

Potential implications of the COVID-19 crisis on social assistance for children in the Kyrgyz Republic

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Eszter Timár and Franziska Gassmann¹

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1. Expected poverty effects of COVID-19 crisis

This paper estimates the implications of the COVID-19 crisis for social assistance, more specifically the Uybulugu Komok program. The estimates use the Kyrgyz Integrated Household Survey 2018 and are based on four economic scenarios provided by the World Bank.² These scenarios make different assumptions about the changes in consumer prices, labor income and remittance associated with the pandemic (Table 1).

Table 1 Summary of assumptions under the four economic scenarios

| Scenario A | Scenario B | Scenario C | Scenario D |
|--|--|--|--|
| Poverty line +5% | Poverty line +10% | Poverty line +15% | Poverty line +20% |
| Labor income: High risk sectors -30% Medium risk -10% Low Risk 0% Agriculture 0% | Labor income: High risk sectors -40% Medium risk -10% Low Risk 0% Agriculture 0% | Labor income: High risk sectors -50% Medium risk -20% Low Risk 0% Agriculture -10% | Labor income: High risk sectors -50% Medium risk -20% Low Risk 0% Agriculture -10% |
| Remittances -30% | Remittances -30% | Remittances -50% | Remittances -50% |

Source: World Bank

The incidence of poverty is expected to increase substantially even under the most modest scenario (Table 2). Children are more prone to poverty in the Kyrgyz Republic, and this would not change under the simulated economic scenarios either. In Scenario A, which assumes a relatively low effect of the crisis on wages and remittances, child poverty is expected to increase to 36%. In Scenario D, which assumes the sharpest increase in prices and a high effect on incomes, child poverty could reach over 55%. In comparison, the poverty rate of the total population would be ten percentage points lower (45%) and that of the elderly (aged 65 and above) would be 30% in Scenario D. The poverty gap is also expected to remain highest for children in each scenario (Table 3).

Table 2 Poverty rate of different population groups in different scenarios

| | Benchmark | Scenario A | Scenario B | Scenario C | Scenario D |
|------------------|-----------|------------|------------|------------|------------|
| Total population | 22.4% | 28.3% | 32.9% | 39.9% | 44.8% |

¹ Maastricht University.

² The World Bank team shared the relevant datafile.

| | | | | | |
|----------------|-------|-------|-------|-------|-------|
| Children (<16) | 29.1% | 36.3% | 41.6% | 49.2% | 55.1% |
| Elderly (65+) | 15.2% | 18.1% | 21.2% | 26.2% | 29.9% |

Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption using consumption and income estimates under different economic scenarios simulated by the World Bank.

Table 3 Poverty gap (as % of the poverty line) of different population groups in different scenarios

| | Benchmark | Scenario A | Scenario B | Scenario C | Scenario D |
|------------------|-----------|------------|------------|------------|------------|
| Total population | 3.7% | 5.3% | 6.7% | 8.6% | 10.6% |
| Children (<16) | 5.0% | 7.1% | 8.8% | 11.2% | 12.9% |
| Elderly (65+) | 2.5% | 3.3% | 4.1% | 5.1% | 6.1% |

Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption using consumption and income estimates under different economic scenarios simulated by the World Bank.

Scaling up existing social assistance program(s) could help mitigate the adverse effects of the loss of labor and remittance incomes. Since different programs reach different target populations, it is important to identify the segment of the population that is most exposed to the current economic shock. The overwhelming majority of those who become poor due to the current crisis live in a household with children (Table 4). In every scenario, more than 90% of the newly poor would live in a household with at least one child. The share of the poor living in a household with elderly members would be lower than 19% in every scenario. This implies that of the existing social protection programs the Uybulugu Komok (UBK) has the largest potential to reach the newly poor, since it is the only regular income support provided for families with children.

Table 4 Distribution of the newly poor among population groups in different scenarios

| | Scenario A | Scenario B | Scenario C | Scenario D |
|-------------------------------------|------------|------------|------------|------------|
| Living in a household with children | 93.2% | 90.7% | 90.4% | 90.6% |
| Living in a household with elderly | 14.0% | 16.4% | 17.3% | 18.6% |

Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption using consumption and income estimates under different economic scenarios simulated by the World Bank.

