

The Kyrgyz Republic: Growth, Poverty, and Inequality, 2005–08

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Currency Unit = Kyrgyz som (KGS)
US\$1.00 = som 46.5

Weights and Measures
Metric System

ABBREVIATION AND ACRONYMS

CPI	Consumer Price Index
GDP	Gross Domestic Product
KIHS	Kyrgyz Integrated Household Survey
NSC	National Statistical Committee

Vice President:	Philippe H. Le Houerou
Country Director:	Motoo Konishi
Sector Director	Yvonne Tsikata
Sector Manager:	Benu Bidani
Country Manager	Alexander Kremer
Task Team Leader:	Sarosh Sattar

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THE KYRGYZ REPUBLIC: GROWTH, POVERTY, AND INEQUALITY, 2005–08

Introduction

1. Based on the significant existing research literature, one may conclude that economic growth is a key to reducing poverty. Economic growth is important in improving welfare for all. Reducing the share of the poor in a society is part of this objective. This is the reason why we look at changes in poverty over time. However, the link is not linear, and attributing a decline in poverty directly to economic growth is a complex undertaking. In light of the social unrest that occurred in the Kyrgyz Republic in 2005 and the ensuing socioeconomic instability, it is important for the Kyrgyz government to foster a type of economic growth that is beneficial to all, but, especially, to the poor. In this regard, the analysis of the nexus among poverty, inequality, and economic growth becomes crucial.

2. This paper attempts to link analytically the dynamics of economic growth from 2005 to 2008 in the Kyrgyz Republic to poverty rates and inequality measures. It is important to remember, however, that time series comparisons of poverty statistics are vulnerable to consistency problems, in particular, the issues related to compatibility during the time poverty measures are applied in an environment of quickly changing economic conditions. One such change in the Kyrgyz Republic was the dramatic price volatility during 2007–08.

3. This analysis does not employ a sophisticated econometric model. It is meant, rather, to point to possible clues for policy makers in the design of effective poverty reducing strategies. We look at trends in poverty rates, real growth rates in gross domestic product (GDP), and Gini indexes over 2005–08. In describing the dynamics of poverty and economic indicators, we try also to explain recent developments and paint them into a coherent picture. The report employs two types of data: macroeconomic, national accounts data as reported by National Statistical Committee (NSC) and microeconomic, primary data derived from Kyrgyz Integrated Household Survey (and collected by the NSC).

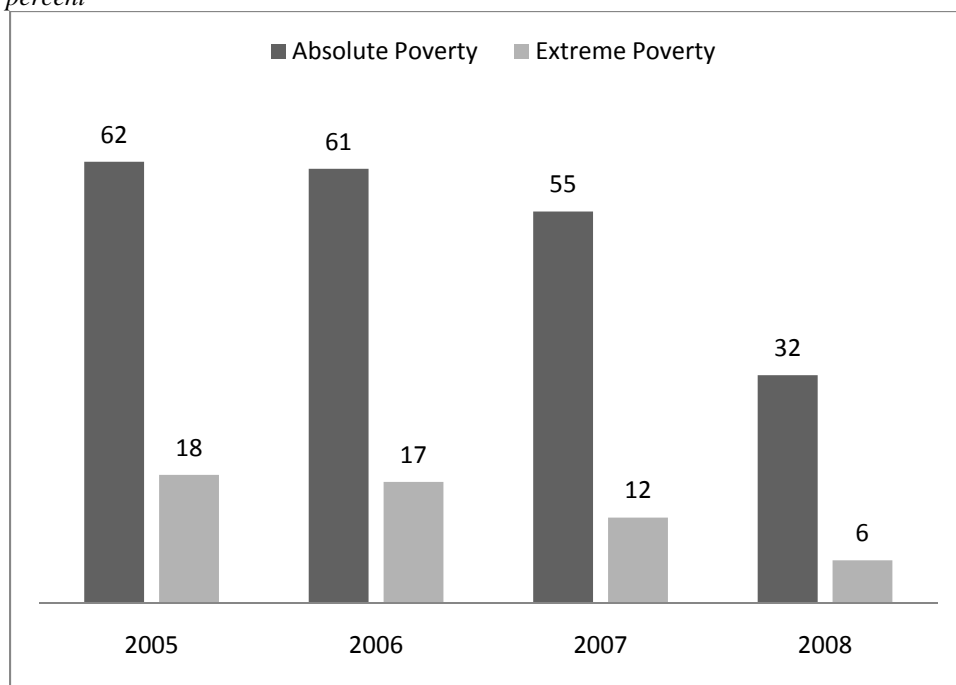
4. The paper is structured as follows. In the first part, we establish the outlines of the poverty trend and look at the regional composition of the trend. Then, we sketch out the development of the main economic indicators pertinent to our poverty analysis, paying special attention to the dynamics of per capita income in recent years. We follow with a look at the inequality measures and distributional changes in per capita consumption. We close with brief conclusions.

