



**POSITION PAPER ON TARGETING OPTIONS
FOR SOCIAL ASSISTANCE PROGRAMME
FOR POOR FAMILIES WITH CHILDREN
April 2020**

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Acronyms

CBT	Community-based targeting
GMI	Guaranteed Minimum Income
GoKR	Government of the Kyrgyz Republic
ILO	International Labour Organization
KIHS	Kyrgyz Integrated Household Survey
MBPF	Monthly Benefit for Poor Families
MLSD	Ministry of Labor and Social Development
MT	Means test
NSC	National Statistics Committee
OECD	Organization for Economic Cooperation and Development
PAT	Proxy affluence test
PMT	Proxy means test
SDG	Sustainable Development Goals
SPF	Social Protection Floor
UBI	Universal basic income
UBK	Uybulugu komok
UNDESA	United Nations Department of Economic and Social Affairs
UNICEF	United Nations Children Fund
WHO	World Health Organisation

1. Introduction

The Kyrgyz Republic has found its way to improving livelihoods and economic growth after a difficult initial period of transition to a market economy and has recently evolved from a low-income to lower middle-income country (World Bank, 2018). Despite a slowdown in economic growth resulting from the global financial crisis, the increase in GDP per capita is predicted to accelerate over the coming years (World Bank, 2018). The economic development has been accompanied by a remarkable increase in living standards, and poverty has dropped dramatically since the turn of the century. According to estimations from the World Bank (2018), more than 40% of the population lived below the international poverty line of USD 1.90 in 2000. By 2014, the corresponding share has dropped to approximately 1% (World Bank, 2018). Measured at national standards, however, a quarter of the Kyrgyz Republic still lives in poverty (Gassmann & Timar, 2018); and rural populations, children and households with two or more children face a substantially higher relative risk of poverty (OECD, 2018). Regional disparities are profound, with nearly half of the country's poor living in rural settlements in the Southern oblasts (Gassmann & Timar, 2018). Kyrgyzstan is also facing a decline in its high rates of fertility, and the population is projected to age significantly in the coming decades (UNDESA, 2018). This, on the hand, is a challenge due to the growing dependency ratio. On the other hand, the current demographic window can be seen as an opportunity to invest in the youngest generation's human capital development and boost their long-term productivity. In such a context, social protection is a key strategic tool in further decreasing poverty and securing the Kyrgyz Republic on a path of inclusive socio-economic development. The goal of investing in the population's future has been explicitly recognized in the country's upcoming Development Strategy (Government of the Kyrgyz Republic, 2018).

The Monthly Benefit for Poor Families (MBPF)¹ is currently the only scheme that provides regular, predictable income support to poor households with children. Its limited coverage, targeting errors and low benefit value have been the topic of discussions among the Government and its development partners. For example, the Strategy for Social Protection Development 2012-2014 already contained the explicit objective to improve the targeting performance of the MBPF (Gassmann, 2013). Analysis of the 2015 Kyrgyz Integrated Household Survey revealed that only 15.5% of the poorest quintile lived in a household benefiting from the MBPF, and nearly 60% of children in the bottom 20% were left out from this benefit (Gassmann & Timar, 2018). Constant pressure on the program budget, inefficient targeting and low benefit values have caused the MBPF to have almost negligible impact on poverty (Gassmann, 2013; Gassmann & Trindade, 2016; Gassmann & Timar, 2018). To strengthen the performance of the social assistance system, the Parliament and the President have agreed to reform the MBPF by introducing a universal birth grant and adjusting the means-test that determines eligibility for the MBPF.

This paper contributes to the policy discourse on child benefits in the Kyrgyz Republic by reviewing the national and international theory and evidence on targeting. First, it introduces the academic literature on the advantages, disadvantages and preconditions of various targeting approaches. Second, it considers international experiences that may provide valuable lessons for Kyrgyzstan. Third, the paper presents simulated scenarios of possible policy alternatives, assessing their efficiency and equity. Finally, it reflects on the political, economic and technical feasibility of approaches to targeting child benefits in the Kyrgyz context.

¹ The transfer has been renamed to *Uybulugu Komok* in July 2018.

2. Theory and evidence on targeting social transfers

The objectives of social assistance for children

Social protection has gained considerable momentum in both the international and national development agendas. No wonder that it is explicitly featured under the Sustainable Development Goals (SDG), namely, as SDG 1.3. target which calls for expanding social protection systems and increasing coverage all over the world. The toolbox of social protection can be categorized as social transfers, which include both transfers from social insurance and social assistance-type programs, programs to ensure access to services, social support and care services, and legislation and policy reform (UNICEF, 2012). Social assistance programs are non-contributory transfers to segments of the population deemed as poor or vulnerable to poverty. Because they aim to protect people from falling into poverty (or provide an escape from poverty), these transfers are often referred to as social safety nets. Being financed from the general budget through taxation, social assistance can be viewed as redistribution of financial resources across the population, from households with higher incomes to those with lower incomes.

Social assistance programs have objectives and potential beyond simply poverty reduction. Social assistance policies on the one hand recognize the human right to decent living standards and social inclusion (ILO and WHO 2009, ILO 2016), and on the other hand, are investments in national productivity that facilitate access to human capital accumulation (World Bank 2012, World Economic Forum 2012, Cherrier et al. 2013, UNDESA 2017). The life-cycle approach to social protection recognizes the diversity of risks and opportunities of people throughout their lives; and calls for measures that provide an adequate minimum standard of living, dignity and protection against life-cycle vulnerabilities (ILO, 2010). Based on this understanding is the ILO's Social Protection Floor (SPF) initiative, which envisions "nationally defined sets of basic income security guarantees that should ensure, as a minimum

that, over the life cycle, all in need have access to essential health care and basic income security² [...]". More concretely, the Social Protection Floor recommendation defines these basic sets of income security guarantees along the lines of the lifecycle, with provisions for children, persons in active age and older persons (ILO, 2010).

Today's most influential approaches to social protection explicitly call for measures targeted at children and designed to meet the specific needs of children. Most of the global poor are underage (World Bank, 2018)- even in the Kyrgyz Republic having children is associated with a higher relative risk of poverty (OECD, 2018). Children experience poverty differently from adults, and deprivations during childhood generate high costs for both the individual and society. There is plenty of evidence on the potential of social transfers to reduce child poverty (for an overview of the Eastern Europe region's experiences see Bradshaw & Hiroshi, 2016). Both the intrinsic and instrumental values of minimizing deprivation are especially high in the case of children, since they have little agency to protect their rights, and poverty during childhood is likely to lead to future poverty. Given this influence of present poverty on future outcomes, the economic argument for providing cash transfers is particularly strong with regards to children. Early investments in children's development generate very high returns (Heckman, 2010). By increasing households' purchasing power and thus ability to meet their (and their children's) needs, child grants are an essential form of such investments.

A competing vision which has gained much attention lately is that of a Universal Basic Income (UBI), expected by many to solve the issues of inequality, the changing world of work and provide a cushion against future economic shocks. Contrary to life-cycle approaches, a pure UBI would transfer an equal amount of money to every individual in a society, regardless of their socio-economic characteristics. As Barrientos (2018) remarks, the objectives of UBI proposals are not the same of social protection, since they rest on egalitarian rather than prioritarian ethical foundations. Moreover, most current proposals of a

² Social Protection Floor definition from the ILO SPF Website: <https://www.ilo.org/secsoc/areas-of-work/policy-development-and-applied-research/social-protection-floor/lang--en/index.htm>

UBI focus on the adult population only (Barrientos, 2018), making them insufficient alternatives if ensuring the basic rights and investing in the productive capacity of children is our objective. Atkinson (2015) proposed a taxable universal child benefit and a participation income to expand coverage of current social assistance systems (complimentary to current social protection systems). The argument for the former is that child poverty has long-term consequences for the individual and society. The participation income (PI) would be similar to a universal basic income for adults, with broad eligibility conditions: any resident with civil engagement (paid or unpaid) or performing household duties would be eligible.

Universal social protection (World Bank and ILO, 2016), on the other hand, envisages access to social protection across all stages of the lifecycle, and is therefore a more suitable framework for ensuring that the present and future well-being of children is protected. Contrary to a UBI, Universal Social Protection does not necessarily mean monetary transfers to all. Instead, it aims to develop an integrated system of policies (including cash transfers) that provide income security and support, in which anyone who needs social protection should be able to access it.

To target or not to target?

Social protection is only one of many government functions competing for a share of scarce resources, which often puts pressure on transfer programs to operate as cost-efficiently as possible.

This scarcity of funds introduces an important trade-off in social protection: at a given cost, governments may choose to increase the size of the 'slice of the cake' (the amount of transfer each beneficiary receives) or share 'the cake' among more people (increase the share of the population covered by the transfer) (Grosch et al., 2008).

Targeting, which refers to the direction of resources to a selected group of the population, presents an attractive solution to this trade-off. While the basic case for targeting might seem compelling (see Box 1), much of the history of social protection policy has been shaped by the questions of whether to target, and how to target. The recent spur of attention towards UBIs revives this debate on universality versus selectivity (through targeting). Under a scenario of selectivity through targeting, resources are directed to a selected group of the population (the poor or vulnerable), thereby maximizing the impact on poverty at a given cost. The core notion of targeting is that if benefits are provided to the whole population, they might be spread too thinly to make a real difference to those who need them most (assuming fixed budgets for redistribution). Universality in social protection means that all members of the society receive the (same) transfers without any differentiation or selectivity. Advocates of universality raise both pragmatic and ethical concerns about targeting (Devereux, 2016); but just as many scholars and practitioners question the financial and political feasibility of universal approaches.

Box 1 The basic case for targeting

The case for targeting is compellingly simple. Imagine a country of 100 people, of which 20 are poor; and a budget for social assistance of 200\$. Without targeting, spending the available budget would mean a 2\$ transfer to everyone in the country. With targeting transfers only to the poor, they could receive 10\$ and spend the whole budget, which would maximize the impact on poverty at a fixed cost. Alternatively, it could minimize costs at a given impact by providing 2\$ to each of the poor at an overall cost of 40\$.

Source: Grosch et al. (2008)

Options for targeting social transfers

Perhaps the most basic design question of social programs is whom to provide them to. There are a number of methods to channel social assistance resources to those deemed in

need, most of which can be found in the Eastern Europe and Central Asia region.

Broadly speaking, targeting methods can be classified under three main approaches: categorical targeting, self-selection and individual

needs assessments (Gassmann et al., 2013), which can be (and often are) combined within a single program. The most appropriate choice depends on various context-specific factors, inter alia the population's poverty profile, the

resources available for redistribution, the level of formality of the labor market, and administrative and infrastructural capacities. Table 1 provides a comparative overview of each method's strengths and weaknesses.

Table 1. Comparative overview of targeting methods

Method	Eligibility criteria	Strengths	Weaknesses
Categorical	Geographical location or belonging to a demographic group	Simple and relatively low costs of administration; low probability of exclusion errors (within the group)	Inaccuracy (high leakage)
Self-targeting	Open to all, but design encourages only the poorest to participate	Relatively low costs of administration	Opportunity costs; social costs; potential for high exclusion errors
Community-based targeting	Community leader or local community decision	Benefits from information on the local level; low administrative costs	Risk of capture by local elites; may re-inforce power structures and exclusion at the community level; difficult to monitor
Means-testing (verified)	Administrative income falling below a threshold	Accurate; responds to changes in welfare	Administratively demanding; requires a degree of formality, literacy and documentation of transactions; may distort work incentives
Means-testing (unverified)	Self-reported income falling below a threshold	Easy to administer (relative to verified means-test and proxy means-test); does not require as high degree of formality as verified means-test	Less accurate due to potential underreporting of incomes
Proxy means-testing	Multidimensional index of characteristics correlated with poverty	Alternative to means-testing in cases of informality, seasonality, in-kind earnings; captures multidimensional aspects of poverty	Administratively demanding; does not respond to sudden changes in welfare; potential for inaccuracies; difficult to communicate
Affluence-testing	Income above a certain threshold or proxies associated with wealth	Depending on threshold can balance exclusion and inclusion errors	Less accurate and administratively demanding (if verified)
Hybrid targeting	Combination of the above	Accuracy; potential for the most optimal use of information; responsive to changes in welfare; less work disincentives; objective and verifiable	Administratively demanding

Source: based on Gassmann et al. (2013); Lindert (2008); World Bank (2009)

The first type, *categorical or group targeting* identifies beneficiaries by characteristics that are easily and reliably observable and are correlated with poverty. This may be a geographical location – in case of *geographic targeting* – in which poverty is concentrated, or a demographic group – in case of *demographic targeting* – which is at a high relative risk of poverty compared to the population. Groups can be identified based on ethnicity, age, disability, among others. Common examples are child grants and social pensions. Administration of categorial targeting is relatively simple and affordable because there is no need to collect individual information on income and economic status. If the identified characteristic is adequately correlated with poverty, it can decrease the likelihood of exclusion errors (at least in the target group). However, it is not the most accurate form of poverty targeting and can result in serious leakage of transfers to the non-poor (the extent to which this is problematic depends on the policy objectives and preferences).