Children falling into poverty should also be protected because of the long-term devastating consequences that deprivations can have for their well-being and development. Depending on the severity of the economic implications the pandemic causes, the number of poor children is expected to increase by between 160,000 and 570,000 (Table 5).

Table 5 Number of total and newly poor children (<16), by economic scenario

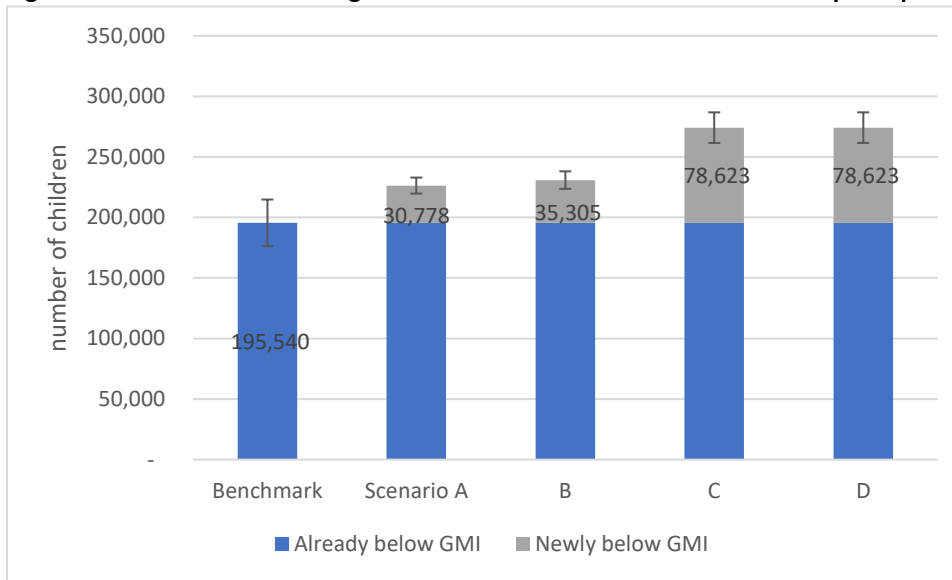
| | Benchmark | Scenario A | B | C | D |
|-------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|---|---|
| Number of poor children | 644,924 [610,196 – 679,652] | 804,847 [766,064 – 843,629] | 921,100 [879,685 – 962,515] | 1,089,904 [1,045,047 – 1,234,761] | 1,219,607 [1,171,743 – 1,267,472] |
| Number of newly poor children | | 159,922 [141,489 – 178,360] | 276,175 [252,061 – 300,290] | 444,980 [414,604 – 475,356] | 574,683 [539,533 – 609,833] |

Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption using consumption and income estimates under different economic scenarios simulated by the World Bank.

2. Implications for the UBK

Demand for social assistance is expected to increase as more and more families lose parts of their income. We demonstrate potential demand for the UBK by the expected increase in children living in families with average income below the Guaranteed Minimum Income (GMI). The GMI is a government-determined threshold which is used to determine eligibility for the UBK. The GMI is set at KGS 1000³ per month, and pensions and other social transfers are excluded from the income calculation.⁴ The extremely low value is well demonstrated by the fact that according to the KIHS only a little over 1% of the population is living in households with income below the GMI in the benchmark estimations. If social transfers are deducted from per capita income (as is done in the means-test for the UBK), 8.8% of children live in a household below this threshold. It is likely that the crisis around the COVID-19 pandemic will push more families, and especially children, below the GMI (Figure 1 and Figure 2).

Figure 1 Number of children eligible for the UBK based on the households' per capita income