A. The Trend in Poverty Levels

5. To be able to make consistent comparisons, we have used the updated poverty line of 2008 to reestimate the poverty levels in 2005–08. It can be seen from figure 1 that *the incidence of poverty in the Kyrgyz Republic fell in 2005–08*. Absolute poverty dropped from 62 percent in 2005 to 32 percent in 2008, which implies that one in two persons who was poor in 2005 had escaped poverty by 2008. The speed of the downward trend is not constant. There was a more rapid decline in absolute poverty of 23 percentage points between 2007 and 2008. A similar trend can be observed in extreme poverty levels: up to 2007, the reduction in extreme poverty was somewhat slow, but, between 2007 and 2008, the indicator fell sharply, from 12 to only 6 percent. The reduction in poverty was likely a reflection of the strong economic growth that took place during the years before the global financial crisis erupted in 2008.

Figure 1: Poverty Trends, 2005–08

percent



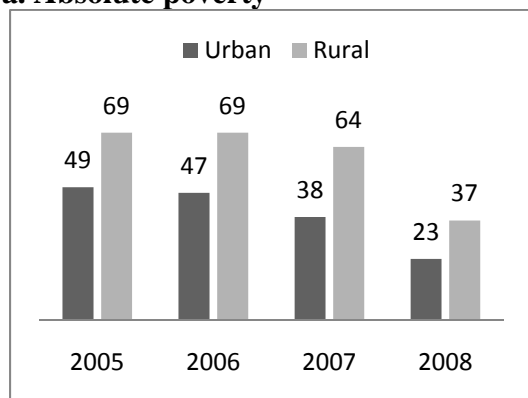
Source: Estimates based on KIHS 2005–08.

6. In terms of the urban-rural divide, *it appears that the reduction in poverty, especially for the last years, was mainly driven by the steep decline in rural poverty levels of 27 percentage points between 2007 and 2008, compared with a drop in urban poverty incidence of 16 percentage points during the same period (figure 2)*. The key to the reduction in rural poverty appears to be growth in the agricultural sector, as well as inflow of remittances and domestic migration to urban areas. This also benefited the extreme poor in rural areas. Among this group, the level of poverty fell by half in 2007–08. These developments took place against the background of relatively constant growth of urban population (table 1).

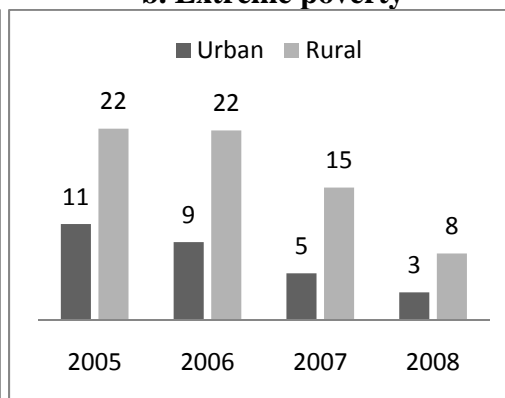
Figure 2: Rural and Urban Poverty Trends, 2005–08

percent

a. Absolute poverty



b. Extreme poverty



Source: Estimates based on KIHS 2005–08.

Table 1: Urban Population and Its Growth Rate, 2000-08

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Urban population (% of total)	35.4	35.5	35.6	35.6	35.7	35.8	36.0	36.1	36.3
Urban population growth (annual %)	0.5	1.0	1.0	1.1	1.3	1.2	1.4	1.3	1.3

Source: Data of the World Bank.

7. Across oblasts, a downward, but uneven trend in poverty levels was also observed, except in the case of Bishkek. Interestingly, the capital city saw a marginal increase in poverty levels, from 13.7 percent in 2007 to 15.2 percent in 2008 (table 2). In contrast, Jalal-Abad and Batken oblasts (provinces) witnessed the largest decline in absolute poverty in 2007–08: 38 and 47 percentage points, respectively. Similarly, in terms of the incidence of extreme poverty, this indicator increased in Bishkek city and Issyk-Kul oblast between 2007 and 2008, whereas, in all other oblasts, the incidence of extreme poverty declined by half or more in 2008.