The second type, *self-targeting* assumes that certain programs may be available for the entire population, but the poor are more likely to actually take them up. These programs are designed in a way that makes them appealing to the target group, but unappealing to others. Such (dis)incentives include the low wages provided in public works programs, or subsidies given for staple products that are predominantly consumed by the poor. Self-targeting has advantages, since it has relatively low administrative costs and does not cause work disincentives. Self-targeting, however, has disadvantages. Subsidies for staple goods can have a stigmatizing effect, and the work requirement often used in public works programs come with very high opportunity costs borne by beneficiaries. In fact, a recent research paper by Lagrange and Ravallion (2018) finds that the disutility from the work requirement is so high, that a more thinly spread universal transfer would actually provide higher utility for the poor than the self-targeting approach of India's National Rural Employment Guarantee Scheme. Further, depending on program design, such interventions may not be able to cover those who cannot participate in the required activities (due to their health, age etc.).

The third type of targeting identifies the eligible population through *individual needs assessments* and includes methods such

as community-based targeting (CBT), means testing (MT), proxy means testing (PMT) or hybrid means testing (HMT). *Community-based targeting* means that eligibility for transfers is determined by the local community. The advantage of this method is that it benefits from knowledge that exists on the local level but is difficult or costly to capture by traditional administrative measures. Nevertheless, it has several risks: transfers can be captured by the local elite, can become a source of conflict within the community or can reinforce power structures and patterns of exclusion. In case of low benefit amounts, strong community structures and weak administrative capacity to carry out individual assessments, community-based targeting can be an appropriate choice (Gassmann et al., 2013).

Means-tests collect information about all income sources and assets to determine the poverty status or eligibility of the household. Verified means-tests – which are considered as the gold standard of targeting – further verify this information by cross-checking it with independent sources or formal documentation. Verification can be very costly to both applicants and the government if administrative and infrastructural capacities are not present to make the process smooth and minimize effort. Unverified means-tests can be carried out based on applicants' self-reported incomes, which is more suitable in economies with high degrees of informality but bears the risk of applicants underreporting their incomes. Arguably, leakage arising from underreported incomes depends on the relative value of the eligibility threshold and the value of the transfer. Means-tests can observe transient changes in a household's welfare and can be highly accurate if implemented properly. However, these measures require a certain degree of formality in the economy and come with high administrative costs due to the capacity required to carry out individual assessments. Further costs include the private costs borne by applicants during the application process (e.g. collecting appropriate documentation for verification), the potential stigma, and (depending on the program design) work disincentives. According to a regional review of social assistance by Tesliuc et al (2015), there are effective experiences with the means test in Eastern Europe and Central Asia, but countries with higher degrees of informality potentially exclude the most vulnerable families with this method.

Reliable and complete information about incomes, expenditures and/or assets is not always available. This is especially true in largely informal economies, when verification is difficult, or when there is a substantial degree of seasonality in the labor market. These circumstances can result in inaccurate observation of household welfare, and therefore inaccurate targeting (Castañeda & Lindert, 2005). *Proxy-means-tests* provide an alternative to means-tests by measuring welfare through indicators other than income, which are typically easy to observe and are correlated with household income. The characteristics upon which eligibility is determined often include educational level, ownership of certain assets, geographic location, quality of housing, or the composition of the household. Nevertheless, PMTs have drawbacks. Unlike monetary means-testing, it cannot respond to sudden changes in the welfare of households, since the observed characteristics usually refer to stock, rather than flow variables. Designing a PMT that can accurately identify the poor is not an easy task: it requires recent and representative household survey data and the capacity to analyze the data and construct a robust econometric model. Since indicators and cut-off points are derived in a sophisticated quantitative process, it can create a feeling of arbitrariness and justifications are difficult to communicate to the wider public. Much criticism has been voiced with regards to the targeting performance of proxy means-tests. Kidd and Wylde (2011) review country experiences from Asia and Sub-Saharan Africa and warn for the inaccuracy of the PMT in correctly identifying the poor. They find that both types of targeting errors increase immensely as the eligibility criteria are set narrower. Brown, Ravallion and van de Walle (2018) compare the targeting accuracy of a PMT and a uniform allocation of resources to the population. Depending on the country's poverty profile, they argue, there are cases in which a universal distribution can dominate targeting through proxies (for instance, a country with very high rates of poverty and low administrative capacities may achieve better results without targeting). While PMTs were found to be effective in reducing inclusion errors, this came at a cost of increased exclusion errors, which is more problematic if the goal is poverty reduction (Brown, Ravallion & van de Walle, 2018).

An interesting and to this day underutilized 'cousin' of poverty targeting is the so-called *affluence-testing*. This approach is based on the

same logic as means-tests, but instead of picking out the poor as eligible beneficiaries, they aim to identify the wealthy in order to exclude them. This can present a solution to balancing exclusion and inclusion errors, in which some leakage is inevitable but occurs among those who are relatively close to the poverty line (depending on where the 'line' for eligibility is drawn). Just as means-testing, affluence-testing can also focus on incomes or proxies for income and be verified or non-verified.

Hybrid targeting refers to the use of a combination of targeting approaches. Hybrid targeting, if it includes an individual needs assessment component, still requires substantial administrative capacities and can therefore put pressure on program budgets. In reality, very few social assistance programs employ a pure categorical or means-assessment strategy to target. Most schemes around the world resort to some sort of hybrid targeting, commonly the combination of a criterion such as the presence of a disabled, underage or elderly household member and an assessment of household welfare.

While comparative reviews of the performance of targeting mechanisms exist, it is difficult to come to a unanimous conclusion on what method works best. Recently, Premand and Schnitzer (2018) experimented with assigning communities in Niger to different methods of targeting. In some villages, beneficiaries for a cash transfer were selected via community-based targeting, while in others one of two proxy means-tests were used (one measuring consumption and one measuring food insecurity). Selecting a single best option has however proven to be inconclusive, as the consumption-based proxy means-test performed better in identifying the poorest households, the food security-based test gained the highest legitimacy among the locals. In terms of cost-efficiency, however, the community-based selection performed best. Acosta et al. (2011) compared categorical and means-tested programs across 13 Latin American countries, and found that the distribution, incidence and depth of poverty had far-reaching consequences on what approaches perform better in reducing poverty. While in most cases, targeting transfers to the poorest achieved higher levels of reduction, geographical targeting can be a very reasonable option in countries with well definable pockets of poverty.

A targeting redux paper by Coady, Grosh and Hoddinott (2004) compared the targeting outcomes of 122 anti-poverty transfers across 48 countries. Country context³ explained much of the observed variation in targeting outcomes, but the importance of unobserved factors also signals that implementation matters to a large extent.

There seems to be no silver bullet for targeting, as the most appropriate and efficient methods will depend on context: policy objectives, poverty profiles, capacities and the political economy (Slater & Farrington, 2009; Devereux et al., 2016; Brown, Ravallion & van de Walle, 2018 – among others). Brown, Ravallion and van de Walle (2018) recommend practitioners to start the quest for the most suitable method with ex-ante evaluations of proposed policy options.

The costs of targeting

Targeting, in essence, can be viewed as an administrative process with the function to allocate social benefits to its claimants, constrained by the size of resources available for distribution (Mkandawire, 2005). Since governments do not have perfect information on households' welfare, the accurate identification of who are the poor, and how poor they are, is a costly and time-consuming task (Grosh et al., 2008). Generally speaking, the more precise (and narrow) targeting is, the higher the costs associated. The technology, infrastructure and staff required to carry out targeting can bring about administrative costs, which can put a particularly great strain on social assistance budgets. In their review of 122 social programs, Coady, Grosh and Hoddinott (2004) found that the administrative costs of means-testing vary substantially, with some accounting for more than 20% of program budgets. Yet, the recent surge of integrating administrative databases and the introduction of social registries may eventually reduce the administrative costs related to means testing (Barca and Chirchir, 2014). Administrative costs may be particularly problematic in low- and middle-income countries for several reasons: the informal sector is often large, which makes the visibility of incomes by the state low. It would therefore require an increased effort to identify the poor as compared to more formalized or wealthier economies,

but administrative capacities are often not developed well enough to carry out the precise identification of the poor as it is recommended by the academic literature (Srivastava, 2004; Mkandawire, 2005). Such a context makes targeting procedures not only more costly, but also less reliable. A recent study has found that in cases of high poverty incidence and low measurability of incomes, it might even be more cost-efficient to take universal or at least quasi-universal approaches (such as geographic or demographic targeting (Brown, Ravallion & van de Walle, 2018).

Depending on the targeting method and policy design features opted for, moral hazard arising from information asymmetry and incentive distortion can pose challenges. For example, a means-tested cash transfer that tops up household income to a pre-defined standard such as the poverty line might incentivize beneficiaries to alter their labor market behaviors. Since earning a unit more on the labor market would mean receiving a unit less in transfers, recipients might be deterred from economic activities (Sen, 1995). Such risks, however, are a matter of policy design – for instance, for flat rate social benefits, Gassmann and Trindade (2018) found no labor disincentives in the Kyrgyz Republic.

Further costs may arise on the demand-side, in the form of private and opportunity costs associated with compiling the necessary documents to apply for the transfer. If the private and opportunity costs outweigh the utility of receiving transfers, potential beneficiaries are unlikely to claim what they are formally eligible for. It is possible that applicants simply cannot mobilize the funds needed to submit their claim (for example travel costs). Such costs can act as barriers to access benefits and result in non-take-up among the eligible population. Non-take-up creates further injustice and inequality between those who claim and those who do not claim their legal entitlements (van Oorschot, 1991), distorts distributional outcomes (Whelan, 2010) and hinders policy objectives such as poverty reduction or the creation of fair opportunities for children (Harnisch, 2019).

Costs to the self-esteem, authority and social position of beneficiaries are highlighted by Sen

³ Targeting performance was related to income level (which was used as a proxy for implementation capacity), the extent of government accountability and the level of inequality in the population (Coady, Grosh and Hoddinott, 2004).

(1995), who argues that any system that requires people to be identified as poor will inevitably have impacts on their self-respect and how society sees them. Poverty-targeted schemes can lead to the stigmatization of participants, and even erode community structures (Grosh et al., 2008). A wide evidence-base from both well-established welfare states low- and middle-income countries with incumbent social protection systems shows that the relationship between shame of social assistance is two-fold (Roelen, 2019). While social assistance can on the one hand reduce shame ignited by poverty (Molyneux, Jones & Samuels, 2016), stigmatization and negative attitudes towards beneficiaries may on the other hand be internalized, reinforcing shame indirectly (Roelen, 2019). The narrower the targeting procedure, the more invasive and interrogative the means-test (Sen, 1995), which negatively influences applicants' sense of authority. Such practices may as well introduce asymmetric power relations between those who apply and those who decide. Such asymmetry in power can also heighten the risk of corruption, as officials hold control over the process of "dispensing favor" (Sen, 1995:14) to the population in the form of cash transfers.

Narrowly targeted schemes are likely to be burdened by political costs, which should be of concern for both recipients and policymakers. Providing transfers to a limited share of the population may undermine wide-spread political support to the program.

Targeting errors

If the characteristics of 'the poor' would be easy to observe and non-reactive to targeting, no debate would be necessary (Sen, 1995). From an equity point of view, perhaps the most important critique regarding targeting is that it is never perfect. According to Devereux (2016:1), "in practice, 100% targeting accuracy is a chimera, virtually impossible to achieve, which raises questions about fiscal efficiency (how much public money can acceptably be wasted on ineligible beneficiaries?) and social justice (is it morally acceptable to leave someone behind)?" There is plenty of evidence on the existence of targeting errors, whatever form of targeting a government may opt for (for a recent review, see Devereux et al., 2015). There are essentially two forms of targeting errors: exclusion and inclusion errors. Exclusion errors occur if some or all of the target group is not reached by the transfer. They undermine the horizontal efficiency of transfers, hinder the program's objective to reduce poverty and are major causes for moral concern. Inclusion errors (or leakage) refer to paying transfers to those who do not belong to the target group. Leakage is a cause for concern because it decreases vertical efficiency and the cost-efficiency of transfers by wasting scarce resources on those who do not necessarily need them (which is, obviously, contradictory with the model linking higher coverage to higher budgets).

The literature identifies an inverse relationship between the two errors of targeting: an effort to decrease one is likely to increase the other

Box 2 Targeting errors in design or implementation

In principle, targeting errors can be distinguished by whether they arise due to the design or the implementation of the program (Sabates-Wheeler, 2015). For example, let us suppose that a government decides for a universal child benefit for all below the age of 16 as their tool to alleviate child poverty. In this case, the primary objective of the transfer is to reduce the incidence and depth of poverty among children. The targeting criteria will introduce an inclusion error by design of non-poor children who are allowed into the program based on fulfilling the age criterion. If a poor child aged 17 gets included in the program, for example due to an administrative mistake or corruption, we can talk about an inclusion error in implementation. Thus, the targeting performance of any social assistance program should be assessed from both sides. First, whether or not the design features (most prominently, the eligibility criteria) cause the exclusion or inclusion of the target population; second, whether deviations from the design during the implementation phase introduce further targeting errors.