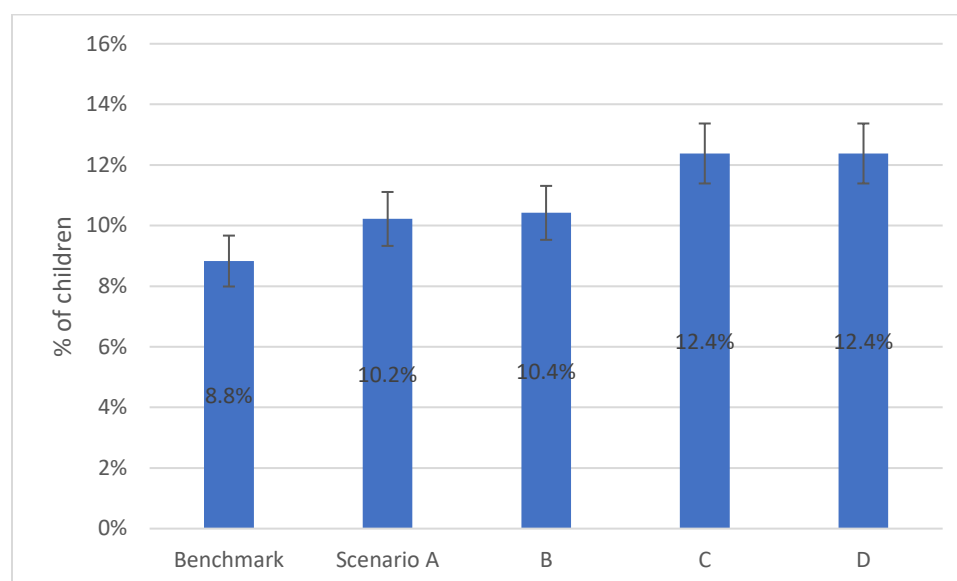


Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: Income is based on per capita income minus social transfers, using estimates under different economic scenarios simulated by the World Bank. Figures should be interpreted with caution due to the low number of observations below the GMI. Whiskers represent the 95% confidence interval.

³ The GMI determining benefit eligibility is set at KGS 1000, but the monthly transfer amount of the UBK is KGS 810.

⁴ In this report, we use total household income minus pensions, the Monthly Social Benefit and the UBK to simulate household income subject to the means-test.

Figure 2 Share of children eligible for the UBK based on the households' per capita income



Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: Eligibility is based on per capita income minus social transfers using estimates under different economic scenarios simulated by the World Bank. Figures should be interpreted with caution due to the low number of observations below the GMI. Whiskers represent the 95% confidence interval.

If no new households are enrolled in the program, the number of poor children not covered by the UBK will increase sharply: under the most pessimistic scenario, more than a million children in poverty could be left without support.

Table 6 The number of poor children (<16) not receiving UBK if the program is not extended, by economic scenario

| | Benchmark | Scenario A | Scenario B | Scenario C | Scenario D |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------------------|
| Poor children without UBK | 529,093 [497,759 – 560,427] | 653,100 [618,627 – 687,572] | 749,068 [712,204 – 785,832] | 892,261 [852,224 – 932,298] | 997,929 [955,147 – 1,040,711] |
| Eligible children ⁵ without UBK | 114,565 [100,284 – 128,845] | 135,101 [119,939 – 150,263] | 139,067 [123,635 – 154,499] | 167,077 [149,787 – 184,366] | 167,077 [149,787 – 184,366] |

Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption, eligibility is based on per capita income minus social transfers, using consumption and income estimates under different economic scenarios simulated by the World Bank. GMI is kept constant at KGS 1000 per month; poverty lines are based on different scenarios. Calculated using KIHS 2018. 95% confidence intervals in parentheses. Figures should be interpreted with caution due to the low number of observations below the GMI.

In theory, children living in families whose incomes will fall below the GIM due to the economic crisis are supposed to be enrolled into the UBK program. The means-test would allow for this, however, the asset filters would most probably prevent households who have only recently fallen below the income eligibility

⁵ Eligible children refers to children who live in a household where the per capita income subject to the means-test (total income minus pensions and social transfers) is below the GMI.

threshold from entering the program. Asset filters do not respond to transient poverty: households who have lost their source of income may still have assets they purchased before the crisis. Between 34% to 40% of children whose families' income would fall below the GMI would be excluded from the program based on household assets (Table 7). The corresponding shares for children under the poverty line are between 31% and 37%.

Table 7 Share of children who become poor (top) or would be GMI-eligible based on income (bottom) and do not pass the UBK asset filters

| Reason for not passing filters | Scenario A | B | C | D |
|--|------------|--------|-------|-------|
| Newly poor children | | | | |
| Has more than 4 livestock units per member | 2.6% | 4.8% | 6.1% | 6.5% |
| Has agricultural machinery/draught animal | 3.5% | 3.0% | 3.0% | 2.9% |
| Has car, truck, or van | 30.6% | 35.6% | 31.9% | 33.7% |
| Has at least one of the above | 31.4% | 33.7% | 40.0% | 36.4% |
| Newly GMI-eligible children | | | | |
| Has more than 4 livestock units per member | 11.9% | 10.0 % | 15.2% | 15.2% |
| Has agricultural machinery/draught animal | 0.5% | 0.4% | 0.2% | 0.2% |
| Has car, truck, or van | 37.3% | 32.1% | 25.1% | 25.1% |
| Has at least one of the above | 39.8% | 34.1% | 36.3% | 36.3% |

Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption, eligibility is based on per capita income minus social transfers, using consumption and income estimates under different economic scenarios simulated by the World Bank. Calculated using KIHS 2018. Figures should be interpreted with caution due to the low number of observations below the GMI.