Table 2: Poverty Levels, by Oblast

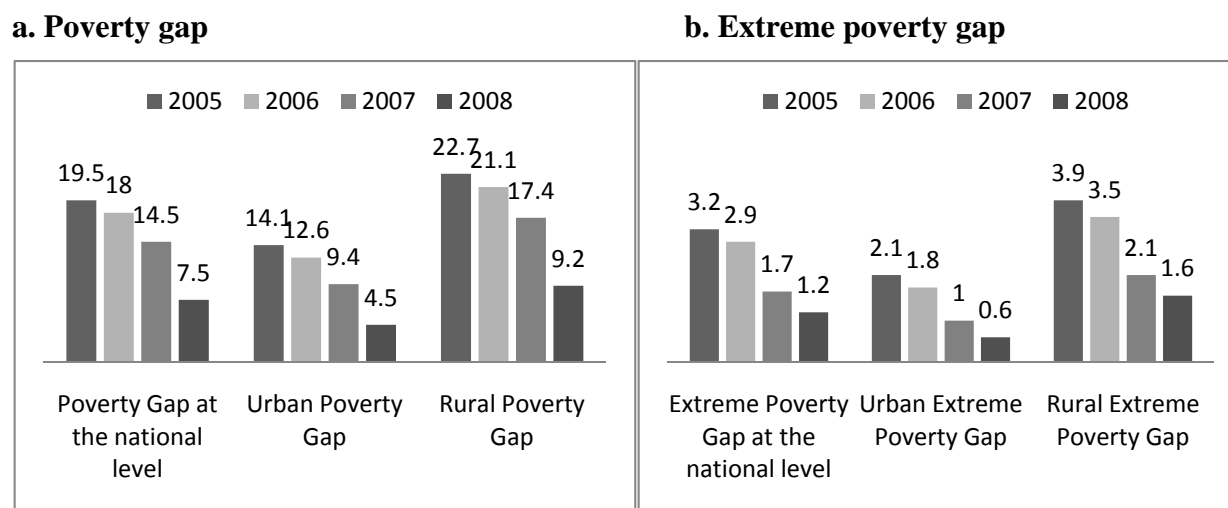
percent

Oblast	Absolute poverty				Extreme poverty			
	2005	2006	2007	2008	2005	2006	2007	2008
Total	62	61	55	32	18	17	12	6
Bishkek	26	22	14	15	1	1	1	2
Issyk-Kul	67	64	58	52	32	15	13	17
Jalal-Abad	83	80	78	40	31	30	22	10
Naryn	72	75	56	43	28	23	23	12
Batken	82	73	67	21	31	28	14	4
Osh	71	74	72	38	15	20	13	5
Talas	66	61	52	43	21	14	15	5
Chui	40	41	30	16	6	7	2	2

Source: Estimates based on KIHS 2005–08.

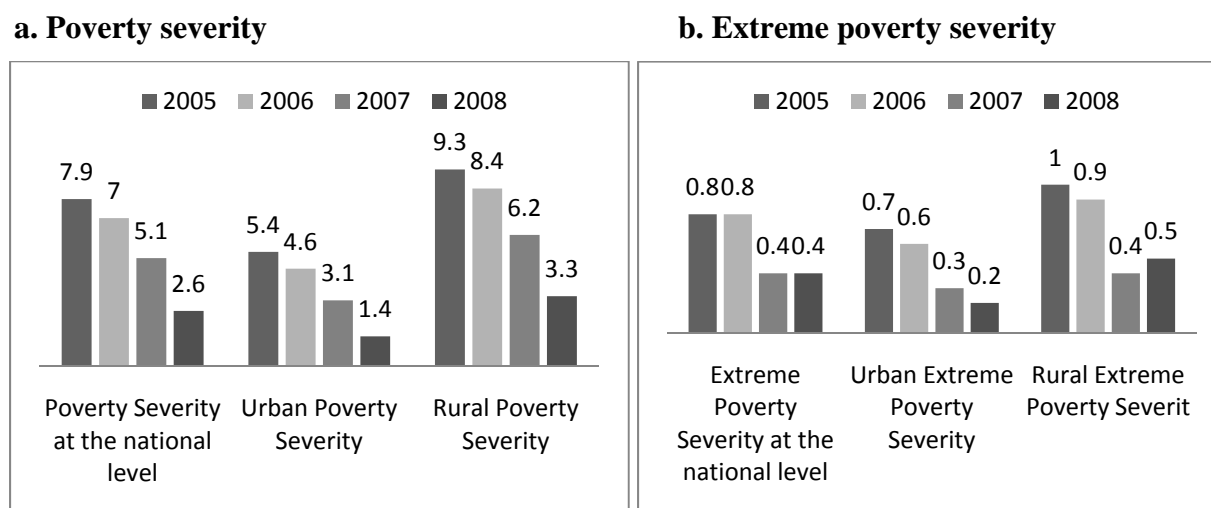
8. *The depth and severity of poverty—as measured by the poverty gap and the severity index—steadily declined over 2005–08.* Between 2007 and 2008, the decline in the depth of poverty at the national level was driven mainly by the decline in the depth of poverty in rural areas. Overall, the decline in the poverty gap indicates that the poor were able to close the gap with the nonpoor in per capita consumption (figure 3). Another positive trend observable for 2005–08 was the fall in the poverty severity index, which is sensitive to income distribution among the poor (figure 4). Thus, the closing of the poverty gap benefited all by lifting the poor closer to the poverty line, including the most poor, as evidenced from improvements in the poverty severity measure.