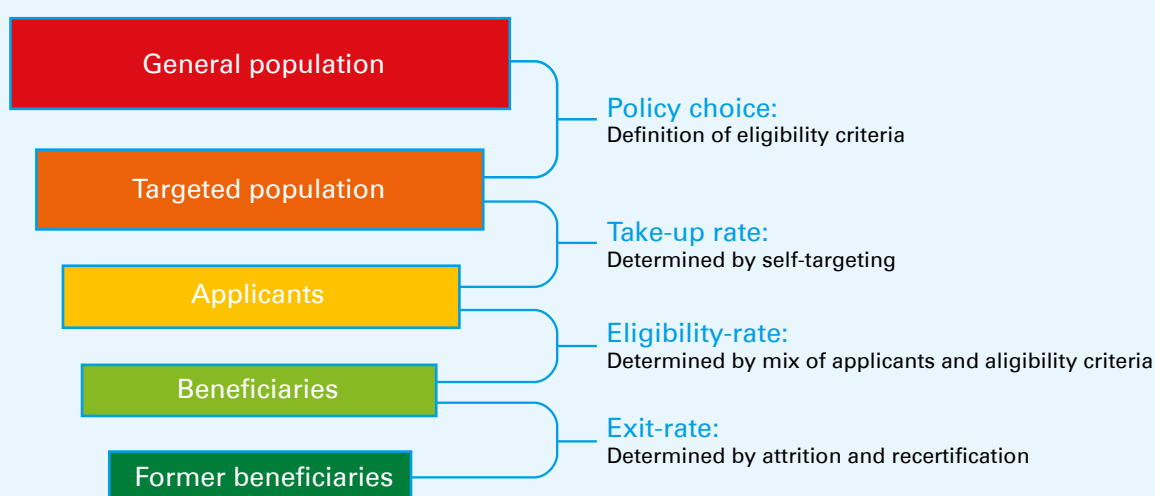
(Cornia and Stewart 1993, Coady, Grosh et al. 2004; Sen, 1995). This introduces a second trade-off: that between the two types of targeting errors. For example, strict screening procedures can be introduced to ensure non-inclusion of those who are not deemed poor. While this is expected to reduce leakage, it will also put a significant burden on the poor by making it more difficult or costly to apply for the benefit. Therefore, it will not only reduce inclusion errors, but also introduce some exclusion errors. Van Oorschot (1999:10) calls it the “tragedy of selectivity that precisely trying to target welfare to the truly needy inherently means that part of them is not reached”. Conversely, increasing horizontal efficiency of transfers by easing eligibility criteria will reduce exclusion errors but will inherently cause some of the resources to leak to the non-poor.

The fact that targeting errors are inevitable and inversely related means that policy-makers have to make their own preferences regarding the type of error they tolerate more (Coady, Grosh et al. 2004). Cornia and Stewart (1993) argue that exclusion errors should be more of a concern, because leakage is merely a non-efficient allocation of resources, while the exclusion of the poor compromises basic program objectives and is problematic also from a human rights

perspective. In this context, policy objectives as well as the patterns and prevalence of poverty matters. Concerns of exclusion may matter more with regards to child benefits, since children cannot be considered independent economic agents. They depend on their environment for the distribution of resources and thus for fulfilling their basic needs, and deprivations experienced during childhood have serious consequences in their future capabilities (Sen, 1995; Biggeri & Mehrotra, 2011; Ballet et al., 2011) and quality of life.

Critical to the success of targeting is the take-up of benefits, namely, the extent to which the target population claims the benefit (see Figure 1 on the process from the general population to beneficiaries). Non-take-up of benefits is a form of targeting that arises in implementation and can be associated with various factors, including design features (such as very low benefit values), stigmatization of participants, high costs of accessing transfers or simply a lack of information among potential beneficiaries. Non take-up might be difficult to predict by policymakers; and the monitoring and evaluation of programs plays a critical role in discovering patterns and understanding the barriers preventing the target population from claiming their entitlements.

Figure 1 The targeting process: from population to beneficiaries



Source: Grosh et al (2008)

In theory, a broad approach (e.g. categorical) to targeting child benefits reduces exclusion errors and therefore dominates narrowly targeted transfers from both a human rights and an economic investment perspective. Leakage to the non-poor depends on the country's specific poverty profile: if the incidence of poverty is high, the cost of including wealthier populations might as well be lower than the costs of targeting. Leakage also needs to be reevaluated if the objective of the transfer is not poverty reduction per se, but includes demographic incentives or horizontal rather than vertical redistribution. Non take-up of benefits may still induce some exclusion errors, depending on the ease of claiming transfers in relation to the value of the grant.

The political economy of targeting

There is a fundamental division on how scholars in support of either universality or selectivity view the political economy of social protection policies. The cost-efficiency argument for targeting (as outlined in Box 1) presumes that budgets for social assistance are fixed, or at least externally constrained. If one accepts the notion that social protection is competing for a slice of the cake, the size of which is fixed, it is a reasonable assumption that directing resources to the poor will maximize outcomes. Atkinson (1995) notes that policy choice and therefore budgetary allocations may be more complex than that.

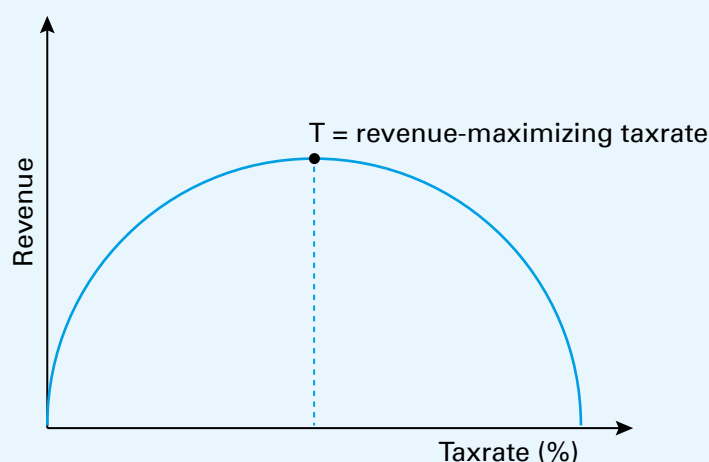
Pritchett (2005) and Sen (1995) argue that people's perceptions of the poor and preferences for redistribution also matter for the budget allocated to social protection programs. Advocates of the universal approach adhere to the idea of budget endogeneity and emphasize the importance of political coalitions. In this view, political support for a transfer program can be negatively affected by targeting it only to a sub-group of the population (Gelbach & Pritchett, 2002). Sen (1995:14) argues that poverty-targeted transfers benefit those whose political voices are weak, and therefore "benefits meant exclusively for the poor often end up being poor benefits". This also suggests that targeting of social transfers, health care, or education programs inherently leads to the creation of "dual structures" (Mkandawire, 2005:7), where only one segment of the population relies on what is provided by the state. Excluding the middle class will ultimately cut the budget

available for redistribution, as redistribution will no longer be in the interest of the elite or the majority of voters. However, the argument hinges on the assumption that the budget is endogenous, which is far from evident in many low and middle-income countries. Moreover, evidence from Zambia points at altruistic rather than self-interested voters and finds preferences for targeting rather than universal provision (Schüring & Gassmann, 2016). Schüring and Gassmann (2016) argue that understandings of social justice, attitudes towards the poor and the level of cohesion in a society are predictors of voters' preferences for the level of targeting. According to Gassmann, Mohnen and Vinci (2016), the quality of institutions also plays an important role in Government's ability to translate society's redistributive preferences into actual policy and corresponding resource allocation.

Kidd (2015) claims that under universal social protection provision, the social unity between the poor and the middle class will be effective to push for higher budgets. Put simply, his point is that the wider the coverage of social protection programs, the larger the budget it will generate. Based on these theories of the political economy of targeting, advocates of universal transfers expect that if social transfers were to include all, it would not diminish, but increase the benefits available for the poor. While there are examples of social transfers that are both universally provided and of higher value than their poverty-targeted comparatives (for example the Mongolian Child Money Programme, or various social pension schemes across the globe), Yemtsov (2018) points out that there is no evidence that universal programs would yield higher transfer adequacy.

Often disregarded in political economy arguments for universality is that governments' wiggle room for increasing social budgets vary. Broadly speaking, governments can re-structure their spending, increase taxation or borrow externally to create fiscal space for social protection (Ortiz, 2010). Kidd (2015) calls for increasing taxation to finance social programs that are both adequate and universal. However, the Laffer-curve predicts that governments can only raise their tax rates to the revenue-maximizing tax rate (depicted by point T in Figure 2) beyond which revenues decrease.

Figure 2 The Laffer-curve



Source: based on Wanniski (1978)

Box 3 From taxation to transfers: two sides of the same coin

Non-contributory social protection programs are generally financed from tax revenue, which means that redistributive cycle is not the mere distribution of transfers but starts at taxation. Inchauste and Militaru (2018) find that direct taxes and social spending together reduce inequality in the Romanian society. However, if indirect taxes are also taken into account alongside direct taxation and transfers, the overall effect increases poverty. Social transfers are not large enough to compensate poor households for the burden that indirect taxes put on them.

Developed economies with strong tax compliance and high degrees of formality typically have higher flexibility in their taxation due to the low substitutability between formal and informal economic activities. The economies of many middle- and low-income countries, however, are characterized by high degrees of informality. This presents a double burden to governments that wish to increase their tax-efficiency: first, the share of formal and thus taxable incomes is low; and second, increasing income and corporate taxes might distort choices between formal and informal economic activity (Vogel, 2012). Vogel argues that higher substitutability between formality and informality (including the presence of home production), as found in countries with informal sectors, flatten the Laffer-curve for income and corporate taxes and introduce one for consumption taxes (Vogel, 2012).

Given the low tax base for direct taxation, indirect taxes such as a VAT or sales tax often constitute a

major share of government revenue in developing countries. For example, Tanzi (1987) estimated that low-income economies (with a typically large informal sector) generate approximately 61% of their total tax revenues through indirect taxation. Shifting taxation from labor to consumption is regressive, as these taxes burden low income households disproportionately (Decoster et al., 2010; Pestel et al., 2016; Inchauste & Militaru, 2018). Increasing indirect taxation to create fiscal space for social protection can therefore weaken equity outcomes; and also flatten the Laffer-curve for consumption (Vogel, 2012).

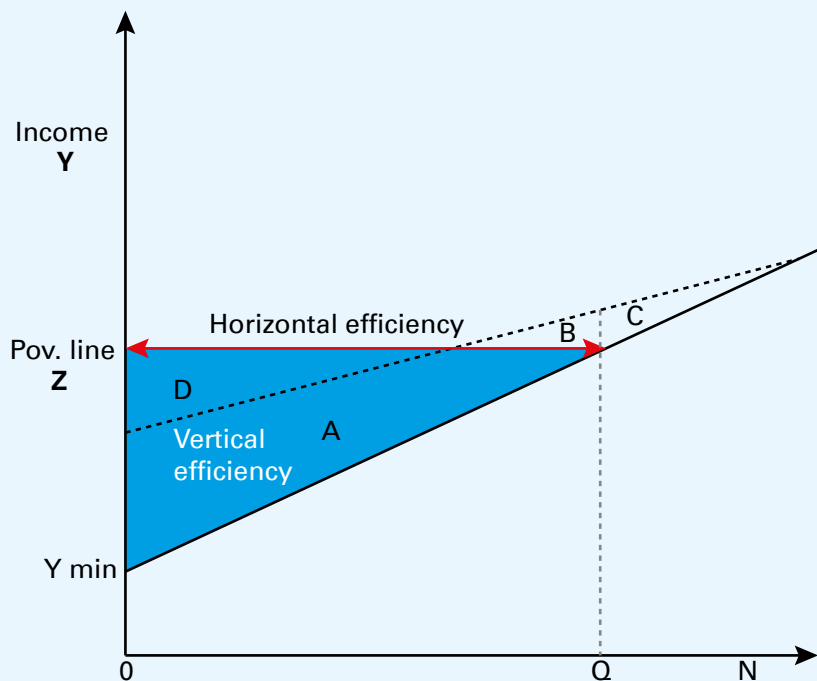
While this does not mean that adequate political and social support cannot generate the resources required for inclusive social budgeting, it does suggest that country-specific factors do matter in the right choice of whether to target and whom to target. Country governments have different options and opportunities to use increased taxation to create fiscal space for social protection.

Assessing the performance of targeting

Part of the overall policy process is to assess the performance of targeting. This supports governments in identifying the strengths and weaknesses of design and implementation, and, ultimately, to improve social transfer delivery. Performance can only be measured against policy objectives. While this paper looks at child benefits and assumes the twin objectives of poverty reduction and human capital investment, it shall be noted that such transfers can serve other objectives, for example horizontal redistribution or demographic goals.

Targeting performance can best be captured by individual outcome indicators (Gassmann, 2010). Horizontal and vertical efficiency are key indicators to assess the extent to which targeting contributes to an efficient allocation of resources (Atkinson, 1995). Horizontal efficiency reflects the coverage – or horizontal distribution – of benefits across the population and refers to the effectiveness of the programs in reaching the target group. Exclusion errors decrease the horizontal efficiency of social transfers. Vertical efficiency is a measure of targeting accuracy. It refers to the efficiency in reaching only the target group. Vertical efficiency decreases if inclusion errors occur, that is if the non-target group benefits from the program as well.