3. Options to extend the UBK

Since the protection of children from poverty is one of the key objectives of the UBK, scaling it up to new beneficiaries could enhance its effectiveness in the crisis. This section provides estimates of how many new beneficiaries would be enrolled and what the cost implications would be of different options for enrolling children who are adversely affected by the crisis. Options 1 and 2 would keep the GMI as the eligibility threshold. Hence, they would extend the UBK to all⁶ children living in a household whose per capita income falls below the GMI due to the pandemic's labor market effects. Option 1 keeps the asset filters while Option 2 would drop the filters. In Option 3 and 4, all children living in a household where per capita consumption is expected to fall below the national poverty line (of 2018⁷) due to the crisis would be eligible for the program. For Option 3, asset filters would apply. For both Options 3 and 4 we include exclusion errors based on the observed targeting performance of the UBK.⁸ The parameters of the simulated options are summarized in Table 8 below.

⁶ For Options 1 and 2, we assume perfect targeting because there is a low number of survey observations with incomes below the GMI.

⁷ The poverty line for 2018 was 32,675 KGS per person per year.

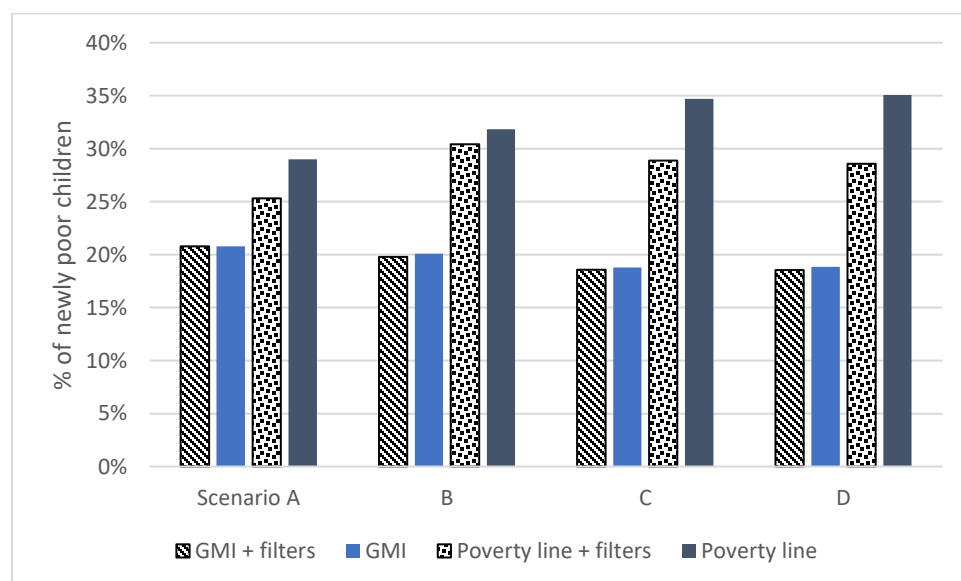
⁸ The UBK successfully identified 74% of the extremely poor (the poorest 5% of children) according to own calculations on the KIHS 2018. In the simulation, we assume that the eligibility threshold would be raised to the poverty line and the UBK would successfully identify 74% of the newly poor children.