Figure 3: The Poverty Gap and the Extreme Poverty Gap, 2005–08



Source: Estimates based on KIHS 2005–08.

Figure 4: Poverty Severity and Extreme Poverty Severity, 2005–08



Source: Estimates based on KIHS 2005–08.

B. Trends in Economic Growth and Other Selected Variables

9. In 2005, because of political instability and social unrest in March, economic progress in the Kyrgyz Republic was interrupted, and real GDP fell by 0.2 percent. Thereafter, *the economy gradually recovered, and, by precrisis 2008, real GDP was growing by an average of 6.6 percent per year.*

10. *The growth rate of total private consumption and private consumption per capita during 2005–08 was high and generally exceeded the growth of GDP per capita.* The growth rate of total private consumption between 2005 and 2008 averaged 9.8 percent per year and appeared to be driven by growth in worker remittances, which grew by an annual average of 50 percent in 2005–08 (table 3). The importance of remittances for the economy was steadily rising. Thus, the share of remittances in GDP was 2 percent in 2005, but, by 2008, it had increased to almost 5 percent.

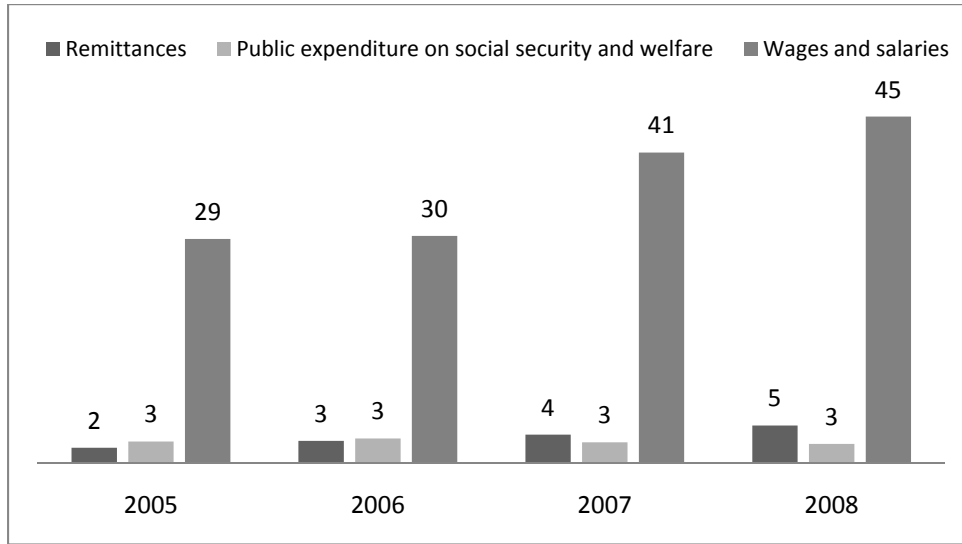
Table 3: Selected Economic Variables, Annual Growth Rate (in real terms)
Percent

<i>Indicator</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
GDP	-0.2	3.1	8.5	8.4
Worker remittances	67.3	48.5	39.7	41.5
Total private consumption	6.2	16.2	2.6	10.8
Private consumption per capita	5	15	2	10
Public sector wages, salaries; Social Fund	14.6	4.3	48.5	21
Unemployment rate	8.1	8.3	8.2	8.2
Consumer price index (inflation average)	4.34	5.57	10.3	24.5

Source: Data of the World Bank.

11. *Another factor that contributed to the growth of consumption and GDP was the persistent rise in public sector wages, salaries, and payments from the Social Fund.* The average growth in this indicator between 2005 and 2008 reached 22 percent (figure 5). Fueled by the high growth rates in remittances and the wage bill, it is not surprising that the consumer price index (CPI) increased from 4.3 percent in 2005 to 24.5 percent in 2008. This took place in the context of a constant unemployment rate of 8.2 percent.

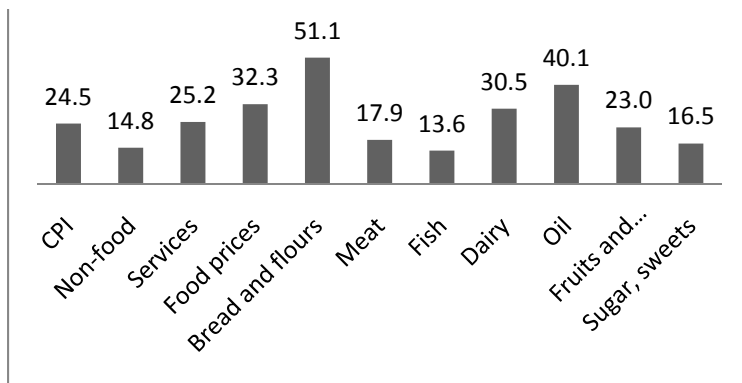
Figure 5: Remittances, Public Expenditures, and the Wage Bill as a Share of GDP, 2005–08
Percent



Source: Data of the World Bank.

