterprises by introducing new micro-financing schemes was in agenda of the government. Authorities relieved fiscal load on business and created several regional free economic zones.

Gold mining appeared as a main export flow of the country in 1997. It assisted to further economic growth via its bonds with other related sectors of economy.

In August 1998 Russian economy was hit by severe financial crises, which in turn had negative consequences for the Kyrgyz economy. Kyrgyz Republic has close economic ties with Russia and liberal trade regime. According to World Bank (2004), export to Russia in this period constituted about fifth of total Kyrgyz export volume.



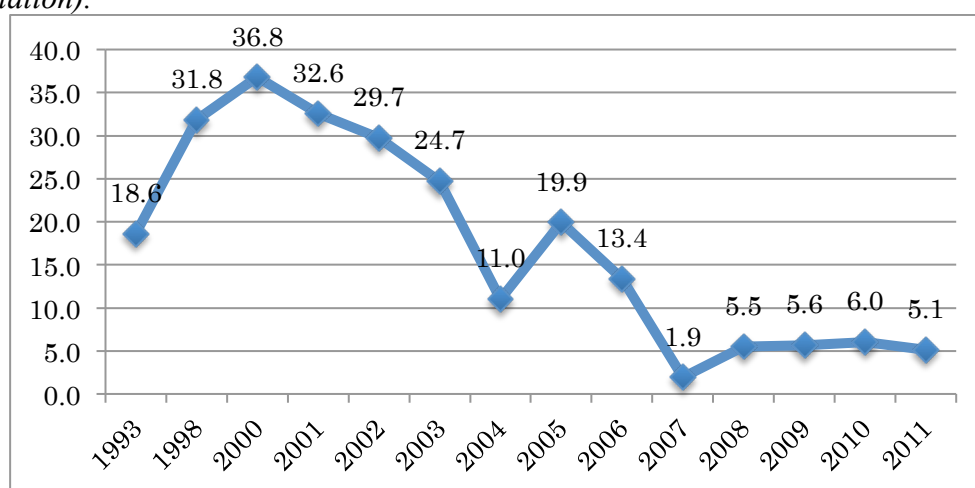
Inflation rate sharply increased by 37.6% in 1999 (See Figure 3.43.). In the period after 2000 Kyrgyz authorities started to conduct more moderate fiscal policy, aimed at reduction of budget deficit and decreasing inflation rate.

The Kyrgyz government has shown worthy advance in conducting such reforms as liberalizing of prices and trade regime, land reform, reforms in pensions and healthcare systems.

Agriculture sector took the biggest place in the economy. It amounted one-third of the country's GDP. There were land reform and farm restructuring which in turn provided easy access to land and increased farm productivity (World Bank., 2004).

Gradually level of poverty was declined due to economic stabilization. Poverty headcount ratio at \$1.25 a day (PPP) (% of population) declined from 36.8% in 2000 to 19.9% in 2005 (See Figure 3.44.).

Figure 3. 44. *Kyrgyzstan's Poverty headcount ratio at \$1.25 a day (PPP) (% of population).*



Source: World Bank. Compiled by the researcher.

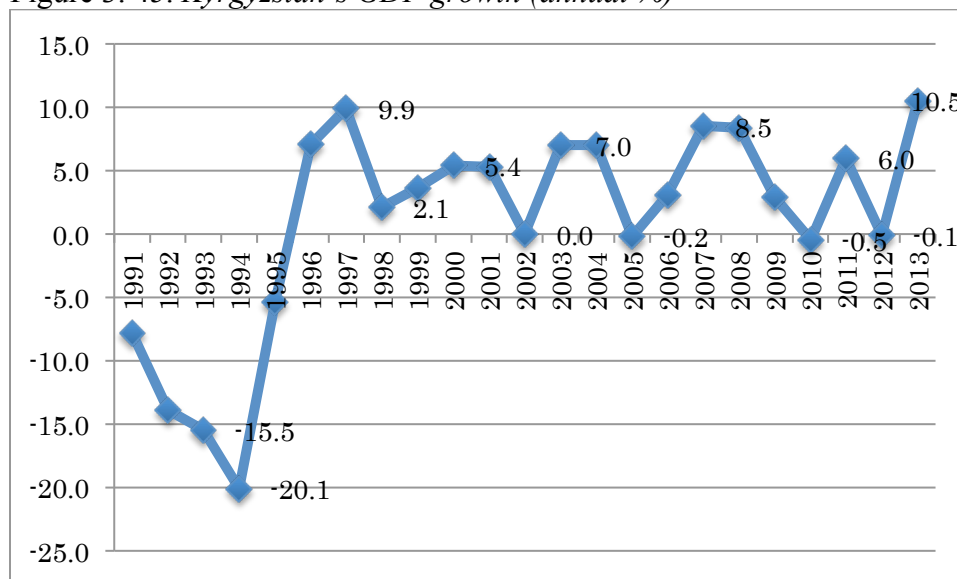
During this period, the Kyrgyz government made notable structural reforms toward market economy. Liberalization of prices, trade and foreign exchange regimes were first transition steps of the government.

Country implemented privatization program, which provided transferring of housing, land, small and medium enterprises from state into private ownership. So, now land can be sold or rent. Also, Kyrgyz authorities made modernization changes in customs, tax and licensing systems of the country. In addition, the government implemented fiscal changes including rationalization of public expenditures.

Three main sectors of economy, namely, gold, agriculture and services have made the significant contribution to economic growth of the country during this period of time. According to World Bank (2004) high rate of increasing of private consumption might be the main driver of economic growth. In turn, increasing of private consumption caused by significant growth rates in wages, salaries, and remittances.

During this period economic growth declined poverty level. From the 2005 to 2007 Poverty headcount ratio declined from 19.9% to 1.9% (See Figure 3.44).

Figure 3. 45. *Kyrgyzstan's GDP growth (annual %)*



Source: World Bank. Compiled by the researcher.

However period of 2005-2013 development of the Kyrgyz economy can be featured as unstable. As it can be seen in Figure 3.45, from 2005 to 2007 GDP annual growth was positive. But, from 2008 to 2013 GDP annual growth was volatile. The reasons for such volatility were internal and external factors. To domestic factors related decreasing of gold output due to glacier movement at the mine. As for the external factors, it was global financial crisis, which had indirect consequences for the Kyrgyz economy through economies of Russia and Kazakhstan.

In this period declining in production of gold in Kumtor gold mine influenced on state budget revenues. Despite this fact, fiscal burden was declined gradually. There was created favorable conditions for business environment, including industry and foreign trade.

### **3.5.2. Political reforms.**

Comparing with other CAR, the socio-political development of the Kyrgyz Republic is more vibrant since achieving independence. There has been a liberal political regime, with growing of Non-governmental Organizations and active civil society. Many opposition representatives were presented in national legislative body.

Nevertheless, later first President Askar Akaev started to reinforce personal power through constitutional amendments. National referenda were held in 1996, 1998 and 2000, by which presidential power has been increased and in turn power of parliament has been substantially limited (Temirkulov, 2010). It was obvious, that such actions of president were the reason of social discontent.

Another reason of social dissatisfaction was the participation of the members of presidential family in the decision-making process in the political and economic issues (Temirkulov, 2010). Pressure and persecution on opposition activists and mass media also contributed to widespread discontent.

Conflicts with the oppositionist supporters in 2002 resulted in death toll of 6 civilians, and in the aftermath of that incident, Prime Minister and cabinet had to resign.

After these events, president Akaev tried to collaborate with the opposition in developing constitutional changes, which delegate more power to legislature. The amendments to constitution were accepted in a referendum in 2003.

It is worth to mention, that President Akaev arbitrated the rivalry between various groups within the elite for gaining influence and economic resources.

The disputed parliamentary elections in February 2005 gave rise to unfavorable criticism and resulted in widespread rallies.

The first elected president Akaev was forcibly ousted from power in March 24, 2005, after almost 15 years in power following a debated parliamentary poll.

Place of president was occupied by Kurmanbek Bakiev. He was the leader of the People's Movement of Kyrgyzstan. Kurmanbek Bakiev promised constitutional reforms in order to cut significant presidential authorities.

However, president Bakiev did not make any crucial changes in political system of the country. Moreover, he began to strengthen his power by persecution of opponents and neglect democratic principles. His family members also intervened to significant state affairs, including allocation of resources.

As a consequence of these negative developments, since April 2006 opposition leaders held large demonstrations and rallies. Protesters call for carry out constitutional reforms, eradication of corruption on the top echelons of the power and stopping of growing criminality.

Nevertheless, after two years mass rallies, Bakiev succeeded to reinforce his power by constitutional changes (Temirkulov, 2010). Unfortunately, economic and social policy of Bakiev did not meet the requirements of the people.

In April 2010, anti-Bakiev political demonstrations were held in north part of the country. Finally, after bloody clashes police and protesters, after death toll, president Bakiev had to flee from the country.

Interim administration, which took over power, ensured constitutional reforms in June 2010. According to new constitution parliament has had much more power than president.

Thus, parliamentary form of government was established in the Kyrgyz Republic. It is first state in the region, which has established western system of state

government. Kyrgyzstan is unique experiment in Central Asia because of its parliamentary system, which has limited the rise of absolute presidential authority, and forced the political groups to build relationship with electorate in more innovative and democratic way (Laruelle & Peyrouse, 2013).

At present time Kyrgyz Republic might be characterized as the most democratic country in the region. Civil society is the strongest in compare with other Central Asian countries.

### **3.5.3. Education**

After gaining independence, Kyrgyz Republic reformed education in the following courses: 1) reducing the range of government obligations; 2) sustaining components of the public education system; 3) permitting private delivery of education services; 4) correcting the education contents and structure to the requests of the employment market.

Before approval of the Constitution in 1993, general secondary education was obligatory and free for all children. After the adoption of the Constitution in 1993, basic secondary education (1-9 grades) had become mandatory. General secondary education (10-11 grades) in public schools was available free of charge. However, it was not promised to everybody any longer.

In pre-school area of education also government obligations were reduced. Numerous public pre-school organizations were closed. In financing of education sector, more attendance paid on wages of teachers and utility services for schools. At the same time less amount of funds directed towards purchasing new textbooks and

school equipment. Definitely, this fact in turn had a negative impact on quality of education.

Basically, subjects of primary and secondary education and structure of higher education did not differ from Soviet period. In recent years, the government began altering programs and public professional training to the realities of the contemporary Kyrgyz economy. As result of these policies, the enrollment numbers were preserved and improved. For instance, Kyrgyzstan made successful effort in improving of classroom instructions by revision of teaching programs (Chapman, Weidman, Cohen, & Mercer, 2005). However, the quality of education has noticeably worsened (Mogilevsky & Omorova, 2011).

#### **3.5.4. Healthcare**

After gaining independence, Kyrgyz Republic began health reforms, which provided complete reorganization of health system. Manas health reform program was adopted in 1996 and the key aim was to reform the health system as the Soviet legacy and providing its financial stability.

Under this program, following changes have been made: 1) reinforcement of primary care and optimization of the complex of health care organizations; 2) altering in funding mechanisms in the system, with adoption of obligatory medical insurance, patient's co-payments, separation of providers and clients in the system, shift from input-based (e.g., per bed) to output-based (e.g., per treated case) model of funding of health care organizations; 3) adaptation of components of evidence-based health care; 4) reinforcement of the public medicine; 5) conveying of certain medical services (e.g., providing of drugs and stomatology) to private medical organizations.

In reforming the health sector the government paid attention to developing private sector in service rendering.

The Manas program had following results: more attention to family medicine and primary health care, reorganizing service delivery and adopting a new healthcare financing system. By and large, public healthcare services are now presented throughout the country, though access of the poor to common medical facilities is still under the question because of due to high cash costs.

The reforms adopted within the scope of Manas program, reinforced by the Manas Taalimi (2006–2010) and the Den Sooluk (2012-2016) health reform programs.