Figure 3 Horizontal and vertical targeting efficiency



Source: Atkinson (1995)

Weisbrod describes the issues of horizontal and vertical efficiency as “having to do with the problem of accuracy in assisting only the target group, and the comprehensiveness of the program in assisting all of that group” (Weisbrod, 1970:25). If the objective of the transfer is to reduce poverty, efficiency measurement can be guided by the extent to which the poverty gap is reduced (the colored triangle in Figure 3). If the objective is to close the poverty gap, the transfer is neither horizontally nor vertically efficient, as

area D reflects the poverty gap after the transfer. In the ideal case, the poverty gap is eradicated.

If the dashed line reflects the income distribution after the allocation of transfers and the reduction of the poverty headcount is the main objective, then the transfer is horizontally efficient (all poor have received support), but vertically inefficient (not only the poor have received it) (Atkinson, 1995). Area B reflects excess pay to the poor and area C is leakage of transfers to the non-poor.

The question is: how problematic are areas B and C (excess pay to the poor and leakage to the non-poor)? This is ultimately a policy decision dictated by preferences and objectives of both policymakers and society and resonates quite a bit with the trade-off between the errors of targeting. Similarly, as concerning the trade-off between exclusion and inclusion errors, one can argue that the vertical efficiency (restricting benefits only to the poor) of child benefits can and shall be sacrificed to maximize horizontal efficiency (reaching all of the poor).

Performance measurement should also focus on outcome indicators that capture results at the level of the beneficiary (Gassmann, 2010). Typical measures are: coverage (indicating access to social protection), targeting accuracy (exclusion and inclusion errors), the distribution of benefits and recipients, and the level or adequacy of benefits (summarized in Box 4). When measuring the vertical efficiency of programs, a nuanced review would consider not only the reduction of the poverty headcount, but the reduction in poverty gap as well (Gassmann, 2010).

Box 4 Key measures of performance

Coverage of the population (can be disaggregated):

$$Coverage_{pop} = \left(\frac{Receiving\ transfer}{Total\ population} \right) * 100$$

Distribution of beneficiaries among the population (e.g. by wealth quintile):

$$Distribution_{ben} = \left(\frac{Transfer\ number\ of\ beneficiaries\ in\ group}{Total\ number\ of\ beneficiaries\ in\ population} \right) * 100$$

Distribution of transfers among the population (e.g. by wealth quintile):

$$Distribution_{cash} = \left(\frac{Transfer\ received\ by\ group}{Total\ transfers\ allocated} \right) * 100$$

Transfer adequacy, the transfer value received as a fraction of total household consumption:

$$Adequacy_{pop} = \left(\frac{Transfer\ value\ received}{Total\ household\ consumption} \right) * 100$$

Poverty reduction (incidence and gap) given social assistance:

$$Poverty\ reduction_{pop} = \left(\frac{Poverty\ rate/gap\ before\ transfer - poverty\ rate/gap\ after\ transfer}{Poverty\ rate\ before\ transfer} \right)$$

Targeting accuracy:

	Target population	Non-target population
Receives transfer	Success	Inclusion error
Does not receive transfer	Exclusion error	Success

3. Experiences from within and beyond the region

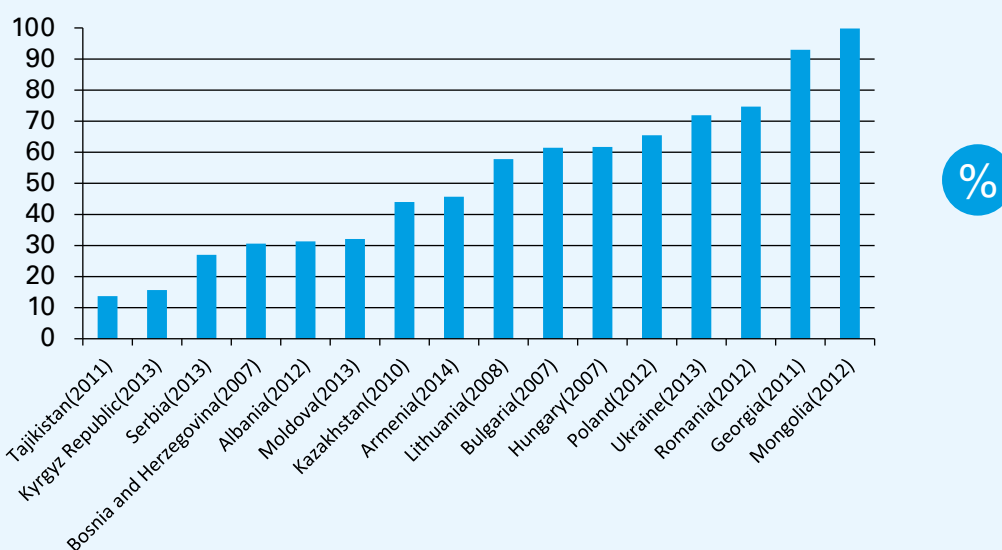
This chapter reviews the experiences with and performance of social assistance in and beyond the Eastern Europe and Central Asia region. First, it looks at standard performance indicators using the World Bank's latest ASPIRE dataset, which allows cross-country comparison (with certain limitations⁴). Second, we discuss some specific experiences of targeting child benefits and the lessons they can provide for the Kyrgyz Republic.

A comparative overview of social assistance in the region

In selected countries within the Europe and Central Asia region, the coverage of the poorest

quintile by social assistance transfers varies greatly (Figure 4). Countries with narrowly targeted safety nets, such as Tajikistan and the Kyrgyz Republic register relatively low rates of coverage (13.7% and 15.7%⁵, respectively). On the other extreme lie countries with inclusive, categorical benefit schemes, such as Georgia (due to its social pension) and Mongolia (with its universal Child Money Program), where the coverage of the bottom quintile is above 90%.

Figure 4 Coverage of social assistance in the poorest quintile (pre-transfer) (%)

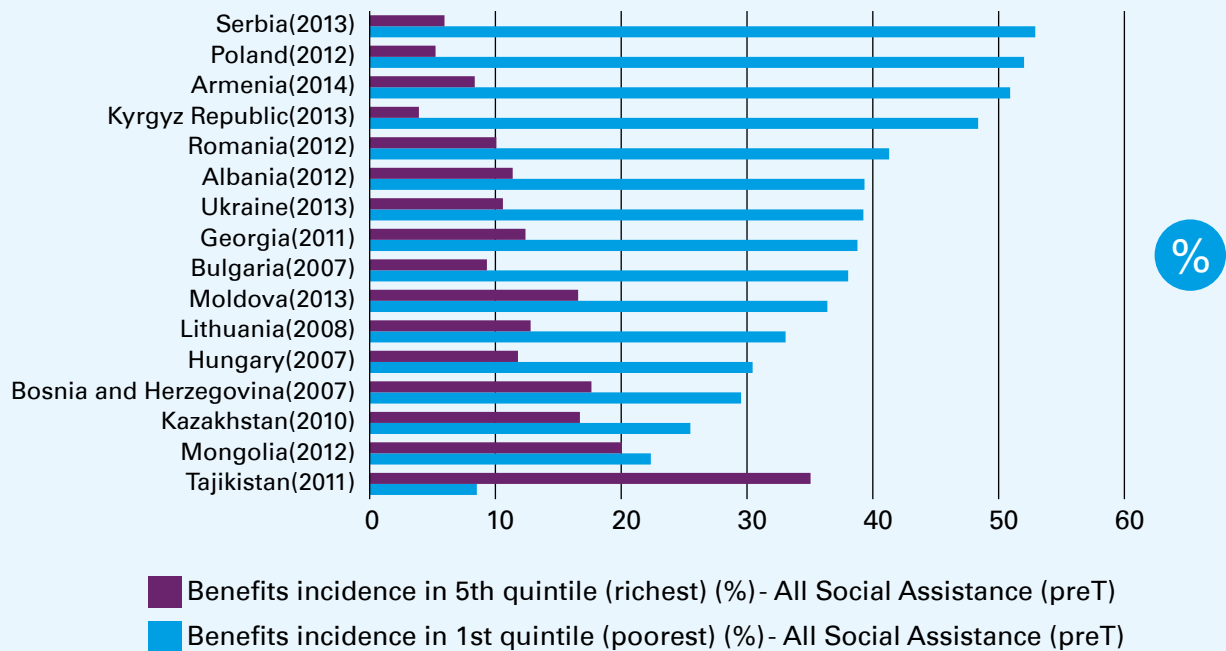


Source: World Bank ASPIRE. Note: figures refer to the coverage of all social assistance transfers in the country included in the ASPIRE database.

⁴ The ASPIRE dataset has some important limitations. Firstly, most household surveys used for the construction of the dataset only capture a part of all the social protection programs. Secondly, the information collected is not complete for each country. Some surveys did not collect data on benefit amounts and can thus not give a solid indication of adequacy. Thirdly, due to the different methods in collecting social protection data among different countries, the exact definition of indicators and the quality of information varies. However, despite data limitations the ASPIRE data forms the most comprehensive and accurate overview of social protection systems around the world.

⁵ Note that this number may differ from national assessments as ASPIRE uses a standardized method for measuring household consumption.

Figure 5 Targeting accuracy (% of total SA benefits received by poorest and richest quintiles (20%) of per capita consumption)



Source: World Bank ASPIRE. Note: figures refer to the average of all social assistance transfers in the country included in the ASPIRE database.

The accuracy of targeting non-contributory transfers is similarly diverse in the region (Figure 5). If we accept that one of the main objectives of social assistance is to reduce poverty, Tajikistan does not perform well. In 2011, a very low share of the overall resources spent on social assistance are received by the poorest quintile, while a relatively high (35%) share is distributed to the wealthiest quintile. In comparison, the systems of the Kyrgyz Republic, Armenia, Poland and Serbia show highly progressive patterns, with the share of benefits captured by the bottom quintile being six to eight times higher than those in the top quintile. The differences in distribution patterns can be explained by basic design and/or implementation features. For instance, in Mongolia, we see an almost equal share of transfers captured by the bottom and

the top quintiles, which is mainly because of the transfers from the Human Development Fund (Gassmann, 2018). The slightly higher share of benefits in the poorest quintile is a result of a higher average number of children at the bottom of the income distribution.⁶ In the Kyrgyz Republic, the flagship social assistance program – the Monthly Benefit for Poor Families – is aimed at reaching extremely poor households with children, with the threshold for eligibility being even lower than the extreme poverty line. Such narrow targeting ensures that leakage to the non-poor is minimal (illustrated on Figure 3) and the allocation of resources is progressive, but at the same time seriously limits the coverage of the poor (as seen on Figure 2). This is a good example of the trade-off between inclusion and exclusion errors.

⁶ Note that the data for Mongolia refers to 2012 when every citizen was receiving a transfer from the Human Development Fund, which was essential a basic income. The policy has changed mid-2012 after which only children remained eligible.

Figure 6 Adequacy and coverage of SA transfers (transfer value as % of post-transfer consumption in bottom quintile)

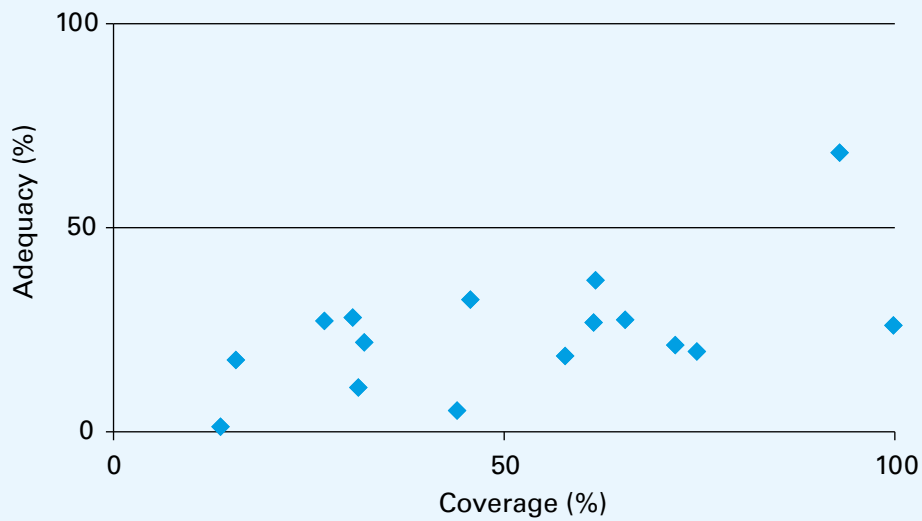
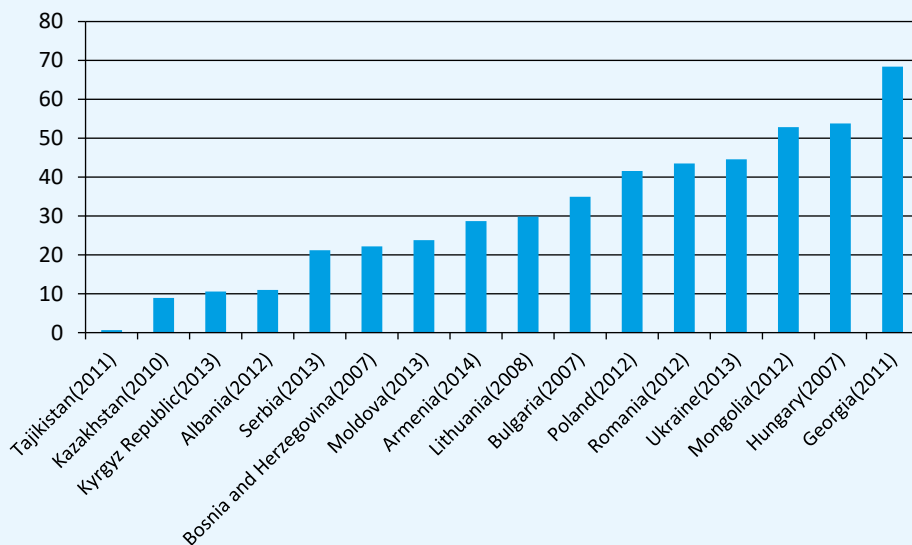


Figure 6 depicts the adequacy versus the coverage of social assistance programs in selected countries of the region. While one would expect an inverse relationship between the two due to governments' effort to balance horizontal and vertical efficiency, this assumption does not hold in all cases. For instance, Georgia not only has the highest transfer adequacy, but reaches also the second highest coverage of the population in the poorest 20%. Similarly,

Mongolia has managed to reach nearly full coverage of the bottom quintile, and at the same time outperform several countries in terms of benefit value – most notably Lithuania and Romania, which are wealthier in terms of GDP per capita. This tells an important story: countries at any level of economic development are able to invest in social protection if they have the political will.