12. Although domestic factors played a role in the increase in the CPI in 2007–08, the main driver of inflation was the global food price increase, which was induced by a combination of bad weather, production constraints in grain-exporting countries, and higher demand for biofuel. As a result, the rise in the CPI in the Kyrgyz Republic, especially in 2008, was mainly driven by the food price increase of 32.3 percent in 2008 (figure 6). Given the large share of food expenditures in household budgets in the Kyrgyz Republic, food prices were in the spotlight of policy makers. However, in the end, *the higher food prices in 2008 did not lead to higher poverty headcount numbers; they appear to have been offset by greater growth in incomes and consumption.*

Figure 6: Price Increases in the CPI and Its Selected Components, 2008
percent



Source: Data of the National Statistical Committee of the Kyrgyz Republic, 2009.

13. In terms of the components of GDP, *the increase, as expected, was observed only in private consumption and imports during the period of the analysis*. Total investment as a share of GDP grew little, and exports relative to imports grew only modestly. Thus, the money pouring into the economy was largely spent on current consumption rather than investment. It appears that consumption increased and the poverty headcount fell mainly because of the effect of remittances and public sector wages and salaries.

14. *The sectoral growth drivers are changing*. The structure of the relative contribution of the main economic sectors to value added growth changed between 2007 and 2008. Notably, the construction sector shrank, and the manufacturing and mining sectors gained importance in terms of their contribution to economic growth in 2008. So, semiskilled and skilled jobs were in demand, driving wages and the geography of labor away from rural areas.

15. As is well known, economic growth translates into a rise in consumption through changes in income and the structure of income. *Data of the Kyrgyz Integrated Household Survey (KIHS) for 2007–08 show that the level of per capita income was growing at a high rate*. Between 2007 and 2008, income per capita increased by an average of 38 percent at the national level, by 50 percent in rural areas, and by 27 percent in urban areas (table 4). The poorest quintiles experienced the largest rise in per capita income, and salary increases contributed the most to the growth in per capita income. Stipends fell for recipients in urban areas and in the second, third, and fourth quintiles.

Table 4: Changes in Income Per Capita, 2007–08

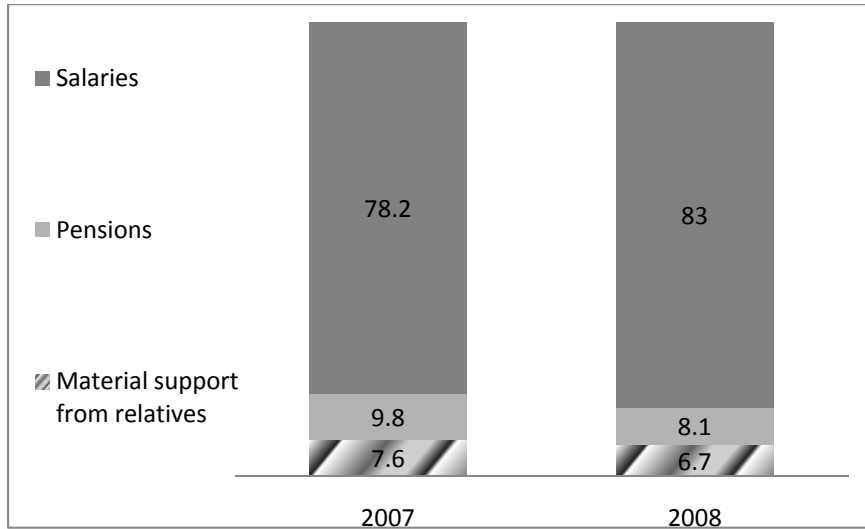
Percent

<i>Source of income</i>	<i>Total</i>	<i>Urban</i>	<i>Rural</i>	<i>Quintiles of Income</i>				
				<i>Poorest</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Richest</i>
Annual per capita income	38	27.2	49.9	52	56	47	39	30
Salaries	47	32.7	62.1	80	70	52	41	42
Pensions	15	13	16.1	30	28	34	13	-10
Stipends	-3	-8.8	1.4	49	-20	-18	-55	64
Material support from relatives and friends	22	16.6	26.1	21	13	30	76	3

Source: Estimates based on KIHS 2007–08.

16. *Salaries were the most important component of total per capita income*. Salaries as a share of income increased from 78 percent in 2007 to 83 percent in 2008 (figure 7). Also noteworthy is the fact that salaries among the poorest quintile were rising at a higher rate relative to salaries among other quintiles, which certainly affected the rate of poverty reduction. Pensions and material support from relatives as a share of per capita income fell during 2007–08.