Systematic and coherent reform in all components of health care system resulted in well-recognized Kyrgyz health care model (Mogilevsky & Omorova, 2011). It is obvious that the model is characteristically distinctive from the inherited Soviet health care system.

### **3.5.5. Social sector.**

Public expenditures on social sector (education, health care, social protection) drastically reduced (World Bank, 2000). For this reason the quality of and access to social services were diminished.

Pension reform was launched in this period. Timely payments of pension were inherent to this period (World Bank, 2004). As a result of this retirement age was increased.



Most direct food and non-food budget subsidies were eliminated. At the same time, the government continued to subsidize milk and food via social institutions like health care centers, schools and kindergartens (World Bank., 2000).

Major decision to reduce the level of family allowances was taken by the government in 1993. Also, the eligibility criteria for family allowances, was redefined. In 1995, the compound system of cash benefits and income support was updated. Main cash subsidies, namely the bread compensation, child allowances, childbirth grant, were substituted by single general social welfare transfer payments based on income (World Bank., 2000).

According to World Bank (2004), life expectancy at birth, infant and maternal mortality, the basic secondary education enrollment ratio, adult literacy, incidence of tuberculosis, and other key social indicators —remain more or less stable. In accordance with report of World Bank (2004), life expectancy surpasses some of the more successful former Soviet republics.

At the same time, there was budget deficit and it was reason for insufficient state funding main social sectors. This fact in turn, had negative influence on healthcare and education system.

In 2011, due to low salary in health organizations, there was vast number of vacancies. This fact allowed redistribute savings from vacant positions to other employees. In turn high salaries declined health budget with cutting funds for expenditures like medicine or food.

## **CHAPTER 4**

### **4. CROSS-COUNTRY ANALYSIS**

#### **4.1. Overview of case studies**

Appendix 1 presents an overview of CAR. All five Central Asian countries gained independence after dissolution of the Soviet Union in 1991. All of them faced similar economic and social difficulties after beginning their own path in building state and transition to new economic system.

The territory of Kazakhstan is huge comparatively to other CAR and occupies over two-thirds of the region's territory. At the same time, Uzbekistan's population accounts for half of Central Asian population.

GDP of Kazakhstan also comprises of nearly two-thirds of all Central Asian GDP. The volume of GDP of Uzbekistan is more than the GDP of Turkmenistan, but if the GDP per capita value is considered, it is clear that Uzbekistan lags behind Turkmenistan.

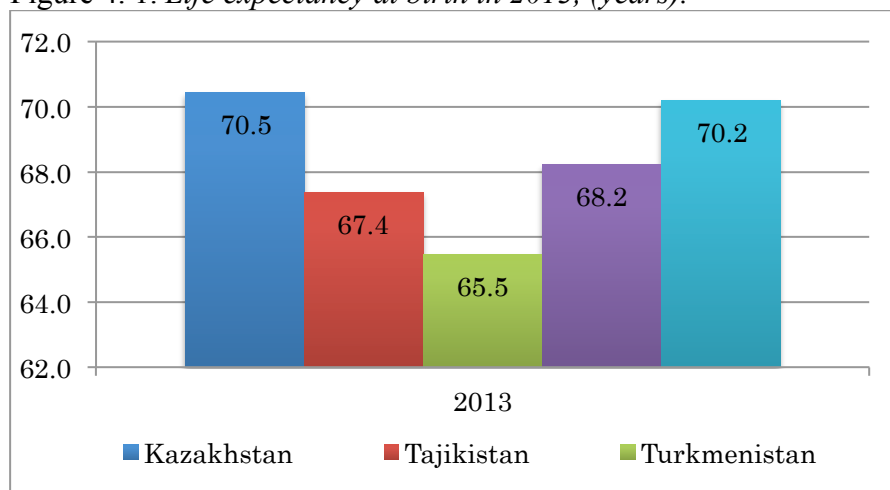
According to the World Bank, Kazakhstan and Turkmenistan belong to the Upper middle-income category. Uzbekistan and Kyrgyz Republic belong to the Lower middle-income countries, while Tajikistan is ranked as a Low income country.

In terms of HDI ranking in 2013, Kazakhstan occupied the 70<sup>th</sup> position and was in the High Human Development category while the other four republics belonged to the Medium Human Development category (UNDP, 2014).

Obviously while comparing HDI, it is also necessary to compare components of HDI, namely Health (Life expectancy at birth), Education (Mean years and Expected years of schooling) and Income (Gross national income per capita).

In Figure 4.1 is presented the Health component, particularly the Life expectancy at birth.

Figure 4. 1. *Life expectancy at birth in 2013, (years).*



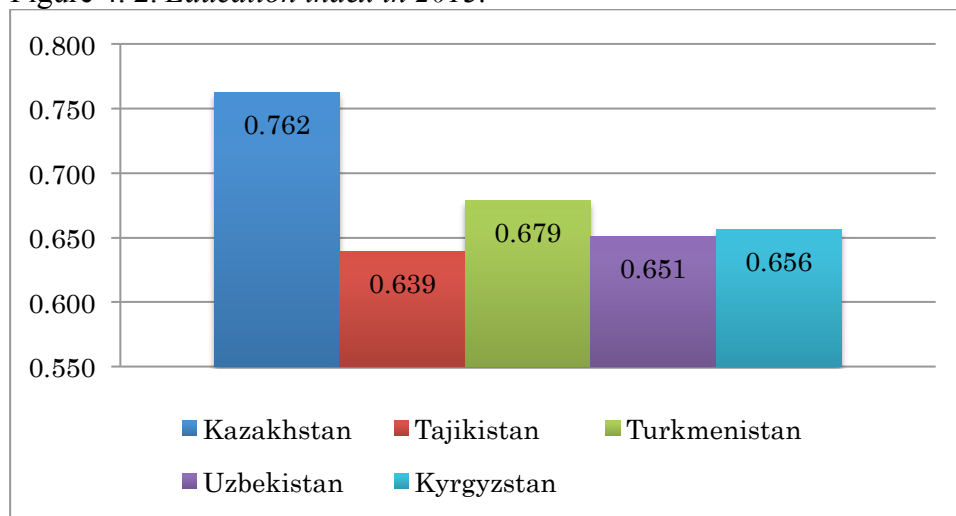
Source: World Bank. Compiled by the researcher.

As it can be seen from Figure 4.1, Kazakhstan and Kyrgyzstan have a high value of Health index while Turkmenistan has a low level.

In terms of the education component of HDI, Kazakhstan had good results compared to other countries (See Figure 4.2.). At the same time, Turkmenistan occupied the lowest position. It is worth noting that the education index was calculated by UNDP using the Mean Years of Schooling and Expected Years of Schooling.

Figure 4.3, presents comparison in terms of the Income component of HDI or gross national income per capita. As it can be seen from this figure, Kazakhstan and Turkmenistan took up predominantly high positions.

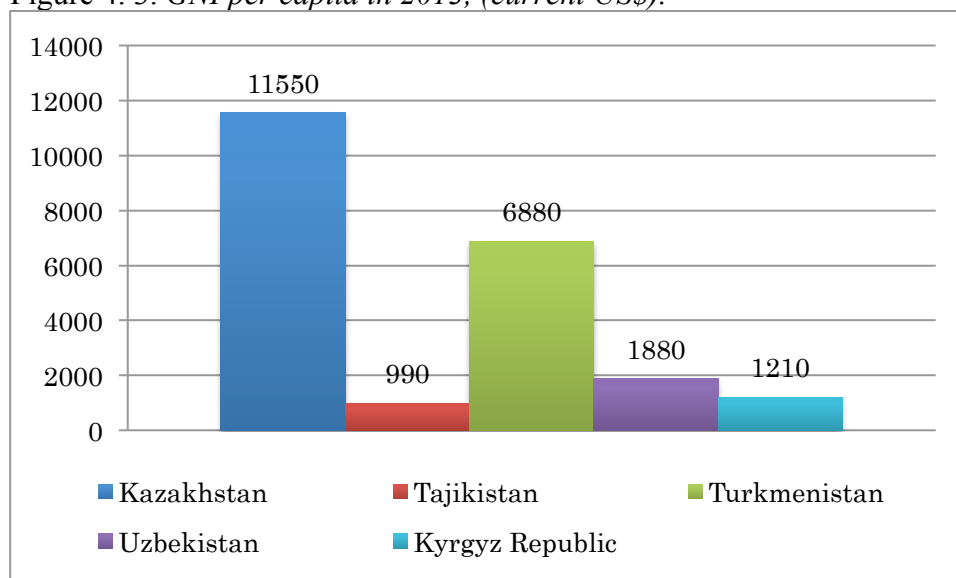
Figure 4. 2. *Education index in 2013.*



Source: UNDP. Compiled by the researcher.

Thus, in comparing components of HDI, there was a highly varied picture in terms of income component.

Figure 4. 3. *GNI per capita in 2013, (current US\$).*



Source: World Bank. Compiled by the researcher.

## **4.2. Cross-country analysis**

During the initial period of transition, economic and social developments of CAR had a notably negative trend. Until the mid-1990s, all socio-economic indicators experienced sharp decrease.

The next period, from the 1996 to 2000 might be characterized as the phase of stabilization and economic recovery. The following factors laid foundation of economic revival in the region: active export of raw materials, foreign investment, credits from international financial organizations, the rise of entrepreneurial activity, and political stability.

Then, the period from 2001 to 2013 presented a time of development in new external economic circumstances or development under conditions of involvement in the global economy.

The above-mentioned temporal schemes of socio-economic development are shown in Appendix 2. In some cases, data for the above-mentioned time frames are not available and because of this, there are some different time periods to consider.

This research considers growth rate of socio-economic development by comparing several key indicators. These are GDP per capita, Budgetary surplus/deficit, Health indicators (life expectancy at birth, maternal and infant mortality rates) and Education indicator.

### **4.2.1. GDP per capita.**

The average dynamic of changes in GDP per capita for designated time periods is shown in Appendix 3.

#### **1991-1995.**

With the collapse of the Soviet Union all economic links was disrupted and barriers for trade, transit and payments emerged. It was a breakdown of an integrated economic space with unified economic and social structure unconstrained by borders (UNDP, 2005, p. 37). This dissolution of unified economic structure led to falling industrial production. Naturally, a decrease of industrial output is the main factor of unemployment, income inequality and poverty.

In the first period of transition to market economy, namely in 1991-1995, Uzbekistan showed good performance in terms of GDP per capita. From Appendix 3 it can be seen that the average decline of Uzbekistan's GDP per capita is -6% which is relatively good performance among other CARs.

In contrast, Tajikistan took worst place with its -18.7% average annual decline of GDP per capita. Obviously, the reason for such negative performance is civil war. Tajikistan is the only country of Central Asia, in which the beginning of transition to market economy was more dramatic due to civil war.

The success of Uzbekistan was the less painful start of the transition. It was due to specialization on agriculture, especially on growing of cotton. This product was usually sold via international brokers. Moreover, cotton had high value-weight ratio and portability and thus was transportable for export by air as well as by rail. Along with it, the world prices for cotton, was growing in this period, which certainly was good fortune for the Uzbekistan.

In contrast, Kazakhstan and Kyrgyzstan were more manufacture-oriented countries with many plants and factories. The break-up of the Soviet Union adversely reflected on operation of manufacturing enterprises. Collapse of the Soviet unified economic space led to the disruption of supply and demand chain between

Soviet enterprises. Together with this problem there were troubles with the sale of finished products. In order to be competitive with domestic and outside rivals and meet demand, it was necessary to adapt production to the new external environment. Many enterprises could not alter production to the new economic circumstances, including loss of economic ties, and became bankrupt. Consequently the industry production declined which in turn reflected in drop of GDP per capita. This fact justified the more severe decrease of GDP in Kazakhstan, Turkmenistan and Kyrgyzstan than in Uzbekistan.