Figure 7 Poverty gap reduction of non-contributory transfers (bottom quintile – bottom 20% of population based on per capita consumption) (%)



Source: World Bank ASPIRE. Note: figures refer to the average of all social assistance transfers in the country included in the ASPIRE database.

The overall effectiveness of social transfers can be measured via their poverty reduction impact. Figure 7 demonstrates that countries with low coverage of the poor and low benefit adequacy register relatively low impacts on poverty: the narrow safety nets of Tajikistan, Kazakhstan, the Kyrgyz Republic and Albania achieve only little reduction of the poverty gap. Extending coverage and benefit adequacy would be critical to boosting the effectiveness of these programs. More inclusive and generous systems such as in Georgia, Hungary and Mongolia manage to close the poverty gap by more than half.

Targeting choices for child benefits in the region

Countries across the region differ not only in terms of program performance, but also in their design – including choices of targeting. Firstly, not all countries operate regular cash transfer programs specifically aimed at children: for example, in Tajikistan, the Targeted Social Assistance program serves to protect poor households with or without children. In Armenia, the Family Living Standard Enhancement Benefit provides greater transfers to households with children but is not restricted to the presence of a child. Others, including the Kyrgyz Republic, Mongolia, Hungary, Romania and Moldova, operate cash transfers that explicitly target children.

Table 2 Examples of targeting social transfers in selected countries in the region

Country	Name of program	Targeting method
Armenia	Family Living Standard Enhancement Benefit	Proxy means-test
Mongolia	Child Money Program	Categorical (universal for all children)
Hungary	Family Allowance	Categorical (universal for all children)
Tajikistan	Targeted Social Assistance	Proxy means-test
Romania	Child State Allowance	Categorical (universal for all children)
Kyrgyzstan	Monthly Benefit for Poor Families	Means-test
Moldova	Ajutor Social	Proxy means-test

Source: ADB (2016); Gassmann & Timar (2018); Tesliuc et al. (2015)

Many modes of targeting transfers for children and families exist in the region. Mongolia, Hungary and recently also Romania opted for maximizing the coverage of children by implementing categorical transfers for all below the age of 18 (Tesliuc et al., 2015; ADB, 2016).

Armenia, Tajikistan, Moldova and the Kyrgyz Republic have narrowly targeted social transfers in place – the former three identifies beneficiaries using a proxy means-test, while Kyrgyzstan's MBPF employs a verified means-test.

4. Targeting social assistance in the Kyrgyz Republic

This chapter dives into the case of the Kyrgyz Republic's Monthly Benefit for Poor Families with Children. First, we discuss the various standards that guide poverty measurement and social assistance design in the country. Second, a brief picture on the magnitude and distribution of poverty is presented, along with an analysis of livelihoods and the population's sources of income. Third, the targeting performance of the MBPF is assessed.

The role of standards

Performing an analysis of targeting efficiency and impact on poverty requires the researcher to identify thresholds and benchmarks to measure against. Similarly, basic design features such as the cut-off point for eligibility and the value of transfers usually depend on such thresholds. This should reflect some sort of standards that reflect acceptable levels of income and consumption. Many countries in the Eastern Europe and Central

Asia region operate programs on a 'Guaranteed Minimum Income' basis, which aims to bridge the gap between a poverty line and poor households' consumption (Gassmann et al., 2013). According to Ravallion (2018), such designs bear the risk of excluding many of their targeting population and introducing disincentives for further income generation (Ravallion, 2018). In Bulgaria, Romania and Serbia, the cost of an essential food basket is calculated regularly, and social assistance tops up household incomes to the level of this package of basic goods (Tesliuc et al., 2015). The reality of social protection budgeting however means that such minimum standards are sometimes driven more by budgets and political economy than the actual measures of the costs of living. The coverage of Bulgaria's GMI program, for example, had fallen by 80% between 2003 and 2008 – largely because the threshold was not indexed and therefore did not reflect the actual cost of a basket of basic goods (Tesliuc et al., 2015).

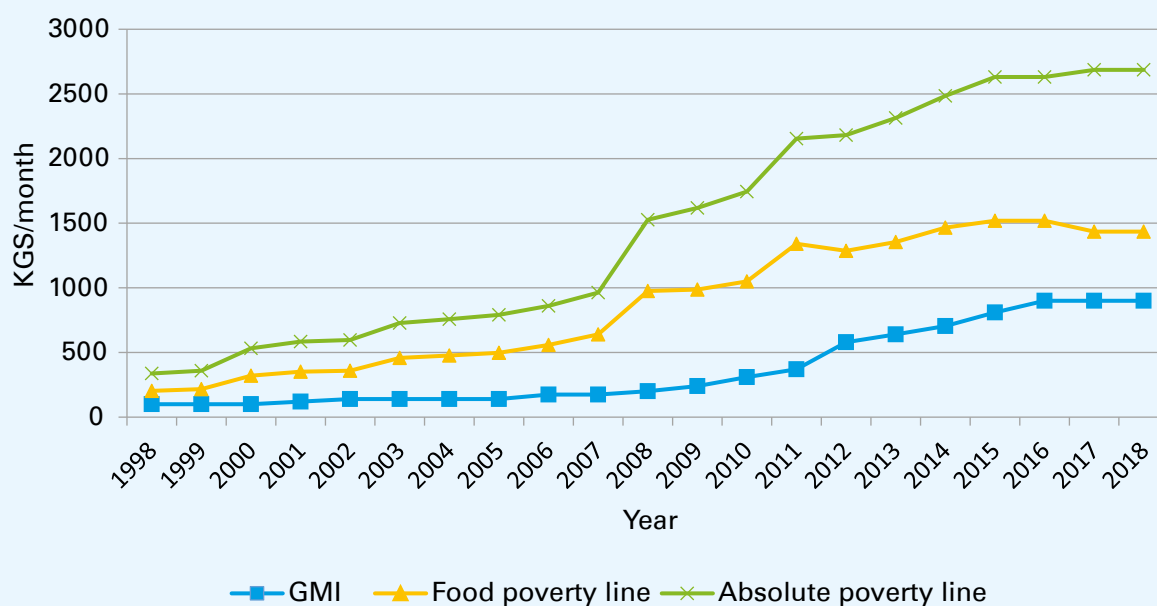
Table 3 Different standards used in social protection programming in the Kyrgyz Republic in 2018

Name of standard	Monetary value in 2018	Remarks
Poverty line	KGS 2,686	Empirically derived monthly monetary resources required to meet basic needs
Extreme poverty line	KGS 1,435	Empirically derived monthly costs of consuming a diet of 2100 kcal per person per day
Guaranteed minimum income	KGS 900	Threshold for MBPF eligibility determined by budget availability

Source: NSC and MLSD

Kyrgyzstan's social assistance system utilizes various income standards, each of which serves a specific purpose in programming (Gassmann, 2013) (summarized in Table 3). National poverty lines derived from a representative household survey and adjusted annually by inflation, measure both the extent and pattern of poverty in the country and allow for the analysis of distributional effects of social protection policies

(Gassmann, 2013). The extreme poverty line serves the purpose of identifying households that are extremely poor. Its value is set at the costs of a basic food basket of 2,100 calories, based on the actual food consumption of the Kyrgyz population (derived from KIHS data). The poverty line also accounts for the consumption of non-food goods and services.

Figure 8 The evolution of standards over time

Source: NSC (<http://www.stat.kg>)

Poverty and livelihoods in the Kyrgyz Republic

Selecting an ideal targeting method starts with the analysis of poverty in the country. The Kyrgyz Republic has a long history of poverty assessments, with the National Statistics Committee publishing official statistics every year. Recently, OECD (2018) and Gassmann & Timar (2018) used KIHS 2015 data to analyze patterns of poverty in the country. In this section, we perform a brief analysis of the distribution of monetary deprivation using the KIHS 2018 data.

Poverty is most often measured through either income or consumption (which is taken as a proxy for income). While in constructing the Kyrgyz population's poverty profile, we will utilize regionally adjusted consumption per capita as a proxy for monetary welfare, we summarize poverty headcounts for the various standards using both income and consumption in Table 4. Demonstrating the differences between the two measures is important to understand the performance of the means-test in later sections of this chapter.

Table 4 Poverty headcount ratio at different cut-off points and measurement

Cut-off point (standard)	Income	Consumption (deflated)
Poverty line	27.1%	22.4%
Extreme (food) poverty line	8.0%	0.6%
Guaranteed Minimum Income	2.7%	0%

Source: own calculation based on KIHS 2018. Note that income does not include income from agriculture.

Measuring the poverty headcount ratio as the proportion of the population consuming less than the national poverty line, we estimate that 22.4% were poor in 2018. The distribution and the incidence of poverty are highly unequal

across oblasts as well as in urban versus rural settings. For instance, a rather high share of the populations of Jalal-Abad (32.2%), Naryn (30.6%), Batken (33.8%) and Osh city (35.5%) consume below the threshold, while in the

capital city of Bishkek the corresponding rate is 15.4%. Poverty is concentrated across rural populations, especially the rural South. Not only

is poverty more frequent in the Southern oblasts but it is typically also deeper as demonstrated by the average poverty gap rate.

Table 5 Poverty headcount rate and poverty gap rate, by oblasts

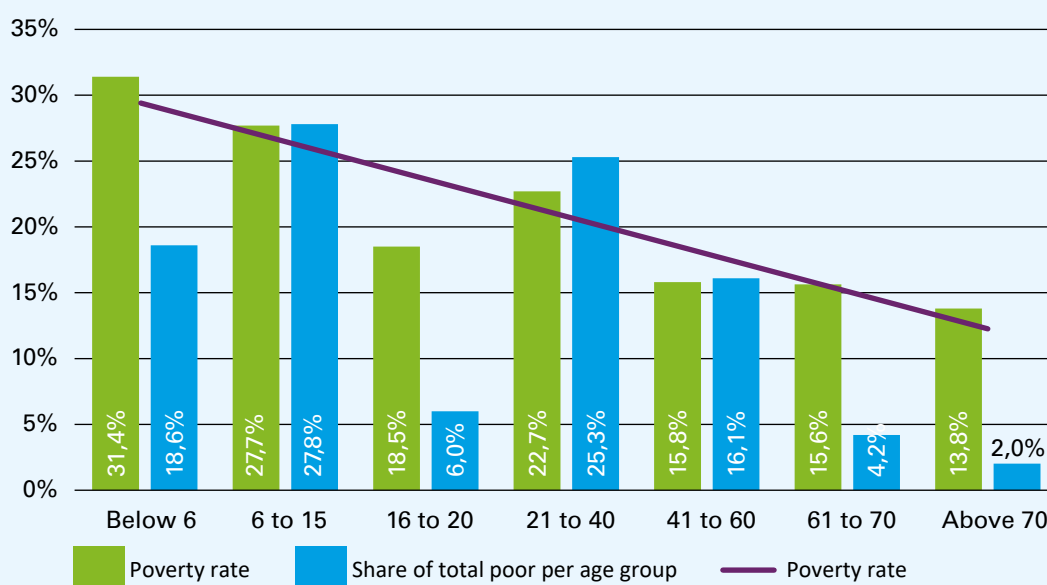
	Poverty rate	Poverty gap
Issykul	21.5%	3.8%
Jalal-Abad	32.2%	5.4%
Naryn	30.6%	6.0%
Batken	33.8%	7.1%
Osh	14.8%	1.8%
Talas	22.1%	3.7%
Chui	15.6%	2.7%
Bishkek	15.4%	1.9%
Osh city	35.5%	5.6%
Total	22.4%	3.7%

Source: own calculations based on KIHS 2018.