Figure 7: Sources of Income as a Share of Per Capita Income, 2007–08
Percent

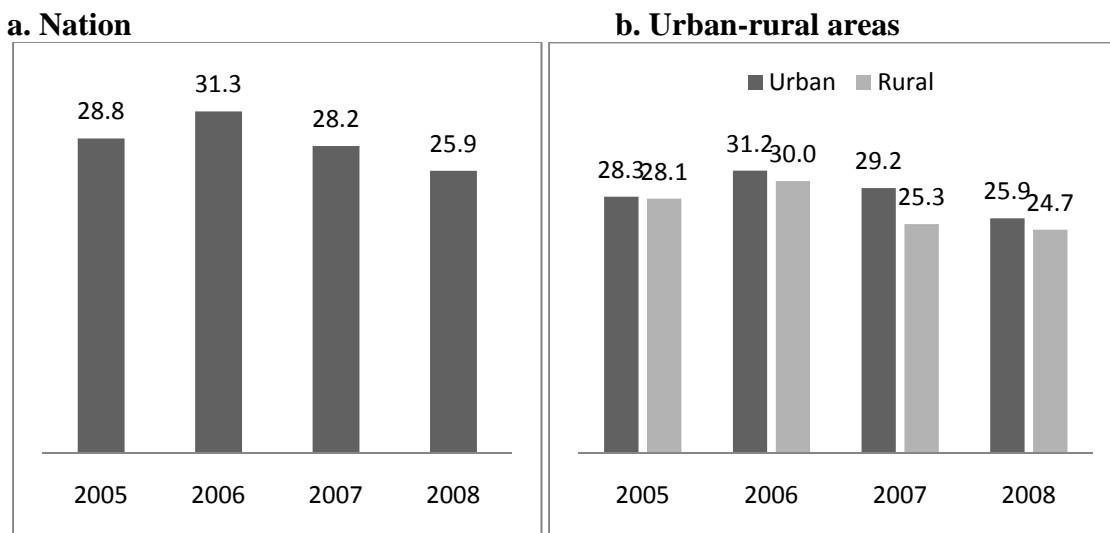


Source: Estimates based on KIHS 2007–08.

C. Trends in Inequality and in the Distribution of Consumption and Income Growth

17. *Mirroring the poverty trend, inequality was also falling, indicating that the benefits of economic growth were reaching the poor, that is, growth was generally inclusive. At the national level, the Gini index, a measure of inequality, declined from 28.1 in 2007 to 25.8 in 2008 (figure 8). This was driven mainly by a decline in urban inequality deriving from welfare gains in terms of increased consumption as a proportion of the poverty line. Overall, rural areas seem to have had less inequality compared with urban areas, but the gap was closing.*

Figure 8: The Gini Index of Consumption Per Capita, 2005–08



Source: Estimates based on KIHS 2005–08.

18. *Though the Gini index was generally downward trending, the change in the inequality indicator was not constant and appears to have changed appreciably.* Figure 8 shows that the Gini index increased in 2005–06 and then declined. The Gini coefficient is sensitive to the middle of the distribution. However, given the scope of this report, it is not possible to dig deeper and relate the changes in the index to a particular factor. It may also be that the features of the sample of households surveyed influenced the erratic behavior of the Gini index.

19. Among the oblasts, inequality—as measured by the Gini index per capita consumption—rose in Jalal-Abad, Issyk-Kul, and Osh between 2007 and 2008 even while consumption as a proportion of the poverty line increased in these same oblasts (table 5). Recall that, during the same period, the increase in per capita consumption was greatest in Jalal-Abad and Osh oblasts. *It appears to be the case then that an increase in per capita consumption or an increase in consumption as a share of the poverty line was sometimes accompanied by a rise in inequality.*

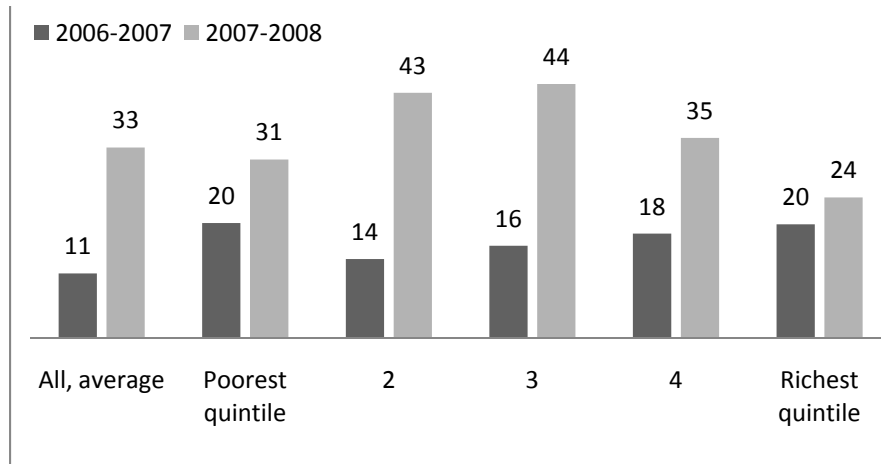
Table 5: The Gini Index, by Oblast, and Consumption as a Share of the Poverty Line, 2007–08