Another reason of more drastic decline in GDP per capita of Kazakhstan and Turkmenistan during initial period is related to oil and gas exports. Although, shifting from the Soviet to world prices of energy resources gave large benefits to Kazakhstan and Turkmenistan, the dependence on pipelines routed through Russia, limited these gains during 1990s (Anderson & Pomfret, 2003, p. 8). Hydrocarbon products can be transported only through pipelines, which after dissolution of the Soviet state became ownership of Russia.

In addition to these problems, Turkmenistan had difficulties with gathering payments for exported gas from some ex-Soviet republics. Turkmenistan also had cotton production in the agriculture sector, which could be good support for the economy. However, due to weak maintenance of irrigation systems, cotton growing made insignificant contribution to Turkmen's economy during this period.

A relatively good performance of Uzbek's GDP in the beginning period of independence also related to policy approach in transition to market economy. As is well known, Uzbekistan followed gradual approach in transforming its economy from a planned system to a market-based system. Gradual economic reforms and

maintaining dominant state presence in the economy during the initial stage of independence probably helped Uzbekistan to mitigate economic shock associated with dissolution of the Soviet Union.

Overall, Pomfret (2010b) explained the success of Uzbekistan in the very first period, by gradual transition policy, favorable world market prices for cotton, and good administration (also good legacy from the Soviet period).

Meanwhile, Turkmenistan is considered as the least-reformer ex-Soviet Central Asian republic. This country maintained tight state control in many spheres of economy and made slow cautious reforms in some areas. Weakly working market economy with substantial state impact replaced the central planning system of Turkmenistan (Pomfret R. , 2010a).

### **1996-2000.**

In this period Kyrgyzstan showed the highest average growth in GDP per capita, 4.1%. Such progress of growth can be explained by the start of the Kumtor gold mining project. This project attracted huge foreign direct investment and became a significant contributor to country's GDP. Meanwhile, the financial crisis in Russia in 1998 had harmful effect on this economic indicator.

The lowest growth of GDP per capita belonged to Tajikistan. It declined rather than grow and the average change of Tajik's GDP per capita was -0.9% during this time frame. At the same time, this change in GDP was better than the performance in the previous period (-18.7%). The relative improvement in this indicator was due to the end of the civil war in 1997 and the beginning of reforms. However, even after



the end of the war, security conditions were fragile. This fact hampered the attraction of foreign investments into the economy of Tajikistan.

Growth of Kazakhstan's GDP also related to attracted significant foreign direct investments. In 1999 FDI accounted for 9.4% of GDP while in 1996 it was 5.4%. These capital inflows were made predominantly to oil sector. Discovery of Kashagan, new oil field, underpinned increasing of GDP. Also, in order to promote export activity, the Kazakh government conducted depreciation of the national currency.

At the same time, several events had negative impact on growth of GDP during this period. First of all, it was unfavorable trend of world commodity prices, which adversely influenced on revenues from export. Second, financial crises of 1998 in Russia also hindered further increase of GDP. Third, delays in constructing new oil pipeline routes to new markets decelerated growth of economy.

Dependence on world goods prices and on Russian financial crisis concurrently showed degree of international integration of Kazakh's economy and vulnerability to external economic factors.

Uzbekistan experienced relatively slight growth of GDP per capita (2.2%) during the period under review. As described Pomfret (2006), well-functioning of Uzbek's economy in 1992-1996 concurred with high cotton prices while after 1996 such economic performance did not take place.

Average growth of GDP per capita in Turkmenistan was 3.4% during 1996-2000. There were two main negative causes for GDP increase. Due to significant outstanding arrears for exported gas, Turkmenistan had to cut off gas supply. Also, agriculture sector suffered from the falling of cotton crop. Cruel agro

policy and weak management resulted in sharp decreasing of Turkmen's cotton yields (Pomfret R. , 2010a).

### **2001-2013.**

During this period sustainable growth of GDP per capita belongs to Turkmenistan and Kazakhstan. Turkmen and Kazakh economies witnessed progress of GDP in 7.3% and 7.0% respectively.

The main origin of Kazakh economic performance is rising of oil prices in a world market. According to Pomfret (2010a), price for oil mounted from less than \$10 a barrel in 1998 to over \$140 in 2008.

In 2000 Kazakhstan explored new oil field in North Caspian. In 2001 Kazakh government launched first autonomous pipeline via Russia and in 2005 first pipeline to Mediterranean port. Such hopeful developments in energy sector accelerated GDP growth of Kazakhstan. Meanwhile, world economic crisis of 2008 had implications on Kazakh economy. In order to minimize adverse effect on living standards, Kazakh authorities used stabilization funds. The government had collected enough reserves from oil earnings to calm the crisis in 2008-2009 (Pomfret R. , 2010b).

As for Turkmenistan, country also enjoyed hiked world prices for gas during this period of time. Pomfret (2010b) explained such well economic performance by high gas prices rather than proper policies.

Kyrgyzstan showed the lowest period average growth of GDP per capita (3.3%). Such difficulties in Kumtor mine, as landslide in 2002 and technological problems affected on production of gold. Together with it, unfavorable climate conditions for agriculture additionally decelerated GDP growth. Also, global crisis of

2008 reflected in remittances of labor migrants. Remittances declined from 23.8% of GDP in 2008 to 20.9% in 2009 (See Figure 4.4.).

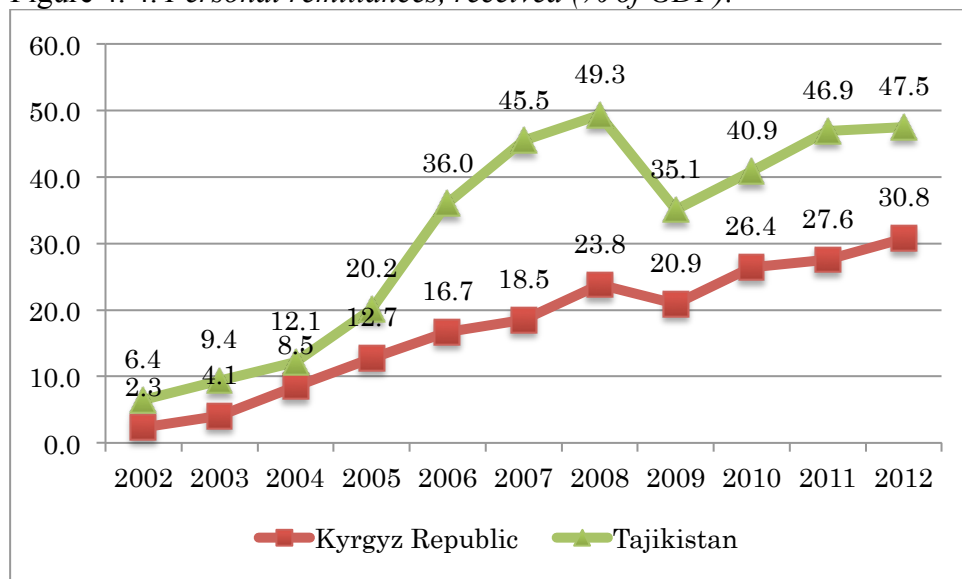
At the same time, liberal tax regime and favorable custom regulations as well as membership in WTO, promoted trading (wholesale and retail), including re-export activity. Bordering with China (WTO member), and relatively auspicious trade conditions created huge regional bazaars (market) in the south of Kyrgyzstan - Kara-Suu bazar (further export to Uzbekistan and Tajikistan) and in the north – Dordoi bazaar (further export to Kazakhstan and Russia). Growing commercial services contributed to GDP growth.

Economic growth of Russia and Kazakhstan, which associated with demand for Kyrgyz goods and services, had spillover effect on recent economic growth of the Kyrgyz economy (MDG 2009).

All above listed factors revealed dependence of Kyrgyz economy on such exogenous factors as economic activity in Russia and Kazakhstan (importers of re-exported commodities, main work places for labor migrants and investing activity to Kyrgyz economy) as well as direct dependence on weather conditions for agriculture.

Growth of Uzbek GDP (5.3% period average) was supported by rising world cotton prices. Likewise, lifting of foreign-exchange control in late 2003 facilitated growth of export activity.

Figure 4. 4. *Personal remittances, received (% of GDP).*



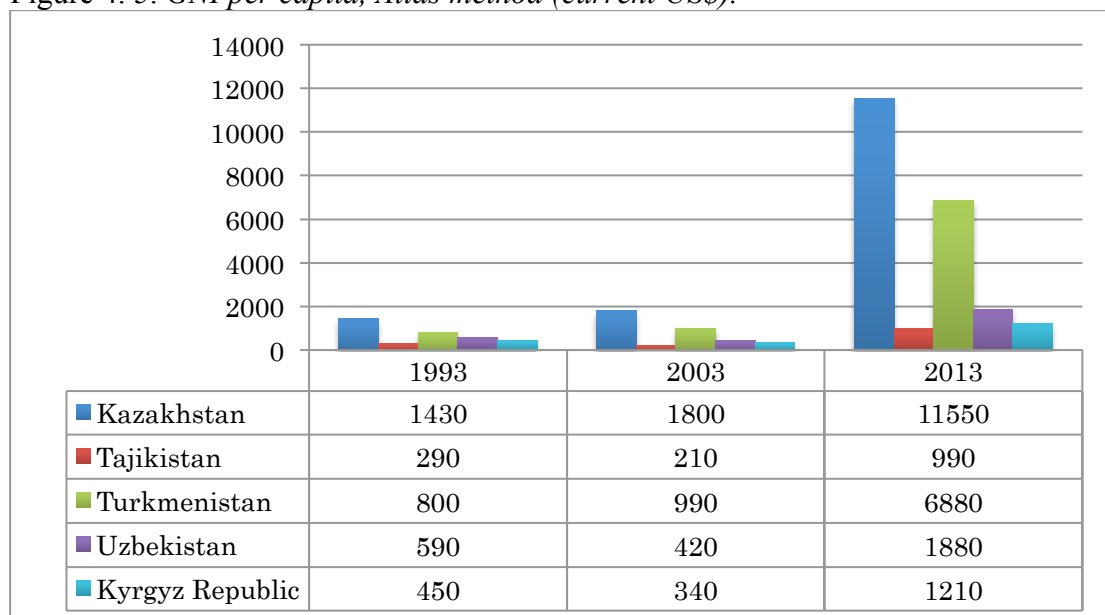
Source: World Bank. Compiled by the researcher.

Tajikistan experienced relatively good GDP increase with its 5.8%. Main contributors to GDP were remittances from labor migrants. Received personal remittances increased from 6.4% of GDP in 2002 to 49.3% in 2008 (See Figure 4.4.). Like Kyrgyzstan, Tajik labor migrants suffered from economic crisis of 2008 and their remittances decreased to 35.1% of GDP in 2009. This fact also confirmed vulnerability of Tajik economy from Russian and Kazakh economic activities.

Thus, many Central Asian economies rely deeply on export demand and remittance transfers from Russian Federation.

With growing economic activity income indicator also shows increasing dynamic since the start of transition to market economy (See Figure 4.5.). Kazakhstan and Turkmenistan demonstrated drastic rise of GNI per capita during 1993-2003. As it was mentioned before, to a large extend this is a result of natural resource export activity.

Figure 4. 5. *GNI per capita, Atlas method (current US\$).*



*Source:* World Bank. Compiled by the researcher.

#### **4.2.2. Budget balance.**

During Soviet period each CAR received large direct budget subsidies from the central government of the Soviet Union (Aslund, 2002). With disintegration of the Union all central subsidies were terminated. It was the main reason of sharp budget contraction at the beginning of independence.

Appendix 4 presents the comparison of state budget performance of countries.

#### **1995-1999**

The moderate average deficit of state budget during 1995-1999 experienced by Turkmenistan with -0.4% of GDP. Channeling gas export earnings directly to Turkmen budget while before they went to Soviet central budget was the supporting factor to budget balance. However, as mentioned before, dependences on pipelines,

which all were laid through Russian territory did not give much budget benefit from export in this period.