Table 8 Simulated options for extending the UBK

| | Option 1 | Option 2 | Option 3 | Option 4 |
|------------------------------|----------|----------|-------------------------------------|------------------------|
| Income eligibility threshold | GMI | GMI | Benchmark poverty line ⁹ | Benchmark poverty line |
| Filters | ✓ | - | ✓ | - |
| Simulated targeting errors | None | None | 26% exclusion error | 26% exclusion error |
| Monthly transfer | 810 KGS | | | |

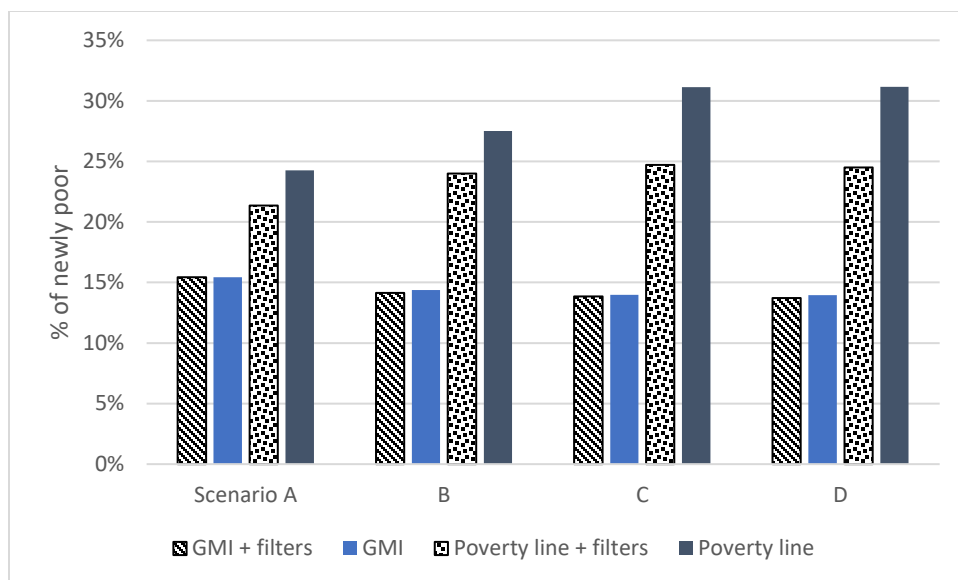
The simulated options would achieve varying coverage of newly poor children (Figure 3). Using the poverty line as the eligibility threshold would yield a higher coverage than using the GMI. Even with the more inclusive approaches (Options 3 and 4), the coverage of the newly poor would decline as economic effects worsen and prices increase (as visible by the lower coverage in the more pessimistic scenarios). The difference in the options' expected coverage of the newly poor is not as high as one may anticipate. This is because the overlap between children who live in households where per capita incomes fall below the poverty line and those who become poor based on consumption is imperfect.¹⁰

Figure 3 Simulated options' coverage for newly consumption poor children (top) and total population (bottom), by economic scenario



⁹ We could also use scenario-specific poverty lines, if preferred.

¹⁰ If income and consumption were more closely correlated, option 3 could yield a coverage of the newly poor two and a half times as high as option 1, because the poverty line is approximately two and a half times as high as the GMI.



Source: own calculations based on KIHS 2018 and World Bank Scenarios. Source: own calculations based on KIHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption, using consumption estimates under different economic scenarios simulated by the World Bank. The lack of difference between Options 1 and 2 in covering the consumption poor is due to the low observations whose incomes fall below the GMI line and the lack of overlap between these observations and the newly consumption poor in the KIHS data.

Varying levels and patterns of coverage also mean different effectiveness in reducing poverty. Table 9 summarizes the poverty rate and poverty gap reduction of the simulated options for each of the four economic scenarios, for the overall population and for children. It presents the percent change in poverty headcount and poverty gap compared to the respective scenarios without additional UBK beneficiaries. Options that achieve higher coverage (Options 3 and 4) also achieve higher reductions in poverty. The effect of Options 1 and 2 remain marginal because of the low benefit adequacy combined with an extremely low eligibility threshold. Removing asset filters increases the poverty reduction effect. In Scenario D, prices are expected to increase so much that the respective poverty line would be far higher than the benchmark poverty line (which is used to target new beneficiaries in this simulation). Because of the severity of this scenario and the low benefit amount, not even the most inclusive approach would successfully reduce the poverty headcount. However, extending the UBK would still manage to reduce the poverty gap.