<i>Oblast</i>	<i>Mean consumption as a proportion of the poverty line, %</i>		<i>Gini index of per capita consumption</i>	
	<i>2007</i>	<i>2008</i>	<i>2007</i>	<i>2008</i>
Bishkek	1.78	1.8	24.90	24.80
Issyk-Kul	1.05	1.18	24.10	28.40
Jalal-Abad	0.84	1.15	18.80	22.00
Naryn	1.03	1.18	26.60	24.80
Batken	1.00	1.35	24.10	20.90
Osh	0.93	1.24	21.60	23.10
Talas	1.18	1.20	29.50	22.20
Chui	1.49	1.68	25.80	25.70

Source: Estimates based on KIHS 2007–08.

20. *Per capita consumption growth (in nominal terms) was generally pro-poor, though it benefited the median-income nonpoor group the most.* In 2007–08, the wealthiest quintile (or richest 20 percent of the population) experienced a relatively small increase of only 24 percent in annual per capita consumption, and the first quintile (or poorest 20 percent of the population) saw a modest increase of only 31 percent, whereas the median quintile (third quintile) of the distribution experienced the largest increase in per capita consumption, 44 percent (figure 9). This compares with the consumption gains in 2006–07, which were more equal across quintiles.

Figure 9: Annual Consumption Growth, by Consumption Quintile
Percent

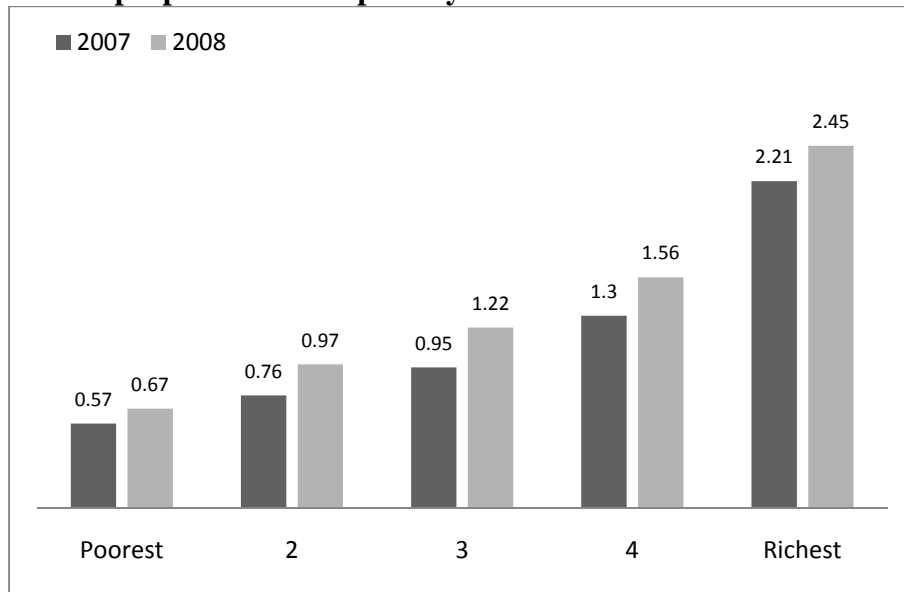


Source: Estimates based on KIHS 2006–08.