Kazakhstan's budget had 3.4% average deficit in these years. Negative factors were declining world oil prices and unfavorable weather conditions as well as financial downturn in Russia of 1998. At the same time, country took certain fiscal measures. The government made efforts to ensure monitoring and strict control of budget implementation as well as optimized tax system.

Budget of Uzbekistan during this period suffered from declining world prices on cotton and declining of output. Meanwhile rising prices on gas underpinned budget revenues. However, it is important to mention that Uzbek budget had considerable revenue item. It was state cotton and wheat procurement system. As described before, the government had significant profits from reselling of cotton from farmers to the world market. Also, import substitution policy of Uzbek authorities envisaged increasing of import tariffs and excises.

Kyrgyz state budget experienced average -5.4% budget deficits in this period. Declining of tax collection in these years contributed to budget deficit. At the same government has cut expenditures and boosted non-tax revenues in order to provide optimal budget balance. Also, external borrowings were used to cover several public expenditures.

As for Tajikistan's budget, there was obvious problem linked to civil conflict and aftermath of that war.

**2000-2007**

According to data shown in Appendix 4, during this period average budget deficit of CARs was relatively similar except Turkmenistan. The variation was from Uzbekistan's -0.2% (of GDP) to -0.7% of Tajikistan. Budget data for Turkmenistan is not available from this source.

Kazakhstan had average budget deficit during this period in -0.3% of GDP. Large public investments were made based on sharp increase of oil revenues. Raised oil and metal industry output as well as increasing world commodity prices provided significant budget earnings.

Tajikistan also enjoyed from cotton and aluminum export revenues in these years. Optimization in expenditures and improvements in revenue administration also contributed to decrease of budget deficit. Meanwhile significant public investments were made during this period.

Uzbekistan received incomes from cotton industry in this period. At the same time, the authorities lowered rates of several taxes.

Kyrgyzstan began Kumtor mining project, which provide considerable budget revenue. Also, the government conducted tax reforms, which led to weakening of tax burden and the same time resulted on budget deficit. Some external credits were used in order to provide public social expenditures.

### **2008-2013**

Global financial downturn of 2008 has hit economies of region's states in different extent. Accordingly economic developments reflected in state budget revenues and expenditures.

Kazakhstan used oil savings to mitigate the effect of the global shock on the economy and the financial sector. In order to revive economic activity, the government introduced fiscal stimulus for enterprises and financial bailout for domestic banks. In following years Kazakh economy recovered as well as budget revenues. Positive developments in extracting sector namely boost of industry output and increasing world commodity prices provided substantial budget incomes. Average budget deficit of Kazakhstan in this period accounted for -2.4% of GDP.

The largest average budget deficit -6% of GDP in these years can be noted in Tajikistan. Budget of this republic experienced negative effect of 2008 world crisis in respect of weak external demand for cotton and aluminum. Largest cotton yield of 2011 gave good contribution to budget. During this period, the government continued to make capital investments on some infrastructural projects. Debt service on external borrowings also had certain burden on state budget. At the same time republic iteratively received financial assistance from international financial organizations.

In contrast to Tajikistan, Turkmenistan had average budget surplus in 3.1% of GDP. This value of the indicator is best performance among CARs. Obviously, this surplus was provided by solid growth of gas extracting industry together with global prices.

Uzbekistan with average 0.5% of GDP also showed budget surplus, which was ensured by rising cotton prices and improved tax collection. Also, during this period, the government adopted several tax benefits for domestic enterprises in order to recover economic activity.



Kyrgyzstan had average budget deficit -2.9% of GDP. Country adopted new tax legislation, which gives more tax benefits and simplified procedures. The aim of the tax reforms was boost of economic activity, which in turn will give more tax payments. Favorable trade regime resulted in re-export activity, which also provided significant import budget earnings.

#### **4.2.3. Health performance.**

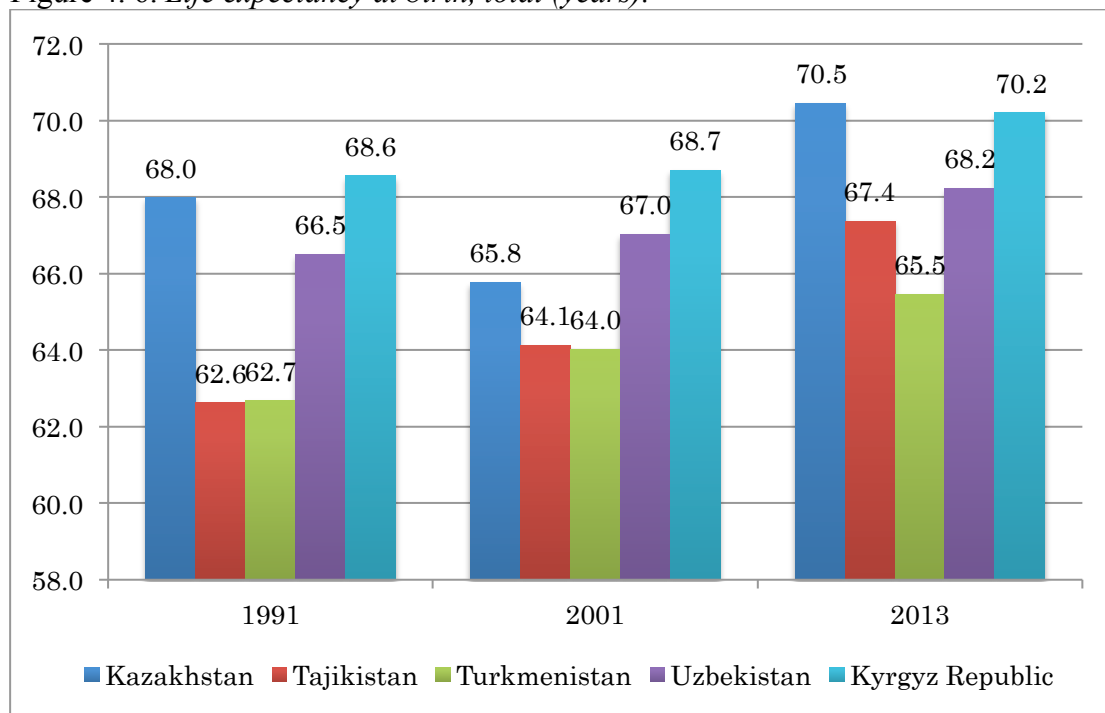
For the purpose of demonstrating the outcomes of health developments since onset of transition period three following indicators are presented: life expectancy at birth, maternal mortality rate and infant mortality rate.

Surely, there are many causal factors of life expectancy at birth indicator. Nevertheless, in this research author assume that health reforms to some extent have impact on that indicator.

The analysis of life expectancy at birth covers the period since the beginning of transition and is divided into three time frames, as it was before done for the economic sector.

Appendix 5, as well as Figure 4.6, present dynamic of change in life expectancy at birth indicator.

Figure 4. 6. *Life expectancy at birth, total (years).*



Source: World Bank. Compiled by the researcher.

### 1991-1995

CARs shared similar difficulties in the health sector in the first years of transition. These are common Soviet inheritance, economic recession, and huge share of population living in rural districts with poor infrastructure (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

These countries also implemented different health reform policies in solving problems in this sector and hence experienced varying dynamics in health indicators.

As can be seen from Appendix 5, over the period from 1991-1995 Kazakhstan and Kyrgyzstan experienced a drastic decline in this indicator with averages of -1.4% and -1.14% respectively. The direct causal factor of such health dynamic is economic decline and accompanying health budget expenditures.

Uzbekistan and Tajikistan showed moderate decline of -0.02%. The Uzbek government managed to maintain the health sector based on good economic performance and budget revenues. In contrast to peers Turkmenistan experienced growth of this indicator at 0.17%.

### **1996-2000**

Kyrgyzstan with 0.75%, demonstrated a rapid growth of the indicator over this period. The reason of such performance might be the reform-oriented policy of the Kyrgyz government.

In fact, Kyrgyzstan showed more successful example of introducing health insurance scheme (Borowitz & Atun, 2006). The Kyrgyz authorities firstly adopted health insurance legislation and then later experimented with its introduction before full-scale realization in 1998. In contrast, Kazakhstan iteratively reintroduced this health financing system.

Strong leadership, careful planning and phased implementation were important aspects in introducing an health insurance system (Borowitz & Atun, 2006). The difference in the experience of adopting health insurance mechanism in Kazakhstan and Kyrgyzstan proved this importance.

Kyrgyzstan combined the Soviet Semashko Model of medicine with the new Bismarckian Health System and thereby created a mixed financing system (Borowitz & Atun, 2006). This step made Kyrgyzstan as the leader in the health reform process in the region.

At the same time, Uzbekistan experienced the slow growth of the indicator, which was 0.19%. Probably one of the reasons is slow reform of the health sector

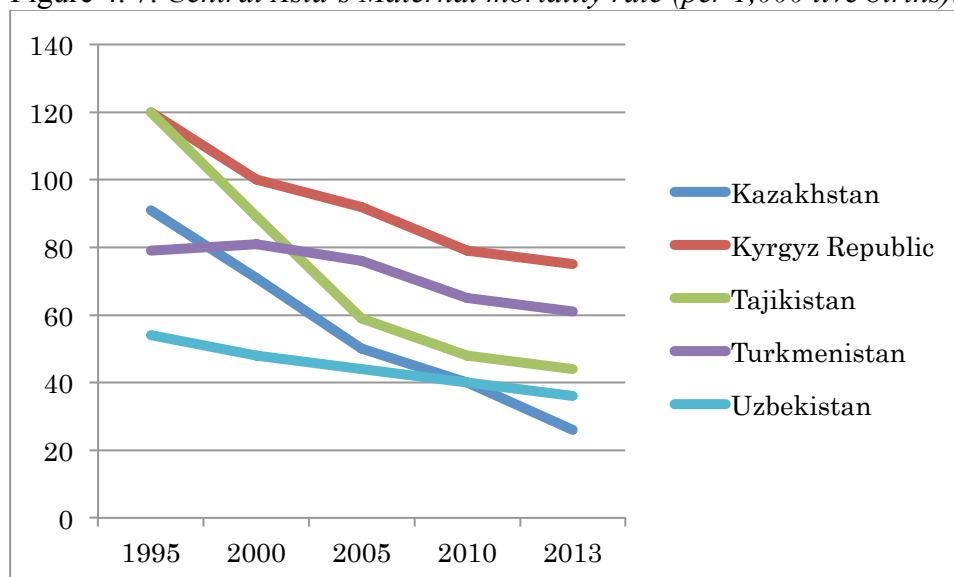
due to weak cooperation with international donor organizations (Borowitz & Atun, 2006).

### 2001-2013

Over these years speedy growth of the indicator belongs to Kazakhstan with 0.58%. The country began systemic reforms and considerable investments in the sector. Kazakhstan began renewing, improving and construction new schools, laboratories and other facilities only since 2002 (Shagdar, 2006). Apparently, economic growth also underpinned the increase of this indicator.

Likewise, Tajikistan experienced a steady growth of the indicator with 0.41%. This republic also made significant efforts in health reforms with the assistance of international donor institutions.