Table 9 Outcome indicators for simulated options, by economic scenario

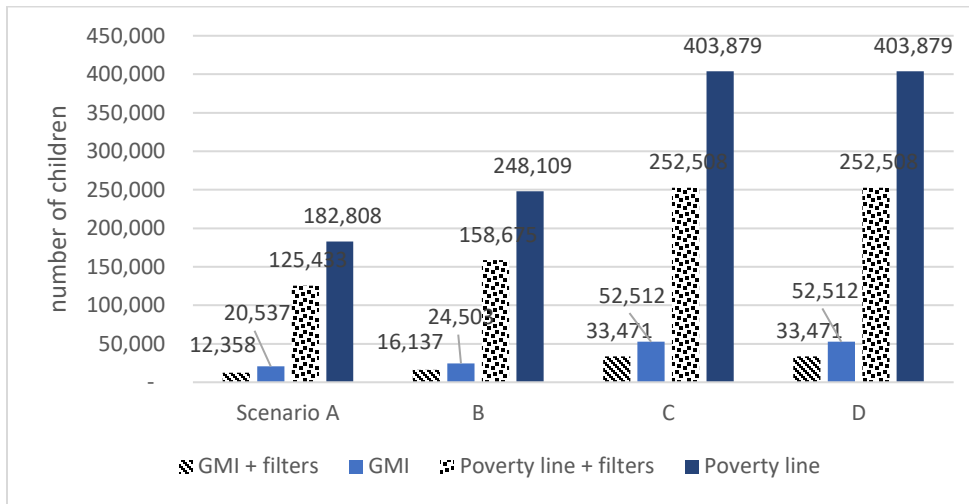
| Scenario A | | | | | |
|--------------------|--------------|----------|-------|-------|-------|
| | No extension | Option 1 | 2 | 3 | 4 |
| Poverty rate | 28.3% | 28.2% | 28.2% | 27.6% | 27.4% |
| % reduction | - | 0.2% | 0.2% | 2.4% | 3.0% |
| Poverty gap | 5.3% | 5.3% | 5.0% | 5.1% | 5.0% |
| % reduction | - | 1.0% | 5.7% | 4.7% | 5.7% |
| Child poverty rate | 36.3% | 36.3% | 36.3% | 35.4% | 35.1% |
| % reduction | - | 0.2% | 0.3% | 2.6% | 3.3% |
| Child poverty gap | 7.1% | 7.0% | 6.7% | 7.0% | 6.7% |
| % reduction | - | 1.2% | 5.4% | 1.9% | 6.3% |
| Scenario B | | | | | |

| | No extension | Option 1 | 2 | 3 | 4 |
|--------------------|--------------|----------|-------|-------|-------|
| Poverty rate | 32.9% | 32.8% | 32.8% | 32.2% | 31.7% |
| % reduction | - | 0.2% | 0.3% | 2.1% | 3.7% |
| Poverty gap | 6.7% | 6.6% | 6.6% | 6.3% | 6.2% |
| % reduction | - | 1.0% | 1.4% | 5.2% | 6.8% |
| Child poverty rate | 41.6% | 41.5% | 41.4% | 40.5% | 39.9% |
| % reduction | - | 0.3% | 0.4% | 2.6% | 4.1% |
| Child poverty gap | 8.8% | 8.7% | 8.3% | 8.6% | 8.1% |
| % reduction | - | 1.4% | 5.7% | 2.0% | 7.7% |
| Scenario C | | | | | |
| | No extension | Option 1 | 2 | 3 | 4 |
| Poverty | 39.9% | 39.9% | 39.8% | 38.6% | 37.9% |
| % reduction | - | 0.1% | 0.2% | 3.4% | 5.0% |
| Poverty gap | 8.6% | 8.5% | 8.5% | 8.1% | 7.8% |
| % reduction | - | 1.4% | 2.1% | 6.7% | 9.7% |
| Child poverty | 49.2% | 49.1% | 49.1% | 47.4% | 46.5% |
| % reduction | - | 0.2% | 0.3% | 3.8% | 5.6% |
| Child poverty gap | 11.2% | 11.0% | 10.3% | 10.9% | 10.0% |
| % reduction | - | 1.8% | 7.6% | 2.6% | 10.8% |
| Scenario D | | | | | |
| | No extension | Option 1 | 2 | 3 | 4 |
| Poverty rate | 44.8% | 44.8% | 44.8% | 43.1% | 42.4% |
| % reduction | - | 0.1% | 0.2% | 3.9% | 5.4% |
| Poverty gap | 10.1% | 9.9% | 9.9% | 9.4% | 9.1% |
| % reduction | - | 1.2% | 1.7% | 6.4% | 9.3% |
| Child poverty rate | 55.1% | 55.0% | 54.9% | 52.6% | 51.6% |
| % reduction | - | 0.2% | 0.3% | 4.5% | 6.3% |
| Child poverty gap | 12.9% | 12.7% | 12.0% | 12.6% | 11.6% |
| % reduction | - | 1.5% | 7.3% | 2.2% | 10.5% |

Source: own calculations based on KHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption, using estimates under different economic scenarios simulated by the World Bank.