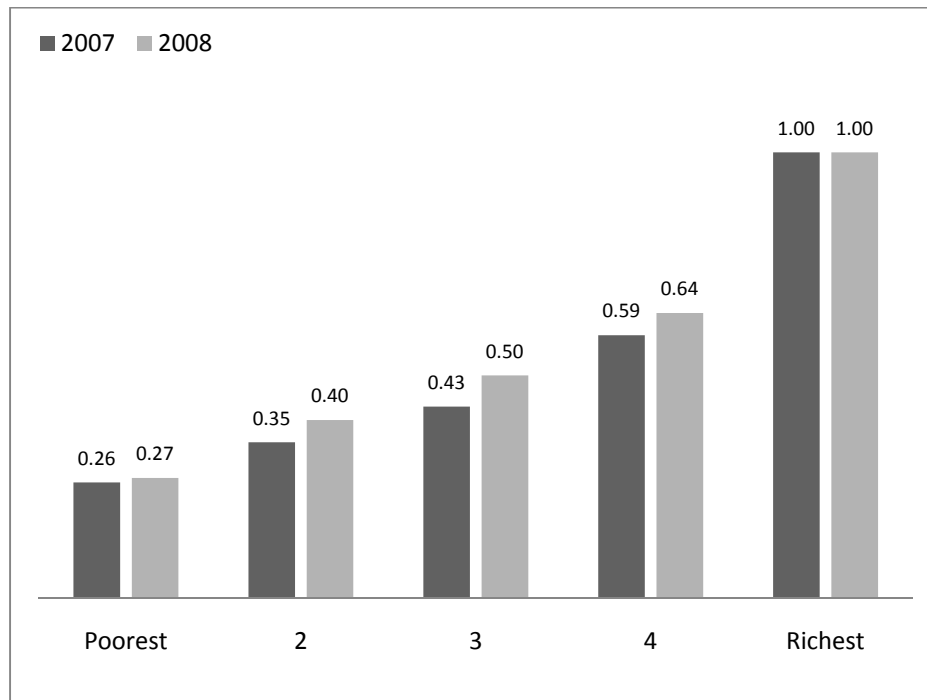
21. *Other measures of the distribution of changes in consumption confirm that growth was skewed toward the second, third, and fourth consumption quintile groups. An alternative measure of the welfare increase is consumption as a proportion of the consumption of the richest quintile. This can be seen in figure 10, which compares the shares in 2007 and the shares in 2008. It shows that the shares of consumption for the lower parts of the quintile distribution increased in correspondence with the increase in per capita consumption. As a proportion of the poverty line, too, quintile 2 and 3 made significant improvements: consumption as a proportion of the poverty line increased by 21 and 27 percentage points, respectively.*

Figure 10: Mean Consumption, 2007–08

a. As a proportion of the poverty line



b. As a proportion of the mean consumption of the richest quintile

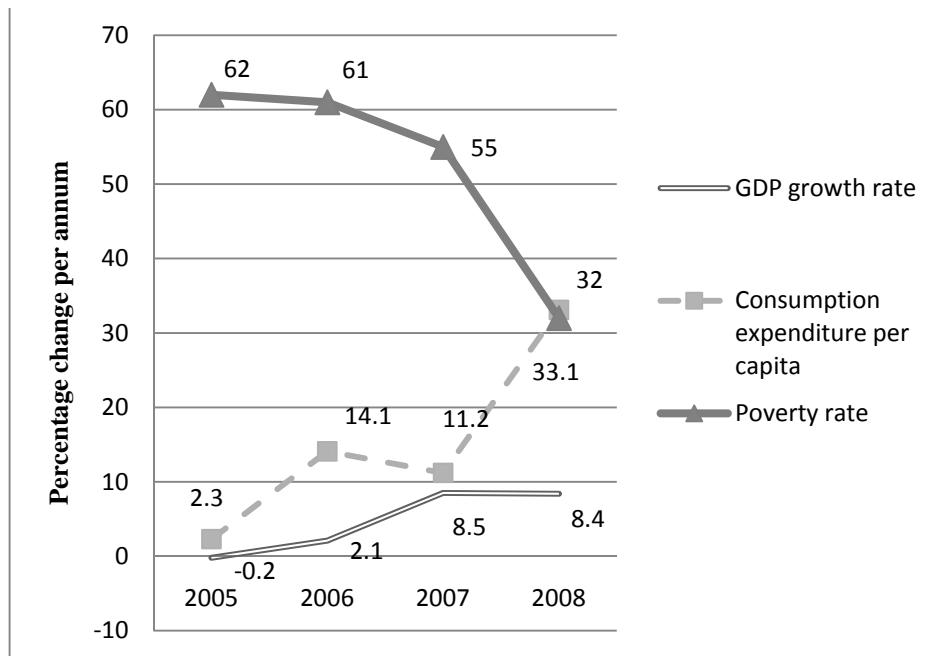


Source: Estimates based on KIHS 2006–08.

D. Conclusion

22. The overall picture that emerges from this report is that the Kyrgyz Republic witnessed a significant fall in poverty rates in 2005–08. According to the general trends, the rate of real GDP growth was high; poverty continued to decline; and inequality in general was improving (figure 11). It appears that the benefits of economic growth reached most areas and all groups in the population, including the poorest ones. The impact of a hike in food prices in 2008 was masked by a rise in income. There is a view that economic growth was motivated by high rates of private consumption growth, which, in turn, was fueled by significant growth rates in wages, salaries, and remittances. High labor income was shared with the poor, which likely played a role in alleviating poverty. Analyses of the sources of growth that relate the growth to consumption spending raises the issue of the sustainability of the economic progress and the additional prospects for poverty reduction. Also, given the structural changes in the sectoral development of the economy, which has impacts on income distribution, the issue of inequality should be closely monitored.

Figure 11: Dynamics of the Rates of Poverty, GDP Growth, and Consumption Per Capita



Source: Estimates based on KIHS 2005-2008 and World Bank data.