Figure 4. 7. *Central Asia's Maternal mortality rate (per 1,000 live births).*

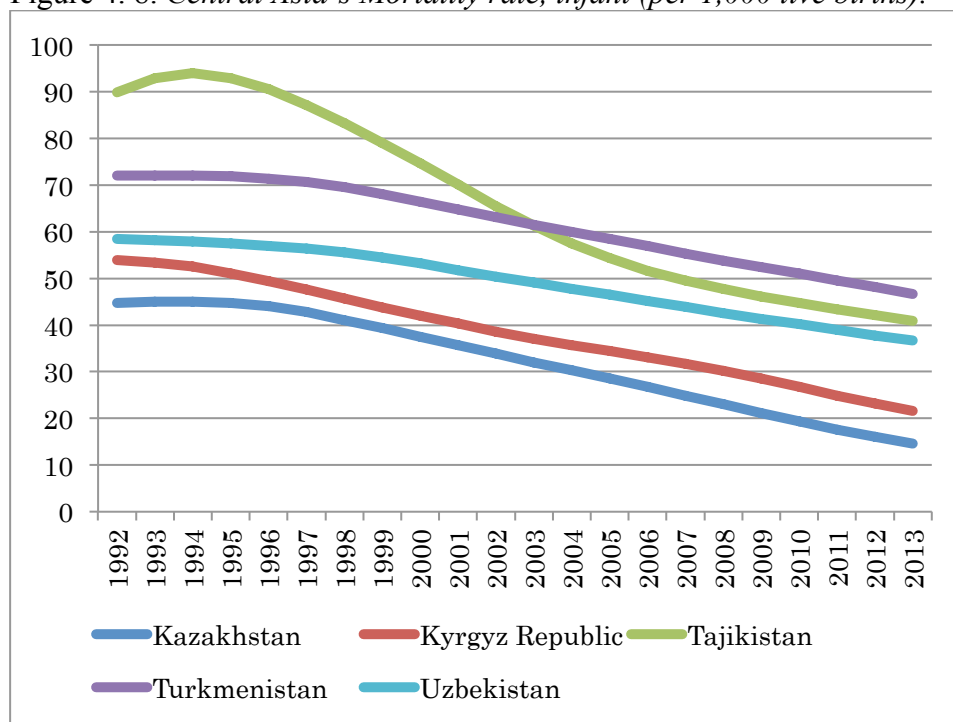


Source: World Bank. Compiled by the researcher.

In order to complement the health care performance the dynamics of maternal mortality rate and infant mortality rate is presented in Figures 4.7 and 4.8. These

figures show decline in these indicators. The average pace of changes over the whole period of each country is compared in Table 4.1.

Figure 4. 8. *Central Asia's Mortality rate, infant (per 1,000 live births).*



Source: World Bank. Compiled by the researcher.

Table 4. 1. *Average pace of decline in maternal and infant mortality rate.*

Index	Kazakhstan	Tajikistan	Turkmenistan	Uzbekistan	Kyrgyz Republic
Maternal mortality rate, 1995-2013	-27%	-22%	-6%	-10%	-11%
Infant mortality rate, 1992-2013	-5.1%	-3.7%	-2.0%	-2.2%	-4.2%

Source: World Bank. Compiled by the researcher.

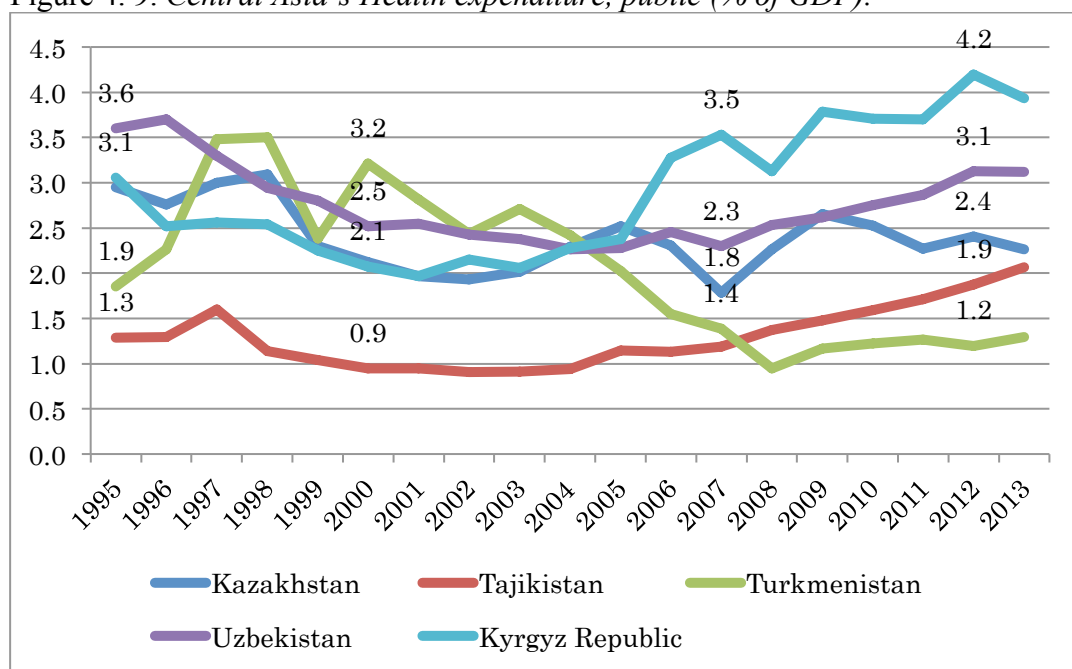
As it can be seen from the Table 4.1, Kazakhstan showed faster decline in both indicators. In contrast, Turkmenistan demonstrated the slowest decrease of these indicators.

Both of these countries have significant budget revenues from their hydrocarbon sector. Supposedly, they should use this wealth together with crucial

reforms to improve the state of the health sector. However, Turkmenistan, with its reform-avoiding approach, has not been successful in health sector changes.

Figure 4.9, presents public health expenditures of the countries from 1995 to 2013. The Kyrgyz government allocated more budget funds since 2006 and the average annual share of expenditures accounted for 3.7% over the period 2006-2013 years. For comparison, during this period Uzbekistan and Tajikistan allocated on average 2.7% and 1.6% respectively.

Figure 4. 9. *Central Asia's Health expenditure, public (% of GDP).*

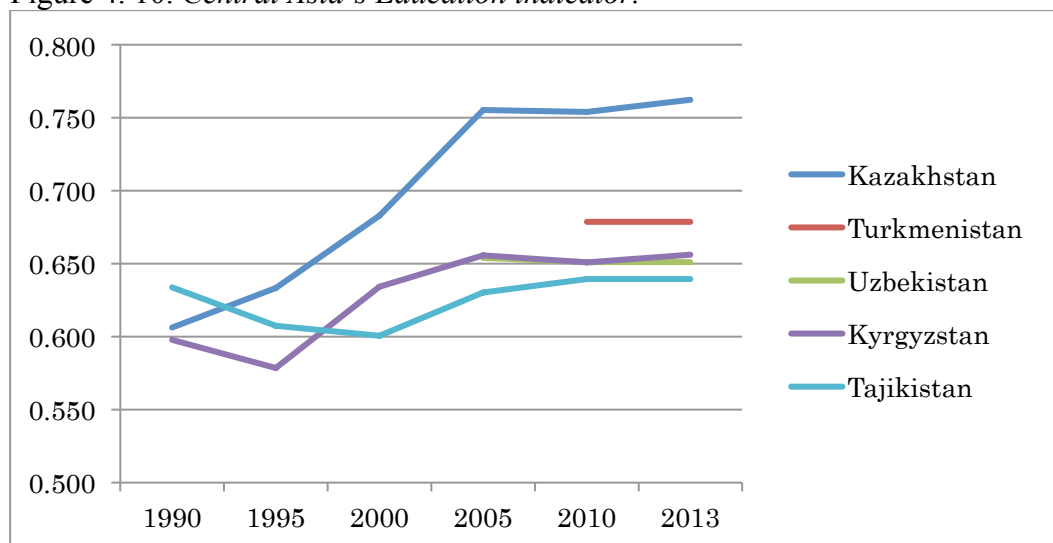


Source: World Bank. Compiled by the researcher.

#### 4.2.4. Education performance

Dynamic of growth in education indices is presented in Figure 4.10. As it can be noticed, Kazakhstan demonstrated good performance also in education sector. Kazakhstan's 4.8% is the highest pace of growth among fellow countries (See Table 4.2).

Figure 4. 10. *Central Asia's Education indicator.*



Source: Human Development Report 2014. UNDP. Compiled by the researcher.

It was hard to evaluate educational development of Turkmenistan and Uzbekistan due to difficulties in accessing accurate and reliable data (Kissane, 2009).

Table 4. 2. *Average increasing pace of Education indicator, 1990-2013 (%).*

Index	Kazakhstan	Tajikistan	Turkmenistan	Uzbekistan	Kyrgyz Republic
<i>Average increasing pace of Education indicator</i>	4.8%	0.2%	n.a.	n.a.	2%

Source: Human Development Report 2014. UNDP. Compiled by the researcher.

In general every country strived to improve the quality of education. However, most challenges were based on state financing issue. As Anderson & Heyneman (2005) pointed out, severe educational problems in Central Asia are closely linked with expenditures.

Nevertheless, some efforts were made in order to solve problems against finance deficiency background.

For instance, by 2005 Kyrgyzstan, Uzbekistan and Tajikistan allowed operation of broad spectrum of school institutional types - gymnasiums, lyceums, private schools, and professional colleges. These educational institutions were allowed to attract private sponsorship. Thus, governments tried to pursue two objects: meet the requirements of students in specific instructions and solve the financial demand of these institutions (Chapman, Weidman, Cohen, & Mercer, 2005).

Another good example of solving problems related to financial constraints in the education sector was demonstrated by Tajikistan. Republican authorities introduced textbook rental mechanism that improves availability of school textbooks for poor parents.

During the initial period of transition process, Kazakhstan, Kyrgyzstan and Tajikistan demonstrated marginally worse results than Turkmenistan and Uzbekistan (Shagdar, 2006). As Shagdar (2006) explained, the reason for Kyrgyzstan's outcome was more radical changes and speed of reforms among other countries.

In general, countries that made good progress in market reforms also are inclined to conduct more profound changes in education systems, versus the states that maintained considerable components of previous planned economies (UNDP, 2005).

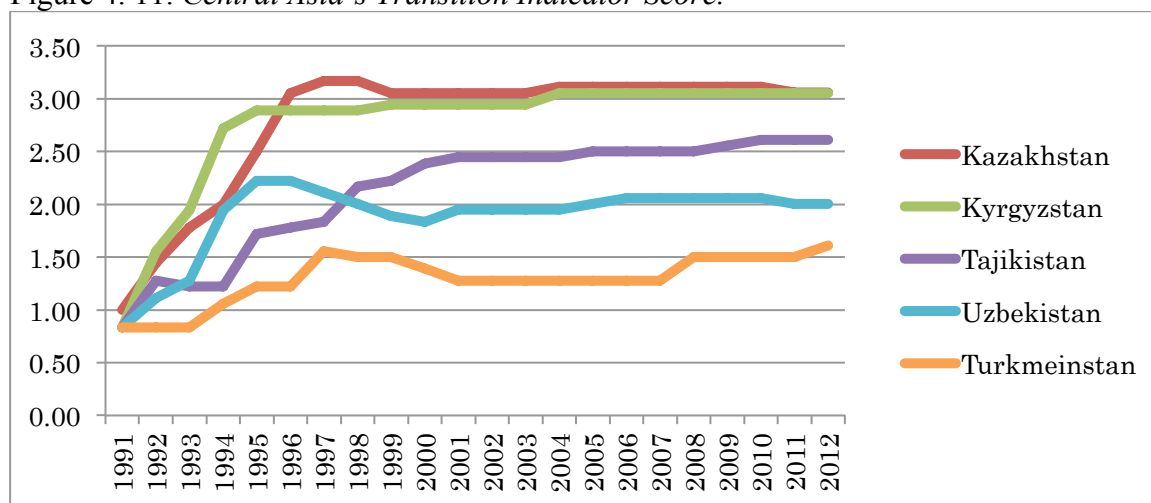
#### **4.2.5. Transition pace.**

In terms of transition degree Kazakhstan and Kyrgyzstan over the period 1991-2012 have average scores 2.79 and 2.76 respectively. They have almost equally the highest scores among CARs (See Table 4.3). Thus, these two countries have the



more market-oriented economies. The lowest average score belongs to Turkmenistan with its 1.3 score. This fact proves that Turkmen economy is the least market-oriented in the region.