Numerous former studies have found age and household composition to be correlated with poverty in the Kyrgyz Republic (most recent examples are OECD, 2018; Gassmann & Timar, 2018). Analysis of the 2018 data supports these findings as poverty rates are highest among children under 6 and gradually decrease until

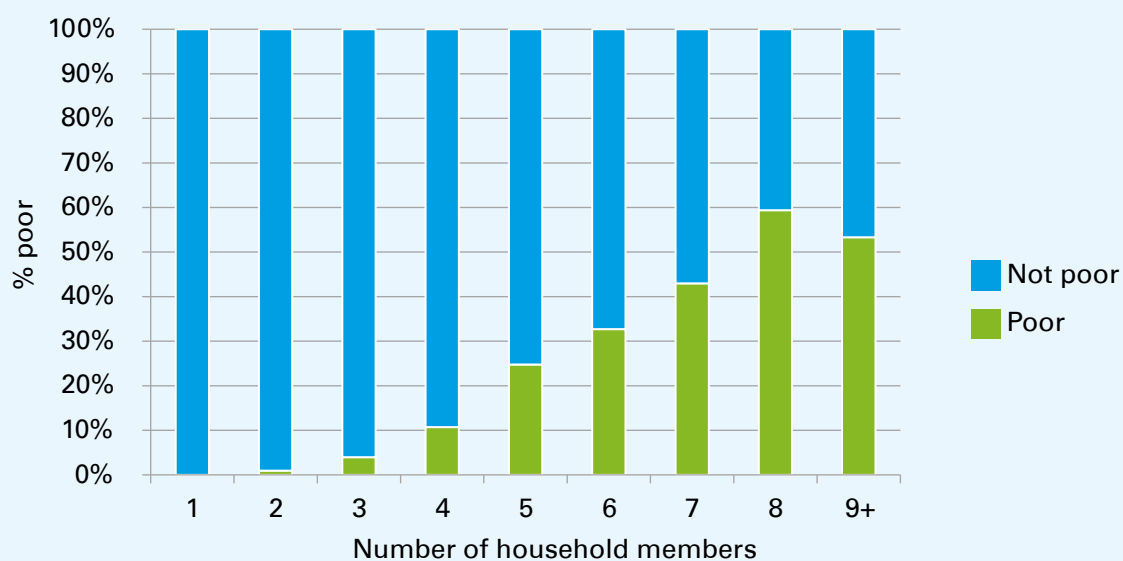
pensionable age (Figure 9). Nearly half (46%) of the poor Kyrgyz are children under the age of 16. The size of the household shows a positive correlation with poverty incidence: while none of the single-member households are estimated to be poor, the corresponding rate for those with eight members is almost 60% (Figure 10).

Figure 9 Poverty rates (pc consumption) by age group



Source: own calculations based on KIHS 2018

Figure 10 Poverty rate (pc consumption) by household size



Source: own calculations based on KIHS 2018

The average number of children under the age of 16 is presented in Table 6. On average, households at the bottom of the distribution have a higher number of children than those at higher consumption brackets. Table 7 shows the incidence of poverty by the number of children in the household, broken down by different age groups. Clearly, the presence of a young child is

associated with a magnified risk of poverty, and whichever age group we look at, the incidence of poverty grows proportionally with the number of children. The younger the children in the household are, the higher the likelihood of poverty – for example, one third of households with a child under three years old live in poverty.

Table 6 Average number of children (under 16) by quintiles of per capita consumption, 2018

Quintile	Poorest 20%	2nd	3rd	4th	Richest 20%
Number of children	2.9	2.6	2.1	1.6	0.8

Source: own calculations based on KIHS 2018

Table 7 Poverty rate by number of children in the household, 2018

	Number of children					
	0	1	2	3	4	5+
Number of children < 16	3.2%	12.9%	21.3%	32.5%	40.0%	62.3%
Number of children < 6	12.5%	28.7%	33.0%	47.4%	52.4%	N/A
Number of children < 3	17.0%	33.2%	40.0%	57.8%	N/A	N/A

Source: own calculations based on KIHS 2018. N/A: insufficient number of observations to draw conclusions.

Livelihoods and income sources in the Kyrgyz Republic

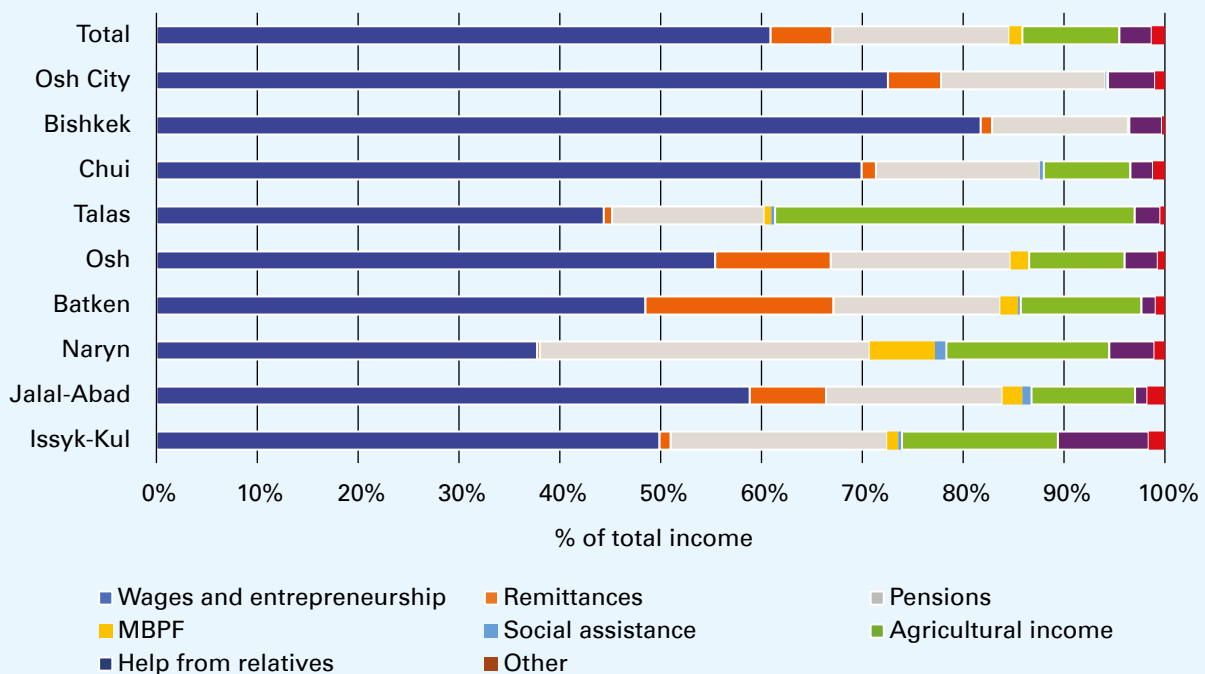
The Kyrgyz Republic has a substantial informal sector – according to the Asian Development Bank, estimates of its share of the economy range between 25-80% (ADB, 2014). In 2011, nearly 70% of the employed worked in the informal economy⁷, and the corresponding rate was significantly higher in rural (77%) than in urban (55%) settings (ADB, 2013). This has implications for social protection in the short and long run. First, incomes generated in the informal sector are largely invisible to the state and thus are difficult to assess. If eligibility for social cash transfers is determined on the basis of family income, this presents a great challenge because of the difficulty of accurately identifying those whose incomes fall below a certain threshold. For example, a household with no formally employed member may as well generate incomes in the informal sector, but this will not have a trace in official records. Second, informality limits the tax base and thus

the resources available for redistribution. Third, it generates a liability for the future if informal workers are not contributing to the pension fund.

An analysis of the various income sources reported in the KIHS 2018 shows that income from (self-) employment constitutes the dominant share of Kyrgyz households' budgets (70%). Social transfers (including pensions) are the second most prominent source of income for Kyrgyz households: on average, 24% of all incomes come from this source. Remittances are also known to be important livelihood sources for much of the Kyrgyz population, constituting nearly a third of the country's GDP in 2017 (World Bank, 2018).

Relying on data from the KIHS 2016⁸, income sources can be disaggregated by oblast. This is presented in Figure 11 below. Within-country differences in income sources is striking. For instance, in the capital city Bishkek more than 80% of an average household's income comes from wages or entrepreneurship. In Naryn, the corresponding share is below 40%, with a higher reliance on pensions and agricultural income.

Figure 11 Composition of household incomes by oblast in 2016



Source: own calculations based on KIHS 2016.

⁷ Work in the informal economy refers to work in unincorporated, unregistered and unprotected contexts. There is generally no income tax paid after work in the informal economy and workers are not covered by contributory or work-related social protection.

⁸ This module in KIHS 2018 was not yet available to the consultants at the time of writing this report.

Current targeting of the MBPF

The MBPF is the Kyrgyz Republic's sole poverty-targeted social assistance program. Other than this, the non-contributory benefits consist of categorical cash and in-kind transfers which have no specific objective to reduce poverty or redistribute resources vertically. Recent reviews of the Kyrgyz social protection system have highlighted several weaknesses of the MBPF: very limited coverage, low transfer value and targeting errors emerging both in the design and implementation stages (OECD, 2018; Gassmann & Timar, 2018). The MBPF utilizes a hybrid targeting method, consisting of a categorical element (the presence of a child under the age of 16), a filter and a means-test. While the individual means assessment is not a PMT, it utilizes durables and livestock as proxies for income, and it includes imputed values from plots and allotments. Eligible are those households in which the per capita income falls below the Guaranteed Minimum Income of KGS 900.

While the overall targeting approach remained the same, the government introduced several modifications to the targeting process as of July 2018. Some of these changes make it more costly to apply for the benefit, for example, applicants now have to travel to the rayon center instead of their local municipalities. Others may make the program more accessible, for instance the removal of the residential address registration (*propiska*) requirement. Moreover, pensions have been removed from the income calculation, which means that more households relying on pensions may be admitted into the MBPF. Because these changes were introduced mid-year, their outcomes are not yet fully visible in the 2018 round of the KIHS. Nonetheless, the next section will compare some primary indicators of targeting performance in 2016 and 2018.

Informal incomes and the caveats of simulating means-tests

The sizeable informal sector and the high reliance on remittances present important challenges for the means-test used to select households eligible for the MBPF. Moreover, these factors create methodological caveats in simulating changes to the targeting methodology.

Eligible for the MBPF are families with a per capita income below the GMI. This is measured via administrative income, which includes wages from formal employment, entrepreneurship, or imputed values from land ownership. Applicants are required to present official documents stating these incomes. Administrative income however is not the same as total income or consumption. Many households in the Kyrgyz Republic generate incomes in the informal sector or receive remittances from relatives working abroad. Since these sources of income are not officially documented, they will not be included in households' administrative income (unless applicants state them).

An important limitation of the KIHS is that administrative income cannot be directly reproduced, and finding a proxy for administrative income that is accurate enough is difficult. This is well demonstrated by the fact that when using per capita household consumption, no household can be identified that would fall below the GMI. Using per capita household income, 2.7% of the population is estimated below the threshold (in 2018). The MBPF, however, covers a much higher share of the population, as the following section shows.

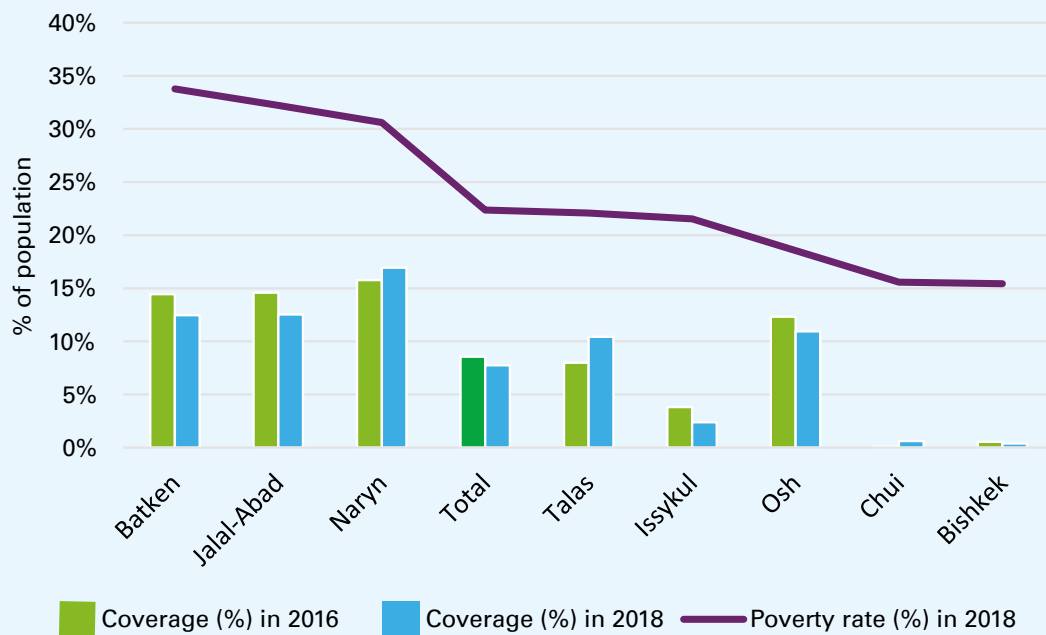
Targeting performance and outcomes

Coverage varies widely across geographic regions, from 0.1% receiving MBPF in Chui to nearly 16% in Naryn oblast. A high incidence of poverty does not always go hand in hand with wider coverage. For example, Osh (city and oblast combined) registers a relatively lower poverty rate in the country but a relatively higher share of the population living in a household benefitting from the MBPF (Figure 12).