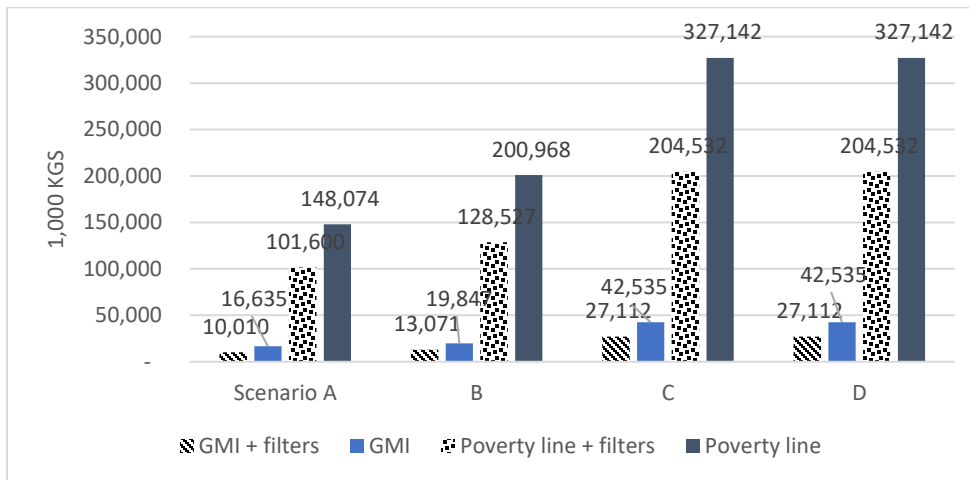
Finally, we estimate the costs of each of the four options under each of the four economic scenarios. Because the administrative infrastructure for the implementation of the UBK is already in place, the estimated costs of extending the UBK is a function of the number of new beneficiaries and the benefit amount. Figure 4 presents the estimated number of new beneficiaries under the simulated policy options for each economic scenario. The new beneficiaries under the options based on the GMI (Options 1 and 2) are only a fragment of the number of new beneficiaries if the poverty line is taken as the eligibility threshold (Options 3 and 4). Removing asset filters increases the number of new beneficiaries. Figure 5 presents the estimated monthly cost associated with the new beneficiaries, which is higher for more inclusive policy options and higher in more adverse economic scenarios. These cost estimates simply multiply the number of new beneficiaries with the official benefit amount of KGS 810 (however, recent administrative figures suggest that the average UBK value was KGS 875).

Figure 4 Estimated number of new beneficiaries



Source: own calculations based on KHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption, using estimates under different economic scenarios simulated by the World Bank. Figures using GMI should be interpreted with caution due to the low number of observations below the GMI.

Figure 5 Estimated monthly costs of extending the UBK



Source: own calculations based on KHS 2018 and World Bank Scenarios. Note: poverty is based on per capita consumption, using estimates under different economic scenarios simulated by the World Bank. Figures using GMI should be interpreted with caution due to the low number of observations below the GMI.

4. Conclusions

Households with children bear the majority of the economic burden associated with the crisis. With over 90% of those expected to fall into poverty living in a household with children, the UBK could be an effective tool to mitigate the adversities experienced by the population. Under the current targeting mechanism, however, many of the newly poor would not be able to enroll in the program for two reasons. First, the asset filters are unable to observe transient poverty and would thus exclude a high share of households who would otherwise be eligible for the transfer. Second, the GMI threshold is too low to appropriately

cushion households with children against the devastating impacts of the crisis. If the government and its development partners wish to protect children, we recommend removing the asset filters as the minimum, and to consider increasing the eligibility threshold to the poverty line. Alternatively, the government could consider introducing a temporary categorical child benefit for all children up to a certain age irrespective of the income level. The current crisis may present an opportunity to transition towards a more inclusive targeting approach of the UBK.