Figure 4. 11. *Central Asia's Transition Indicator Score.*



Source: EBRD. Compiled by the researcher.

In the first decade of transition Kyrgyzstan was classified as the most reform-oriented country of the region. One of the results of its policy is the first membership of WTO among former Soviet republics, ahead of even Baltic republics (Pomfret R. , 2012)

Table 4. 3. *Average Transition Indicator Score, 1991-2012*

	<b>Kazakhstan</b>	<b>Tajikistan</b>	<b>Turkmenistan</b>	<b>Uzbekistan</b>	<b>Kyrgyz Republic</b>
Average Transition Indicator Score	2.79	2.13	1.30	1.89	2.76

Source: EBRD. Compiled by the researcher.

## **CHAPTER 5**

### **5. DISCUSSIONS**

#### **5.1. Lessons from transition experience**

This part presents the lessons that emerge from transition experience of Central Asian countries. They are presented according to HDI components.

##### **From the experience in economic development.**

First, agriculture specialization of Uzbekistan was one of the factors, which contributed to moderate economic decline in the first period of transition in contrast to the more manufacturing-oriented Kazakhstan. In the beginning of sovereignty most of the Uzbek industry was relatively independent from other parts of the former Soviet Union (Myant & Drahokoupil, 2013). Moreover, specialization of agriculture on cotton, which is an easily transportable commodity, gave benefit to Uzbekistan in comparison to Kazakhstan and Turkmenistan with their oil pipelines, which were laid through Russia.

Also, closed financial sector of Uzbekistan as well as the whole economy with considerable state presence was less affected by world financial crisis of 2008. Whether it is good example of avoiding external shocks or not, is a question for another discussion.

Second, the oil savings of Kazakhstan were cushions to soften the effect of the global economic crisis in 2008. Such cushions allowed the country to not only maintain social expenditures, but also to give tax stimulus and bailout. Kazakhstan and Uzbekistan took considerable anti-crisis measures, which were over 15% and 5%

of GDP respectively (Ruziev & Majidov, 2013). Moreover, Kazakh oil savings, in the form of National Fund, are utilized to capital investment in infrastructure projects and other programs, which will provide return of benefits in the future. These measures are taken in the framework of diversification of economy and lowering dependence on oil industry.

Third, Kyrgyzstan by creating favorable international trade regime and as a first member of WTO among former Soviet republics became a trade hub in the region. This status gave considerable budget revenues from re-export activity. Kyrgyzstan, by engaging in re-export activity of Chinese commodities throughout the Central Asia, Russia, and potentially the Middle East, originated new dynamics in transformation process (Laruelle & Peyrouse, 2013).

Fourth, one of the causal factors of good economic performance of Uzbekistan in the first decade of transition is the good administration (Pomfret R. , 2012). As he explained, well maintenance of irrigation systems and ginning facilities underpinned cotton output.

Fifth, all CARs conducted fiscal reforms, which envisaged tax and customs (to a lesser degree) stimulus for economic revival. Lowering of tax rates as well as simplifying of tax procedures served as measures of fiscal incentives. Surely, these measures were accompanied with budget loss. However, cost of these measures is not commensurate with future returns. Incentives rather than administrative plans are drivers of sustainable economic growth (Ruziev & Majidov, 2013). Also, CARs made efforts in providing budget discipline. It implies optimization of expenditures, budget control and monitoring and etc.

Sixth, favorable business environment along with proper directing of huge remittances can secure much higher investment (World Bank, 2014). The World Bank (2014) presented the example of Kyrgyzstan with its high level of remittances, “*where total investment averaged 25 percent of GDP in 2012, including private investment averaging 19 percent of GDP*”.

### **From the experience in education sector**

Kazakhstan, Kyrgyzstan and Tajikistan by cooperating with and their openness to the world education community allowed more opportunities to study abroad and bring new knowledge to the society.

By 2009 Kazakhstan had become a regional education center with active teacher networks and more varied educational opportunities among CARs (Kissane, 2009). As Kissane (2009) emphasized, oil savings in the form of National Fund of Kazakhstan, allowed financial support for the most progressive scholarship program for study abroad. Kyrgyzstan is the only country in the region, where an American university was opened.

Kazakhstan and Kyrgyzstan changed university entrance exams procedures in order to decrease corruption in the admission process. Admission tests have been standardized and computerized.

### **From the experience in health sector.**

Experience of Kyrgyzstan probably is relatively the best lesson of successful health reforms among CARs. Kyrgyzstan has implemented a range of appreciable

reform steps in the health sector (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

For instance, Kyrgyz authorities reformed financing mechanisms in the health sector. They successfully launched a single payer system and formal co-payments, in order to decrease regional disparities and informal payments. Also, an extended state-guaranteed benefit package and patient information campaigns were introduced in the republic. This measure contributed to the financial safety of the population.

Second, the government promoted effective engagement of local communities and civil society in the development and realization of quality improvement programs.

Third, Kyrgyzstan applied sector-wide approach in coordination of donor assistance, in order to increase aid effectiveness and avoid splitting up.

Fourth, the Kyrgyz government piloted some reform elements and then later rolled them out countrywide. This approach proved the effectiveness of the reforms.

In general, Kyrgyz authorities demonstrated political leadership, governance and consistency in conducting health reforms. In turn, consistency was supported by integration of capacity building into programs of structural changes (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

Kyrgyzstan showing “a consistent commitment to comprehensive reforms” succeeded better than Kazakhstan, which followed a more changeable way (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

## **5.2. Various approaches to promote human development.**

Overall, transition from planned economy to market-based economic system had negative impact on human development standards during the initial period. Countries of the region faced analogous economic and social challenges and tried to solve these problems in different ways.

Each country of the region made efforts to provide sufficient level of human development. As a result of the different views on transition path, these countries have reached diverse levels of human development. Surely, initial conditions of these countries also were diverse and this is one of the reasons for the current dissimilar levels of human development. However, the speed of changes and reaching achievements also contributed to the various levels of human development. Differing ways of reforms defined the dynamic of development in the main economic and social indicators. The present study evaluated the dynamic or speed of changes in key economic and social indicators that related to the human development index.

However, the approach to achieve this goal was heterogeneous. While some of these countries preferred radical changes and shock therapy, others preserved a gradual way of transformation by maintaining many elements of the previous system. Though some republics began significant reforms in the early stages of transition, others came later to the necessity of changes. While some states relied on resource wealth, others used credits from international financial organizations. Though some republics were open to cooperation and integration to the world community, others believed in self-sufficiency and hence remained isolated. While some of states have created open and liberal economies, others still retain state control over the economy. While some exported their natural resources, some exported their labor forces. All this divergence of activity resulted in varying levels of human development.

Sometimes a contradictory policy of state interference played a positive role in maintaining social conditions of the population. For instance, the poverty rate increased in the relatively unregulated Kyrgyz economy, while the more controlled Uzbek and Turkmen economies more successfully contained the rise of inequality (Pomfret R. , 2006). Another example is Uzbekistan's cotton state procurement system, which underpinned state budget and hence social expenditures. However, this policy had a positive effect in the short-term perspective rather than in the long-term.

In some countries reforms avoidance might be explained by the political context. Authorities were reluctant to make structural changes because of possible threat to their power. The case of Turkmen education sector proves this idea. As it was described earlier the educational institutions in Turkmenistan were regarded as breeding-ground of political dissidence.

Another aspect of conduction reforms is the political issue, which is expressed in the form of rivalry amongst power elites. Influential political groups have been competing in gaining control over resources in these countries. As a rule this struggle impeded crucial structural changes and consequently resulted in the deterioration of the living conditions of people. An example is the delays in reforms in Tajikistan in the first half of nineties. In Tajikistan, the World Bank (1996) noticed an existing influential political pressure to delay structural changes, which would be detrimental to the interests of the different political groups.

The problem of pressure from influential political groups together with powerful business interests linked to them still exists in all countries of the region.

Necessary reform initiatives encounter enormous hostility and resistance from these groups.

In order to overcome such resistance from political groups as well as government officials it is worth to consider relevant institutional reforms. The emergence of interests and their expression through institutions was a difficult process in CAR (UNDP, 2005). The necessity of institutional approach in mediating the different rival interests is obvious. Institutional mediation should take into account interests of those who gain from reforms and of those who lose the benefits because of reforms. For the latter category some compensation might be given.

For instance, optimization of customs administration will give benefits to many exporters and importers as well as producers and consumers (UNDP, 2005). Through relevant institutions they can express their economic demands and quite likely that they will get political support for the necessary changes in the sector.

UNDP (2005) clearly described the case of customs administration, where institutional approach might be used. Importers and exporters can receive political backing through different institutions (UNDP, 2005). At the same time, customs officials might be compensated through retraining and higher official salaries.

### **5.3. Region's Trade Hub**

One of the common characteristics of CAR is the landlocked position, which makes difficulties in export/import activities. One of the ways to overcome these obstacles is creating liberal trade regime, which implies lifting import/export restrictions and low tariffs. Surely, the issue of protection of the domestic industry should be taken into account. Probably, re-export activity is not a good remedy in economic



development. However, in the situation of Kyrgyzstan it was the only way to create jobs and increase GDP.

The case of Kyrgyzstan showed an example of the negative side of trade liberalization. Commercial activity increased in Kyrgyz economy as a result of creating favorable trade regime. At the same time Kyrgyzstan could not develop domestic industry as well as agriculture sector. Developed industrial potential is the main driver of accelerated economic growth (Koichuev, 2009).

Another point is the export of raw materials. The country is significantly dependent on Kumtor mine. It means that Kyrgyzstan also focused on export of primary commodities, as other peers of the region. However, the state should introduce incentives for the export of processed and manufactured goods rather than for the export of raw materials (Koichuev, 2009). Thus, Kyrgyzstan should consider international trade issue, taking into account issues of domestic manufacturing and agriculture processing industries.

#### **5.4. External Debt and Resource Wealth**

Kyrgyzstan and Tajikistan faced problems of how to carry out transition reforms and maintain social conditions in a resource-scarce environment.

Apparently, governments of these republics saw solutions for this problem in receiving credits and grants from international financial organizations. Aid rather than natural resources provides significant financial resources for Tajikistan and Kyrgyzstan (Melnykovska & Schweickert, 2013).

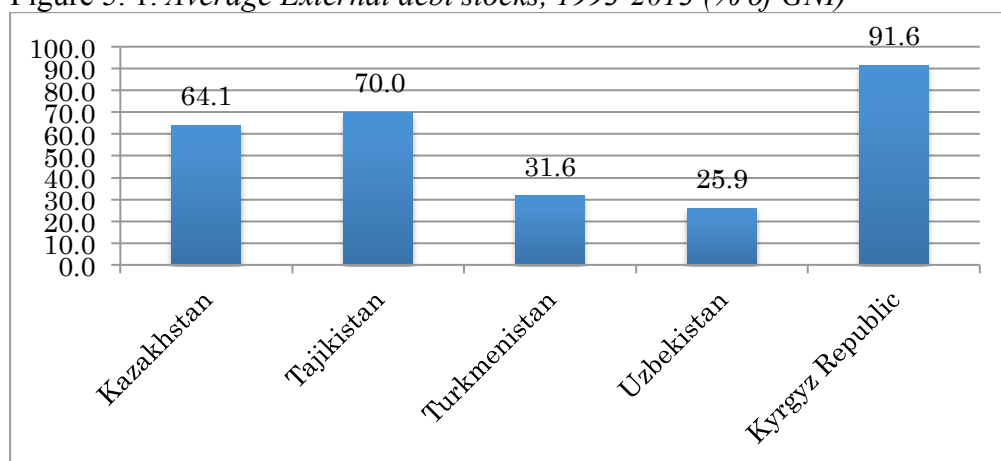
These republics conducted structural changes in health care and education sectors with the financial assistance of international institutions. As Gleason

highlighted (2003), its pro-reform position rapidly made Kyrgyzstan the *Wunderkind* of the international donor community. Kyrgyzstan received the greatest amounts of credits from all external donors. By 2005 Kyrgyzstan and Tajikistan accumulated significant foreign debt, which have become a serious burden for their budgets.