Between 2016 and 2018, perhaps due to the reforms, some shifts in coverage by oblast have occurred. The coverage of the total population has decreased in Issyk-Kul, Jalalabad, Batken, Osh and Bishkek, but increased in Naryn, Talas and Chui. The overall coverage of the Kyrgyz population⁹ has decreased by 10%, from 8.6% in 2016 to 7.7% in 2018.

⁹ The share of the population living in a household benefiting from the MBPF.

Figure 12 Poverty rate (2018) and MBPF coverage by oblast in 2016 and 2018*



Source: authors' calculations based on KIHS 2016 and 2018. *Osh includes Osh city and oblast.

A basic benefit incidence analysis of the MBPF in 2016 and 2018 is presented in Table 8. As expected, with the low eligibility threshold, the MBPF coverage is relatively low. In 2018, 7.7% of the total population and 12.8% of children under 16 are living in a household receiving the MBPF. Compared to 2016, coverage has slightly decreased, accompanied by a re-shuffling of benefits across the distribution. Coverage of the children in the second quintile has increased substantially from 9% in 2016 to 16.5% in 2018. This is also reflected in the distribution of the benefits. The share of benefits going to second quintile has practically doubled. At the same time, coverage in richer quintiles has decreased along with a lower share of benefits going to wealthy households. Whether or not this is the effect of the policy changes introduced mid-2018 is too early to say, but it could be a potential explanation.

The adequacy of benefits has also increased from 2016 to 2018. Overall, the MBPF accounts for 15% of total household consumption in recipient households and increase of almost

one third compared to 2016. The increase is most notable among the poorest households, where the MBPF represented almost 20% of total household consumption in 2018. Survey respondents were also asked about the amount of MBPF transfer they receive annually. Dividing this by the number of months they reported benefit receipt, and by the number of children, the average transfer value is calculated and presented in the last row of Table 8. The value comes closest to the KGS 810 per month, which is the monthly benefit per child, in the second quintile. In all other quintiles, except the wealthiest, the reported average monthly value is below the expected monthly value. According to the data, the average monthly benefit per child in the top consumption quintile was KGS 1360 (with a statistically significantly higher average value in the top quintile) in 2018. The reason for this discrepancy is unclear, since all households should receive KGS 810 per month per child. It is impossible to tell from this data whether inaccurate reporting, or actual implementation errors occurred.

Table 8 Coverage, distribution and adequacy of MBPF, 2016 and 2018

	Year	Poorest 20%	Q2	Q3	Q4	Richest 20%	Total
Coverage, total population	2016	19.3%	7.6%	8.7%	6.1%	1.2%	8.6%
	2018	17.9%	12.9%	4.5%	2.6%	0.8%	7.7%
Coverage, children (<16)	2016	23.8%	9.0%	11.9%	9.0%	2.6%	12.8%
	2018	22.0%	16.5%	6.3%	4.0%	2.1%	12.0%
Share of beneficiaries	2016	45.0%	17.7%	20.3%	14.2%	2.8%	100%
	2018	46.5%	33.1%	11.7%	6.7%	2.0%	100%
Share of benefits	2016	45.7%	17.8%	23.5%	11.4%	1.6%	100%
	2018	47.1%	35.6%	10.1%	4.3%	2.9%	100%
Benefit adequacy	2016	11.4%	10.9%	9.2%	5.5%	3.8%	9.6%
	2018	18.2%	14.0%	9.2%	5.7%	10.0%	14.8%
Average benefit amount*	2016	682 KGS	726 KGS	754 KGS	695 KGS	904 KGS	713 KGS
	2018	716 KGS	824 KGS	697 KGS	569 KGS	1360 KGS	752 KGS

Source: authors' elaboration based on KIHS 2018. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume. *as reported by households.

The MBPF is a transfer for children in extreme poverty, it is therefore most meaningful to look at the exclusion and inclusion of children living in extremely poor households. However, given that less than one percent of the population is living in extreme poverty in combination with less than 10% of the population receiving the MBPF, we use the bottom 5% of the population to assess the targeting errors. The analysis of the KIHS

data reveals that one quarter of children in this bracket are not covered by the transfer program. The MBPF performs relatively well in terms of vertical efficiency (only 11% of recipient children are from higher consumption brackets), but its horizontal efficiency is weakened by the low benefit adequacy and not covering all children at the very bottom of the distribution.

Table 9 Targeting errors of the MBPF (exclusion and inclusion of children under 16)

	Receives MBPF	Does not receive MBPF
Bottom 5% (pre-MBPF)	74.3%	25.7%
Not bottom 5% (pre-MBPF)	11.0%	89.0%

Source: authors' elaboration based on KIHS 2018. Pre-transfer poverty rates are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 10 presents the poverty reduction impact of the transfer. Overall, the MBPF has reduced the incidence of child poverty by 4.0% and the child poverty gap by 5.7% in 2018. While this is of relatively small magnitude due to

both exclusion errors and low adequacy, the reduction in the poverty headcount is a three-fold improvement compared to 2016. All indicators show a statistically significant difference in poverty at a 1% significance level using t-test.

Table 10 Poverty and child poverty (age<16) reduction impact of the MBPF in 2016 and 2018

Child poverty reduction				
	2018		2016	
	Poverty rate	Poverty gap	Poverty rate	Poverty gap
Before MBPF	30.3%	5.3%	32.8%	5.6%
After MBPF	29.1%	5.0%	32.4%	5.4%
% Change	-4.0%	-5.7%	-1.3%	-3.9%
Overall poverty reduction				
Before MBPF	23.0%	3.8%	25.8%	4.3%
After MBPF	22.4%	3.7%	25.6%	4.2%
% Change	-2.6%	-2.6%	-1.0%	-3.2%

Source: authors' elaboration based on KIHS 2016 and 2018. Pre-transfer poverty rates are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume. All reported differences are statistically significant at the 95% level.

There are various explanations for the considerable targeting errors of the MBPF. First, as explained in the previous section, incomes are very difficult to measure and verify due to the large informal sector and the heavy reliance on remittances (among remittance receiving households). This presumably contributes to the inclusion errors, as households with high informal incomes could still be eligible based on their administrative incomes.

The costs of applying for benefits can further contribute to exclusion errors – more importantly, to the exclusion of the poorest. Tesliuc et al. (2015) estimate that in 2014, the average time needed to gather all documents to submit an

application was about two days. The costs of submitting an application dossier vary geographically: in urban areas, they equaled on average 15% of a monthly benefit, while in rural areas, they reached 80% of the monthly value of the MBPF due to the very high costs of transportation (Tesliuc, 2015). International lessons warn about the social costs of narrow targeting and stigma that beneficiaries have to face but there is no robust evidence on whether this plays a decisive role in the take-up rate of the MBPF. Last but not least, anecdotal evidence cited by Gassmann & Timar (2018) mentions a pressure from top political levels to limit the number of beneficiaries, which could also account for some of the exclusion.

5. Simulating alternative policy options

The empirical assessment of the MBPF using KHS 2018 data in the previous chapter confirms earlier assessments (for example Gassmann, 2013; OECD, 2018; Gassmann & Timar, 2018). There is considerable room to improve the MBPF's targeting performance. Exclusion and inclusion errors remain high, and the reduction of (child) poverty is low. The literature review concluded that there is an inevitable trade-off between the two types of targeting errors. The exclusion of children in need is of particular concern because it is inequitable and undermines program objectives. Further, the current demographic window and the Government's vision for investment in the youth both underpin the rationale for more inclusive protection of children.

This chapter proposes and tests alternative solutions to target the MBPF in the Kyrgyz Republic. The selection of policy alternatives is guided by theory (Chapter 2), the quantitative analysis of poverty and targeting performance (Chapter 4), and two policy proposals put forward by the Ministry of Labor and Social Development and a working group in the Parliament. The aim is to identify potential design alternatives that increase coverage, lead to sharper poverty reduction and are (technically, politically and financially) feasible given the local context.

The four simulated alternatives differ approach and methods. The two policy proposals recently put forward (P1 and P2) envision a more inclusive benefit for infants under 18 months of age, and the current MBPF design for older children up to the age of 16. The difference between P1 and P2 is in eligibility threshold for infants. The Ministry's proposal (P1) plans to raise the eligibility threshold to the NSC poverty line for infants (keeping the targeting method of the MBPF, just adjusting the threshold for the youngest). The draft law advocated for by Members of Parliament (P2) aims to exclude only the richest 20% of households from the infant grant. As benchmark options, we include option P3, which provides a benefit to all infants up to 18 months, and the current MBPF for older children, and option P4, which is transfer for all children up

to the age of 16 irrespective of age and family income.

The context in which the MBPF operates makes it difficult to precisely identify the poorest by using a narrow targeting approach. Incomes are difficult to measure and verify, and the costs of targeting are high both on the supply and the demand side. A recent evaluation (Gassmann & Timar, 2018) reported anecdotal evidence of the political pressure to limit the number of MBPF beneficiaries, which would explain the program's decreasing coverage rate even when the eligibility threshold was raised. Such issues would likely be solved by opting for a purely categorical approach by age group, which is supported by evidence that very broad targeting approaches practically eliminate exclusion errors.

Technical considerations of an "affluence-test" for child benefits

Before the expected distributional outcomes can be simulated, this section will investigate the technical considerations around operationalizing an affluence-test. An affluence-test is based on a similar logic as a means-tests, but instead of selecting the poor as eligible beneficiaries, it identifies the wealthy in order to exclude them. This may present a solution to balancing exclusion and inclusion errors, in which some leakage is inevitable, but the risk of exclusion errors can be minimized. Given that a categorical child grant, where all infants would be eligible, is politically not feasible in the Kyrgyz Republic at the moment, an approach that excludes the wealthiest households may garner sufficient political support. Just as means-testing, affluence-testing is an individual assessment of eligibility. It can focus on incomes or proxies for income and be verified or non-verified. The draft law of the parliamentary working group on child benefits contains an affluence-tested component for young children, excluding the top 20% of households, but the practicalities of how to identify the wealthy are yet to be defined.

The question thus is: what would be options to affluence-target this new child benefit, and what would be their consequences on program equity and effectiveness? A set of criteria was first identified which the ideal targeting method would have to fulfill (Table 11). Overall, it is essential to the successful implementation to

select a simple and transparent set of eligibility criteria and make the application process as fast and hurdle-free as possible (for both applicants and staff). Hence, the ideal targeting method would rely on few indicators that are easy to observe based on existing sources of information.

Table 11 Criteria of an ideal method of identifying the wealthy

Objective	Requirements	Criteria
Reduce exclusion errors	Low monetary costs of application	Minimal number of documents to be collected; Minimal number of visits to authorities required;
	Low social costs of application	Minimal stigma or threats to applications' dignity;
	Reduce room for corruption and discretion	Clear, transparent and simple selection criteria; Indicators easy to observe; Easy to verify digitally/centrally (no home visits);
Reduce burden on staff	Reduce workload	Few indicators to determine eligibility; Indicators easy to observe; Easy to verify digitally/centrally (no home visits); Minimize time required to determine eligibility.

Source: authors' own elaboration

According to these criteria, eligibility should be determined based on indicators that the applicant can easily provide, and the social staff can easily verify. This limits options to indicators that are (potentially) captured in one of the government authorities' databases¹⁰, including:¹¹

- The Social Fund's database on incomes and contributions;
- The Tax Office's database on income, employment;
- Registries of property ownership, such as real estate or vehicles;
- Cadaster: land ownership;

- Civil registry: household composition;
- Database of the Ministry of Education on educational attainment.

Two approaches are tested to select the wealthy. A Proxy Affluence-Test (PAT) is constructed first, which follows the steps of estimating a proxy means-test but with the objective of identifying the affluent rather than the poor. Second, filters and combinations of filters are tested to see whether they can accurately identify the wealthy. The methodology for their construction, sensitivity analyses and the advantages and shortcomings of both approaches are discussed below. Basic descriptive statistics of variables in the KIHS that can be used as indicators are presented in Table 12.

¹⁰ Without detailed knowledge of the respective databases, we assume that the indicators below are available. However, that might have to be checked/verified at a later stage. It may also entail that some of the proposed indicators need to be adjusted.

¹¹ Because the basis for this exercise is the Kyrgyz Integrated Household Survey, the proposed indicators also need to be available in this dataset.

Table 12 Descriptive statistics of potential indicators available in KIHS 2018

Variable	Mean of quintiles 1-4	Mean of top quintile
Real estate ownership		
Owns at least two dwellings (any type)	1.8%	1.6%
Owns at least two apartments	0.8%	0.6%
Owns dwelling built before 1991	41.8%	41.9%
Owns dwelling built after 2010	11.1%	11.3%
Number of rooms available	3.8	3.5
Living space (total sqm)	66.1	59.6
Living space (per capita sqm)	13.3	21.4
Vehicle ownership		
Quantity of cars owned	0.3	0.4
Price of most recent car (KGS)*	46,330	75,678
Quantity of trucks owned	0.0	0.0
Price of most recent truck (KGS)*	8,583	8,359
Land and agricultural assets ownership		
Owns land	81.4%	71.3%
Total size of land owned (sqm)	7,572	6,029
Total number of cattle	0.6	0.7
Horses	0.1	0.2
Sheep and goats	3.2	3.0
Animals for agricultural use (e.g. ploughing)	0.0	0.1
Quantity of large agricultural equipment	0.0	0.0
Educational attainment		
At least one household member completed higher education	31.4%	38.4%
Household head completed higher education	14.6%	25.7%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume. *Only for the sub-set of observations with reported values.