Kyrgyzstan and Tajikistan achieved relatively good output in social sectors as a result of their reform-oriented policy. However, together with this they have also had high external debt obligations.

To date, less resource endowed Kyrgyzstan and Tajikistan have been exposed to high external debt burden. In contrast, resource-rich Turkmenistan and Uzbekistan (to a lesser degree) have avoided multilateral debt obligations (See Figure 5.1). Another reason for a low debt burden is the political freedom issue in these countries. In many cases, international organizations suspended cooperation with Turkmenistan and Uzbekistan due to existing repressive political regimes.

Figure 5. 1. *Average External debt stocks, 1993-2013 (% of GNI)*



Source: World Bank. Compiled by the researcher.

Reforms in the health and education sectors as well as the maintenance of some social budget obligations were made with the credit assistance of international

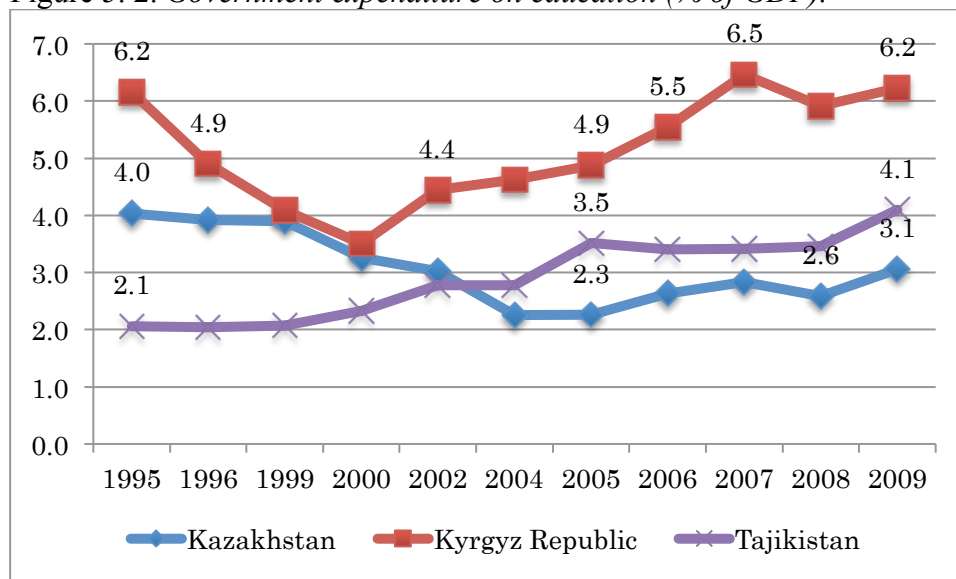
financial institutions. Obviously, authorities of these republics tried to retain decent social conditions for the population. As a result of these steps Kyrgyzstan and Tajikistan showed relatively good performance in the education and health sectors.

However, a high dependence on external debt poses contradictory questions about such policy approach in reforms. As Rajan & Subramanian (2007) emphasized, aid plays insignificant role in economic growth. Moreover, the governments recognizing that aid is no cure-all can accelerate the development tendency. It is important to highlight, that significant amounts of Kyrgyz and Tajik external debt arose partly in consequence of inadequate public borrowing and partly due to high degrees of concessional crediting by the international financial organizations (UNDP, 2005).

Probably, this situation would not emerge if countries were endowed with rich natural resources. As can be seen from the present study, Kyrgyzstan made significant reforms towards market economy together with Kazakhstan. However, differences in natural resource wealth placed these countries in different positions of human development.

For instance, available significant economic and financial resources encouraged the reforms of higher education in Kazakhstan. Meanwhile, politically more liberal but resource-poor, Kyrgyzstan has had to rely mainly on external assistance for implementing reforms (UNDP, 2005). Kyrgyzstan and Kazakhstan could promote the most advanced educational policies and opportunities for schools, however the former suffers from severe budget restraints (Kissane, 2009).

Figure 5. 2. *Government expenditure on education (% of GDP).*



Source: World Bank. Compiled by the researcher.

From Figure 5.2, it can be seen that the share of the Kyrgyz government's expenditures on education is traditionally more than in Kazakhstan and Tajikistan. It is worth mentioning that the Dakar Conference on Education for All recommended public expenditure on education on the level of 6-7% of GDP (Kissane, 2009). The data for Turkmenistan and Uzbekistan is not available.

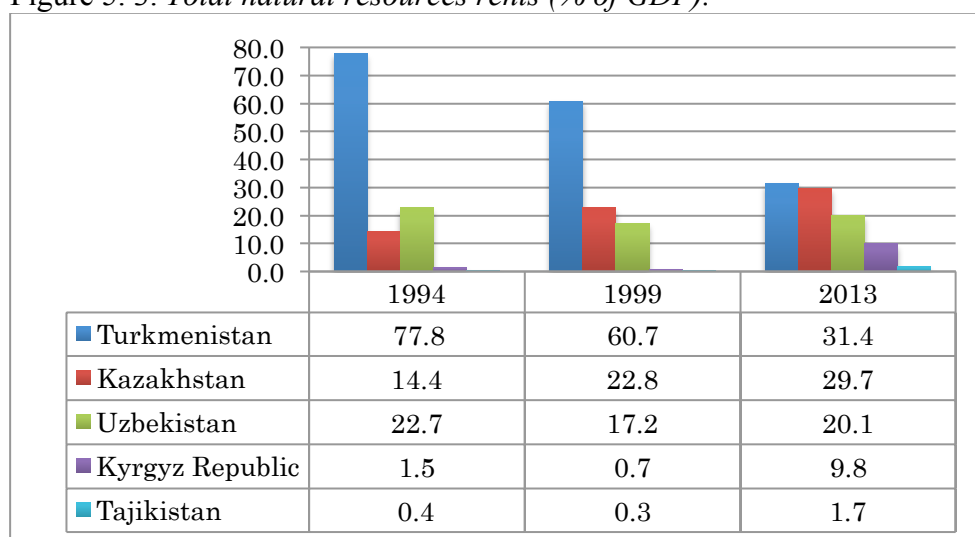
The same tendency can be noticed in the public health expenditures since 2006 (See Figure 4.9.). Kyrgyzstan spent more than others on health in 2007, despite poor resource wealth (Rechel, Ahmedov, Akkazieva, Katsaga, Khodjamurodov, & McKee, 2012).

The reason of such social oriented feature of the Kyrgyz state budget might be the aim of human resources development. Human resources are one of the important assets of Kyrgyzstan and Tajikistan that have scarce natural resources (UNDP, 2005). Authorities have to recognize that knowledge in general is an important factor of economic growth in the twenty-first century (Laruelle & Peyrouse, 2013). Also,

the government should provide the population with equal access and a wide spectrum of health-care services (Borisova, 2011).

The resource endowments in terms of natural resources rent of the countries are presented in Figure 5.3. According to the explanation provided by the World Bank, natural resources rent is calculated as the difference between the price of a commodity and the average cost of producing it.

Figure 5. 3. *Total natural resources rents (% of GDP).*



*Source:* World Bank. Compiled by the researcher.

Many causal factors played roles in the development of economy, education and health. Moreover, these sectors of state policy are interrelated and interdependent. Economic development of the country as a rule also reflected in education and health sectors. At the same time, a high quality education together with healthcare, provide human resources for the economy.

The direct link might be observed through the state financing of these social sectors and incomes of the people. A population having sufficient income can have

access to decent education service and health care. The state can improve these social services by adequate budget funding, as well as by properly regulating these fields.

The case of Kazakhstan demonstrates this relationship between economic development and growth of quality in education and medicine. Having considerable earnings from natural resources, the country made significant investments into healthcare and the enlightenment of the population. Hence, this policy allowed Kazakhstan to improve the human development trend. As Kissane (2009) pointed out, Kazakhstan boasted the most developed education system in the region thanks to oil wealth and speedy economic growth.

Also, it is worth to mention that growth of the oil industry in Kazakhstan had spillover effects to other sectors of economy. The banking sector and construction also had a growing trend.

Another finding of this research is that Kazakhstan and Turkmenistan attracted more foreign direct investments than other republics. As UNDP (2005) highlighted, other republics could not attract considerable foreign investments because of poor resource wealth (Kyrgyzstan), fragile political situation (Tajikistan) or absence of market reforms (Uzbekistan).

The main sectors of Kazakh and Turkmen economies, which attracted significant investments, are the hydrocarbon industries. Most likely that oil and gas production has a high rate of capital return. Net inflows of foreign direct investments (% of GDP) are presented in Appendix 1.

Thus, the economic performance of CAR was mainly (and overwhelmingly) determined by whether the countries are well endowed with energy resources or not (Pomfret R. , 2010b).

Table 5. 1. *Economic and Social features of CAR*

	Market transition	Natural resource wealth	Public External debt burden	Trade regime	Education Quality	Health Quality	HDI
Kazakhstan	<i>High</i>	<i>High</i>	<i>Low</i>	<i>Mostly Liberal</i>	<i>High</i>	<i>High</i>	<i>High</i>
Tajikistan	<i>Upper middle</i>	<i>Low</i>	<i>High</i>	<i>Mostly Liberal</i>	<i>Upper middle</i>	<i>Upper middle</i>	<i>Middle</i>
Turkmenistan	<i>Low</i>	<i>High</i>	<i>Low</i>	<i>Restricted</i>	<i>Low</i>	<i>Low</i>	<i>Upper Middle</i>
Uzbekistan	<i>Upper low</i>	<i>Middle</i>	<i>Low</i>	<i>Restricted</i>	<i>Middle</i>	<i>Middle</i>	<i>Middle</i>
Kyrgyzstan	<i>High</i>	<i>Low</i>	<i>High</i>	<i>Liberal</i>	<i>Upper middle</i>	<i>High</i>	<i>Middle</i>

It is apparent from Table 5.1, that a predominantly market-oriented economy along with natural resource richness is a precondition of the high HDI level.

### **5.5. Uniqueness of Kyrgyzstan**

The uniqueness of Kyrgyzstan is encompassed in its inclination to changes. This country was the most reform-oriented former Soviet republic in the region during the early stages of transformation. By 1995 Kyrgyzstan was the first republic, which managed to curb inflation growth by implementing proper monetary policy (Pomfret R. , 2010b). Kyrgyzstan is the first former Soviet republic, to become a member of WTO in 1998. Kyrgyzstan is the only republic, to become the trade hub of the region thanks to its liberal trade regime and its proximity with China, which is also a WTO member. Kyrgyzstan demonstrated exemplary experience in reforming the healthcare sector among CAR.

Finally, Kyrgyzstan is the only republic, which ousted two former presidents and subsequently has established a European style of governance – parliamentarism.

Nevertheless, clannish rivalry and competition of political elites, although in a civilized manner, still exists in the country, as well as hidden resistance to vital reforms.



## **CHAPTER 6**

### **6. CONCLUSION**

Overall, a transition from planned economy to market-based economic system had negative impact on human development standards during the initial period.

The countries of the region were confronted with similar difficulties of transition process. The economies of the CAR experienced different pace of development and indisputably it was based on the chosen way of readjustment. Some countries began reforms earlier while others started later. Since the onset of transformation, some countries have made encouraging successes in economy and social sector, although slowly, unevenly, and sometime on a case-by-case basis (Akiner, 2003).

By 2014 many reforms towards market economy as well as systemic changes in the education and health sectors have been completed in Kazakhstan, Kyrgyzstan and Tajikistan. Evidently, the outcomes of those reforms are varied. Accordingly, the degree of human development also diverges.

Summarizing the economic performance and the resulting social development of the countries, the present research suggests that the trend of human development since the achievement of sovereignty has been mainly determined by exporting natural resources (all countries) as well as exporting labor forces (Tajikistan, Kyrgyzstan, Uzbekistan), and re-export activity (Kyrgyzstan). Additionally, market reform-oriented policy along with close cooperation with international organizations (including accumulated large amount of borrowings) contributed to human development tendency over the period under review.

The conclusion is that not only resource wealth plays a key role, but also a fully market-based economic activity together with proper governance secures progress in human development of the region. Political will, institutional support and favorable business environment are preconditions for advanced human development.

The case of Kazakhstan demonstrated that exploitation of natural resource wealth together with a market-oriented policy played a key role in the advancement of human development after attaining sovereign statehood. This strategy was implemented hand in hand with relatively prudent governance and proper management. In particular, such feature was seen in accumulating oil savings and later using these savings as cushions during crisis situations.

The good management of cotton irrigation systems in Uzbekistan is a note-worthy experience of good governance. Likewise, Kyrgyz health reforms presented another good example of prudent governance in implementing reforms.

Economies of all countries are dependent on external factors such as the global financial situation, world prices on commodities, as well as economic situations in neighboring states, which provide export demand and remittance flows. Likewise, weather conditions and other natural factors have significant impact on economic performance of the countries under study.

Nevertheless, economic policy is more crucial than natural resources endowment for economic development (Auty, 2000). The improvement of position in HDI ranking might be reached not only by possessing rich natural resources, but also by proper administration of economic and social policy.

Although all countries demonstrated overall progress towards human development, much still needs to be done. The progressive experience in human

development of more advanced republics of Central Asia, expressed in HDI, might give important lessons for other less developed countries of the given region.

In order to improve HDI position of the CAR, further efforts should be made by policymakers, government officials and development practitioners. Political will, strong leadership and interests of authorities also play crucial roles in reforms of sectors related to HDI.

Based on the analysis of this research the governments of the CAR should follow strategies that improve HDI rank.

For instance, the republics with less market-oriented economies should complete structural reforms of their economy in order to establish a market-based system with fully functioning institutional block.

For countries with high dependence on energy resources it is necessary to make further efforts in diversifying of economy in order to avoid the so-called “resource curse”. It is quite possible to do so, taking into account accumulated energy earnings. A shift from export of primary commodities to export of processed and finished industrial products (including export of high technologies and other services) might be one of the steps. Another element of economic diversification can be a favorable business environment, which promotes investments in other sectors of economy.

For less resource-endowed countries it is reasonable to focus on human resources through providing high quality education and healthcare.

The landlocked geographical position of the region demands the promotion of international trade of CAR. The decrease of trade barriers, development of the transport network and the improvement of cross-border infrastructure can facilitate

international trade. Likewise, it is necessary to enhance the regional cooperation in order to promote international trade.

The governments should prudently manage the state budget taking into account the perspective of future generations. Also, the budget policy should provide future savings as it can play a stabilizing role in possible volatile periods.

Finally, the strict observance of the laws, the transparency in decision-making and accountability of authorities are crucial conditions for implementing economic and social policy. Also, it is important to eliminate red tape and reinforce anti-corruption drive.

All the above-mentioned measures will contribute to human development in the region.

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## Appendices

### Appendix 1. Overview of Central Asian Countries (Data as of 2013).

	Territory (Sq. km)	Population (million)	GDP (billion, current US\$)	GDP per capita, PPP (current int. \$)	Income level (World Bank)	HDI rank	Human Development category (UNDP)
Kazakhstan	2,724,900	17.0	231.9	23,214	Upper middle income	70	High Human Development
Tajikistan	142,550	8.2	8.5	2,512	Low income	133	Medium Development
Turkmenistan	488,100	5.2	41.9	14,004	Upper middle income	103	Medium Development
Uzbekistan	447,400	30.2	56.8	5,168	Lower middle income	116	Medium Development
Kyrgyzstan	199,949	5.7	7.2	3,213	Lower middle income	125	Medium Development

Source: World Bank, UNDP.

**Appendix 2.** *Time periods under analysis*

<b>Period</b>	<b>Feature</b>
1991-1995	The initial period of the transition to market economy associated with deterioration and declining in economy
1996-2000	The period of stabilization and revival
2001-2013	The growth tendency according to chosen model of transition and socio-economic development

**Appendix 3. Dynamics of GDP per capita, (average annual growth, %)**

	1991-1995	Remarks	1996-2000	Remarks	2001-2013	Remarks
Kazakhstan	-8.7	<p>Positive factors:</p> <ul style="list-style-type: none"> <li>- Less radical reforms than Kyrgyz Republic and more resource wealth.</li> </ul> <p>Negative factors:</p> <ul style="list-style-type: none"> <li>- Bound with old Soviet oil pipeline routes through Russia.</li> </ul>	3.8	<p>Positive factors:</p> <ul style="list-style-type: none"> <li>- Inflow of FDI and overwhelmingly to the oil sector.</li> <li>- Devaluation of the national currency (growth of exports);</li> <li>- New oil field Kashagan was found;</li> </ul> <p>Negative factors:</p> <ul style="list-style-type: none"> <li>- Russian financial crisis in 1998;</li> <li>- Trend of world commodity prices;</li> <li>- Delays in constructing new oil pipelines routes to new markets</li> </ul>	7.0	<p>Positive factors:</p> <ul style="list-style-type: none"> <li>- Optimistic developments in energy sectors;</li> <li>- Boasting oil prices;</li> <li>- New oil field was explored in North Caspian in 2000;</li> <li>- Increased production of oil in Caspian oilfield;</li> </ul> <p>Negative factors:</p> <ul style="list-style-type: none"> <li>- World economic shock of 2008.</li> </ul>
Tajikistan	-18.7	Civil war	-0.9	<p>Positive factors:</p> <ul style="list-style-type: none"> <li>- End of the war in 1997;</li> <li>- Initial structural reforms;</li> </ul> <p>Negative factors:</p> <ul style="list-style-type: none"> <li>- Fragile security situation hampered investment</li> </ul>	5.8	<p>Positive factors:</p> <ul style="list-style-type: none"> <li>- Providing stability and continuation of reforms;</li> <li>- Contribution of remittances to GDP;</li> <li>- New projects in hydro energy sector;</li> </ul> <p>Negative factors:</p> <ul style="list-style-type: none"> <li>- Significant part of the population (male) working abroad</li> </ul>
Turkmenistan	-10.9	<p>Negative factors:</p> <ul style="list-style-type: none"> <li>- Bound with old Soviet pipeline routes;</li> <li>- Problems with collecting payments for exported gas;</li> <li>- Weak care of irrigation system</li> </ul>	3.4	<p>Negative factors:</p> <ul style="list-style-type: none"> <li>- Cutting off gas to debtors;</li> <li>- Falling of cotton yield;</li> </ul> <p>Measures:</p> <ul style="list-style-type: none"> <li>- Foreign-exchange control;</li> </ul>	7.3	<p>Positive factors:</p> <ul style="list-style-type: none"> <li>- Boasting gas prices;</li> </ul> <p>- Import-substituting industrialization strategies</p>

		for watering the cotton;		- Maintaining state order for cotton;		
Uzbekistan	-6.0	Positive factors: - Bulk of the production was focused on the agricultural (cotton) and some energy products. - Sales of cotton were via international brokers; - Cotton (high value-weight ratio and portability) was able to transporting (air or rail) for export; - Prices for cotton and gold were high.	2.2	Positive factors: - Boasting gas prices;  Negative factors: - Prices for cotton and gold declined.  Measures: - Foreign-exchange control; - Maintaining state order for cotton and wheat;	5.3	Positive factors: - Upturn of cotton prices; - Abolish of foreign-exchange control in late 2003;  Negative factors: - Burden of foreign-exchange control, which lasted until 2003;
Kyrgyzstan	-13.2	- All economic links were disrupted	4.1	Positive factors: - Beginning of Kumtor goldmine project (by FDI) Negative factors: - Russian financial crisis in 1998	3.3	Positive factors: - New projects in hydro energy sector;  Negative factors: - Obstacles in production process of Kumtor mine (Landslide, Technological problems); - Unfavorable climate conditions for agriculture;

Source: Calculated by the researcher. Data has been taken from World Bank, UNDP, EBRD.



**Appendix 4. Dynamics of Budgetary surplus/deficit (average, % of GDP)**

	<b>1995-1999</b>	Remarks	<b>2000-2007</b>	Remarks	<b>2008-2013</b>	Remarks
Kazakhstan	-3.5	Fall of global commodity prices and unfavorable weather for agriculture as a consequences decline in budget revenues; Weak collecting of budget revenues due to tax reforms	-0.3	Drastic rise of oil prices with increasing industry output in oil and metal extraction sector;  Increasing public investment	-2.4	Positive developments in extracting sector especially in oil industry.
Tajikistan	-4.5	Civil war	-0.7	Budget revenues from cotton and aluminum export; Budget discipline, which was provided by improvements in revenue collection and optimizations in expenditures; Increasing public investment programs	-6.0	Negative factors: - Weak external demand for main export commodities; - Higher capital expenditures; - Relaxing of tax burden;  Positive factors: - Budget support from international financial institutions; - Largest cotton harvest of 2011.
Turkmenistan	-0.4	Gas export revenues directly came to republic rather than to Soviet budget	n.a.		3.1	Positive factors: - Steady growth of gas extracting industry
Uzbekistan	-2.2	Negative factors: - Declines in output and tax revenues; - Fall in world cotton prices;	-0.2	- Incomes from the cotton industry. - Lowering some tax rates	0.5	- Improved tax administration and increased tax revenues; - Tax benefits for domestic

		Positive factors: - Rising gas prices; - State procurement mechanism for cotton and wheat.				enterprises;
Kyrgyzstan	-5.4	Negative factors: - Decrease of tax revenues; - External borrowings to fund public expenditures;	-0.5	- Incomes from Kumtor mining project; - Reform of tax system.	-2.9	- Adopting of new tax code; - Debt service of external debt; - Import budget revenues;

Source: *Calculated by the researcher. Data has been taken from ADB.*

**Appendix 5. Life expectancy at birth, average annual growth (%)**

	1991-1995	Remarks	1996-2000	Remarks	2001-2013	Remarks
Kazakhstan	-1.4%	Negative factors: - Poor water quality and sanitation; - Limited access to piped water in some regions; - The quality of the health care service.	0.55%	- Introducing of health insurance; - Establishing of National Mandatory Health Insurance Fund (separating from Ministry of Health)	0.58%	- Introducing state-guaranteed basic benefit package;  - Payments according to diagnosis-related group replaced by reimbursement of actual expenditures;
Tajikistan	-0.02%	Civil war	0.47%	Recovering from civil conflict	0.41%	- Introducing of state-guaranteed basic benefit package; - Adopting of formal patient co-payments; - Capitation-based payment;
Turkmenistan	0.17%	Data should be considered with caution.	0.27%	The donor community has largely abandoned Turkmenistan because of the political situation.	0.19%	Some reforms were made with coming of a new president of the republic
Uzbekistan	-0.02%	Good economic performance with	0.19%	Positive factors: - Investment in primary care in rural areas (renovation and building of primary care facilities with support of World Bank); - Introducing state-guaranteed basic benefit package;	0.15%	- Introducing family medicine; - Focusing on human resources by educating with new medical programs;  - Adopting modernized curricula with Western standards.

				Negative factors: - Weak cooperation with international donors.		
Kyrgyzstan	-1.14%	- Decrease of health expenditures; - Emerged out-of-pocket payments which is burden for poor people; - Increased communicable diseases; - Difficulties with sustain immunization coverage;	0.75%	Positive factors: - Sizeable external assistance supported spending on healthcare (first World Bank project in 1996); - Establishing of Mandatory Health Insurance Fund (dividing from Ministry of Health)  Introducing basic benefit package which secure free primary care	0.18%	- Adopting state-guaranteed basic benefit package; - Per case payments according to clinical cost groups;

Source: Calculated by the researcher. Data has been taken from UNDP.