Proxy affluence-test

The calibration of the PAT relies on easily observable household characteristics that fulfill our criteria and are correlated with household well-being. Relying on household survey data from the 2018 round of the KIHS, a regression analysis is run in which the relationship between per capita household consumption per capita and the potential indicators is estimated. Through an iterative process (STATA's stepwise regression function), only those indicators are left in the final regression model which are statistically significant predictors of monetary well-being at the 10% level. The regression coefficients are

then used to predict household consumption. Since association between monetary well-being and certain household characteristics may be different for rural and urban areas, the models are estimated separately for those living in rural and urban settings. Further, two additional models look at the relationship between consumption and the proposed indicators in only the wealthiest 40% of the population. The regression coefficients of the association between the logarithmic form of per capita consumption¹² (before transfers) and the independent variables are summarized in Table 13.

Table 13 Regression coefficients of OLS regression models

Variable	Rural – total population	Urban – total population	Rural – top 40%	Urban – top 40%
<i>Dependent variable = log of per capita consumption before MBPF transfer</i>				
Household size	-0.034 [0.004]	-0.071 [0.004]	-0.033 [0.0037]	-0.056 [0.005]
Number of children	-0.059 [0.0037]	-0.055 [0.0039]		-0.018 [0.0051]
Number of rooms owned	0.02 [0.0033]	0.01 [0.003]	0.018 [0.0038]	
Total living space owned	-0.003 [0.0002]	-0.003 [0.0002]	-0.003 [0.0003]	-0.003 [0.0003]
Per capita living space	0.013 [0.0007]	0.013 [0.0006]	0.009 [0.0006]	0.008 [0.0006]
Owns dwelling built before 1991	-0.059 [0.007]	0.012 [0.0074]	-0.027 [0.0074]	0.032 [0.0084]
Owns dwelling built after 2010	-0.063 [0.0121]	0.085 [0.0089]	-0.063 [0.0134]	0.041 [0.0096]
Owns at least two dwellings	0.126 [0.0489]	0.079 [0.0268]		
Owns at least two apartments	-0.085 [0.0489]	0.266 [0.0582]	0.089 [0.0353]	0.132 [0.0475]
Quantity of cars owned		0.234 [0.0336]	-0.101 [0.0293]	
Price of most recent car (KGS)	0.000 [0.0000]	0.000 [0.0000]	0.000 [0.0000]	0.000 [0.0000]
Year of issue of most recent car	0.000 [0.0000]	0.000 [0.0000]	0.000 [0.0000]	0.000 [0.0000]
Quantity of trucks owned		-12.965 [6.3659]		
Price of most recent truck (KGS)	0.000 [0.0000]			
Year of issue of most recent truck		0.010 [0.0032]		
Household owns land	0.031 [0.0112]		-0.042 [0.0154]	
Total size of land owned (sqm)	0.000 [0.0000]	0.000 [0.0000]		
Quantity of large agricultural equipment			0.056 [0.0111]	

12 An alternative model was estimated in which the dependent variable is the logarithm of per capita income (results in the Annex). The model with consumption as the dependent variable is preferred because consumption is deemed a more robust estimator of well-being. Moreover, the model presented in Table 13 produces a better fit than the alternative.

Animals for agricultural use (e.g. ploughing)	-0.032 [0.0174]			
Sheep and goats	-0.001 [0.0003]			
Horses	0.007 [0.0034]			
Total number of cattle	0.024 [0.0022]		0.009 [0.0018]	
Donkeys	-0.076 [0.0329]		-0.089 [0.0373]	
At least one household member completed higher education	0.037 [0.009]	0.041 [0.009]		-0.018 [0.0108]
Household head completed higher education	0.037 [0.013]	0.066 [0.01]	0.057 [0.0104]	0.059 [0.0113]
Constant	10.815 [0.0211]	11.057 [0.0145]	11.149 [0.0215]	11.289 [0.0163]
N	9090	10176	3348	4499
R2	0.394	0.487	0.309	0.382

Source: authors' calculations based on KIHS 2018 data. Dependent variable: natural logarithm of per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume. Top 40% refers to the top 40% of individuals based on consumption.

The analysis indicates that the number of rooms is positively associated with per capita consumption in all models except for urban households in the top 40%. Average living space per household member is positively associated with per capita consumption. The number of animals matters in rural areas, but their association with consumption is mixed: horses, for example, show a positive, but sheep, donkeys and animals for agricultural use show a negative coefficient. The level of education (either of the household head or at least one household member) matters in both urban and rural areas. The completion of higher education results in higher consumption levels. Ownership of multiple dwellings is significant and positively associated with consumption, however, the coefficient of owning at least two apartments is

negative for rural households. If only the richest 40% is used for the analysis, many variables lose their significance. The models also indicate that different indicators are positively associated with higher consumption levels in urban and rural areas. For example, owning an old or a new dwelling (built before 1991 or after 2010) is negatively associated with consumption in rural, and positively in urban areas.

Following the regression analysis, the statistical software performs a "backwards estimation", in which it predicts per capita consumption as the function of household characteristics and the coefficients associated with them. Because the variation in household consumption was not perfectly explained by the selected indicators, the prediction will not be perfectly accurate either.

Table 14 Performance of PAT-models in identifying the affluent population

	Bottom 80%	Top 20%
Model 1 (total population in households with children)		
Not identified as affluent	95.6%	66.5%
Identified as affluent	4.4%	33.5%
Model 2 (only top 40% in households with children)		
Not identified as affluent	94.1%	63.9%
Identified as affluent	5.9%	36.1%

Source: authors' calculations based on KIHS 2018 data. Figures are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Since trade-offs between exclusion and inclusion errors are inevitable, policymakers must decide which type of error they tolerate more. We assume that the main objective of the targeting reform is to reduce the exclusion of the poor, even if this means that some of the benefits will be captured by those who are better off than the target population. In terms of reducing exclusion errors, the PAT-model performs very well, falsely identifying only 4.4% of the eligible households with children as affluent (Table 14). However, if one looks at the identification of the top 20%,

the PAT has only a 33.5% success rate. Using only the top 40% of the population for the estimation of the coefficients increases exclusion and decreases inclusion errors. Tables 14 to 16 present the share of each pre-transfer quintile identified as affluent with the PAT, broken down by age group. Although the share of infants in the lower quintiles falsely identified as affluent is expected to be higher than for the total population (living in a household with children), it would still remain low.

Table 15 Share of each quintile identified as affluent with a PAT, total population in households with children

	Bottom 20%	II	III	IV	Top 20%	Total
Not identified as affluent	99.6%	97.7%	96.4%	87.4%	66.5%	92.2%
Identified as affluent	0.4%	2.3%	3.6%	12.6%	33.5%	7.8%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 16 Share of each quintile identified as affluent with a PAT, children under 16 years old

	Bottom 20%	II	III	IV	Top 20%	Total
Not identified as affluent	99.7%	97.8%	97.2%	88.5%	63.9%	93.3%
Identified as affluent	3.2%	2.2%	2.8%	11.5%	36.1%	6.7%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 17 Share of each quintile identified as affluent with a PAT, infants

	Bottom 20%	II	III	IV	Top 20%	Total
Not identified as affluent	98.1%	97.2%	96.9%	85.3%	69.9%	93.3%
Identified as affluent	1.9%	2.8%	3.1%	14.7%	30.1%	6.7%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Affluence filters

One of the criteria set out prior to the calibration of the PAT was for the selection process to be simple, clear and transparent. While the PAT is based on a defined set of indicators, its calculation may be difficult to explain to the public, inducing a sense of arbitrariness and lack of transparency among applicants. A technically easier and potentially politically more acceptable approach could be to replace the complex calculation by a few easy-to-observe filters to identify the wealthy. This is what the "affluence-filters" aim to achieve.

Based on the descriptive statistics summarized in Table 12, we select a few potential filters that are statistically more prevalent among the most affluent 20% compared to the rest of the population, and characterize a high enough proportion of the wealthy to identify a substantial

share of them. These are per capita living space in the house or apartment and completed higher education in the household. Further, we add an income filter to be used in combination with the two others.

Income filter

Targeting benefits through an income-test is undoubtedly difficult in the Kyrgyz context. However, if the primary concern are exclusion errors, and the objective of affluence-testing is to increase public support for the program rather than to save costs, some leakage in implementation to the top quintile may be tolerated. As such, an income-test could be linked to self-reported (unverified) income¹³. The question remains where to draw the threshold – what normative standard best reflects a household being well off?

Table 18 Distribution of the population earning above the Subsistence Minimum, by quintiles of per capita consumption¹³

	Bottom 20%	II	III	IV	Top 20%	Total
Total population (households with children)						
Income below SM	93.0%	87.8%	66.7%	54.6%	30.4%	66.5%
Income over SM	7.0%	12.2%	33.3%	45.4%	69.6%	33.5%
Children under 16						
Income below SM	94.0%	90.6%	72.9%	60.0%	44.8%	77.1%
Income over SM	6.1%	9.4%	27.1%	40.0%	57.2%	22.9%

Source: authors' calculations based on KIHS 2018 data. Figures are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

¹³ For the analysis, per capita total annual income was used (Section 8 in Form 5 of the Kyrgyz Integrated Household Survey). This includes income from: wage work, self-employment, occasional work, work outside of the Kyrgyz Republic, scholarships, alimony, contributory and non-contributory social benefits (except for the MBPF), income from the lease or sale of real estate or land, income from dividends, transfers from relatives or friends (including remittances from abroad), proceeds, and other income.

Clearly, both the GMI and the poverty line are too strict if the goal is to exclude the wealthy and only the wealthy. The subsistence minimum is a good candidate because it is a normative standard reflecting a good standard of living, and it is also the highest of the different standards of the Kyrgyz Republic. One third (33.5%) of the total population lives in a household where per capita income falls above this threshold. Categorizing the population by their levels of consumption, it is visible that the share of those earning above the living wage progressively grows towards the higher consumption quintiles (Table 18). While only 7% of the poorest 20% (based on consumption) reported earning an income over the subsistence minimum, the corresponding share for the highest quintile is nearly 70%. Limiting the analysis only to children under the age of 16 reveals that 23% of them would be identified as living in an affluent household with the subsistence minimum as a threshold. Based on the principles of minimizing exclusion errors, especially among the worst-off children, and increasing political support by excluding the affluent, the subsistence minimum seems to be a reasonable threshold.

Per capita living space in own dwelling

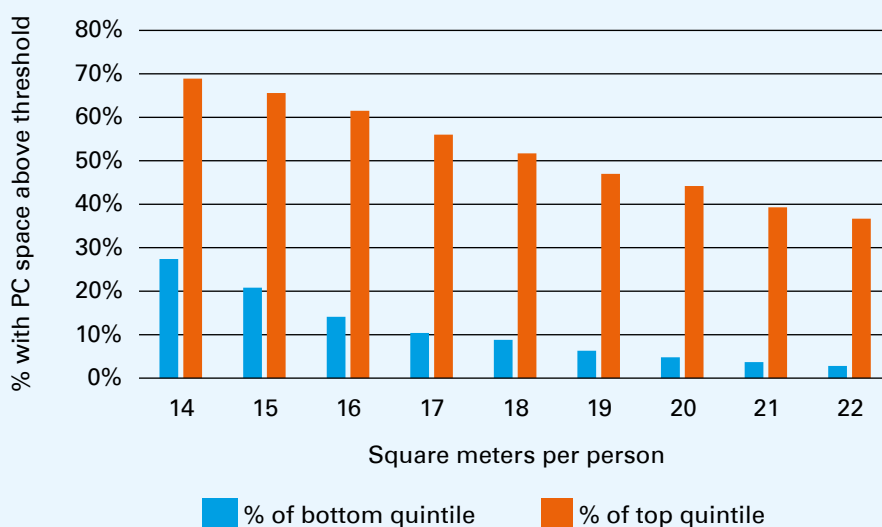
Asset ownership (including real estate, vehicles and land) is an easily observable household

characteristic that can be expected to correlate with wealth. In theory, assets could be ideal filters as such property is likely to be registered in some administrative system. This information could be requested by social staff to determine eligibility. An analysis of the KHS data, however, reveals that ownership of vehicles and land is relatively uniform across different segments of the population and cannot be used to identify the better off. Regarding real estate ownership, several variables have been tested as potential filters:

- Self-assessed price if dwelling was to be sold;¹⁴
- Age of dwelling;
- Size of dwelling (total living space and living space per household member);
- Ownership of multiple dwellings.

Out of these, self-assessed selling price showed no clear relationship with household consumption, and old and new dwellings were both common among all levels of the wealth distribution. The share of affluent households that reported having two or more dwellings was lower than the population mean. However, living space per household member (which controls for wealthier households tending to be smaller) emerged as a meaningful filter.

Figure 13 Share of bottom and top quintile with living space exceeding different thresholds



Source: authors' calculations based on KHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

¹⁴ The survey question is asked as: "If you were to sell this dwelling, how much would you ask for it?"

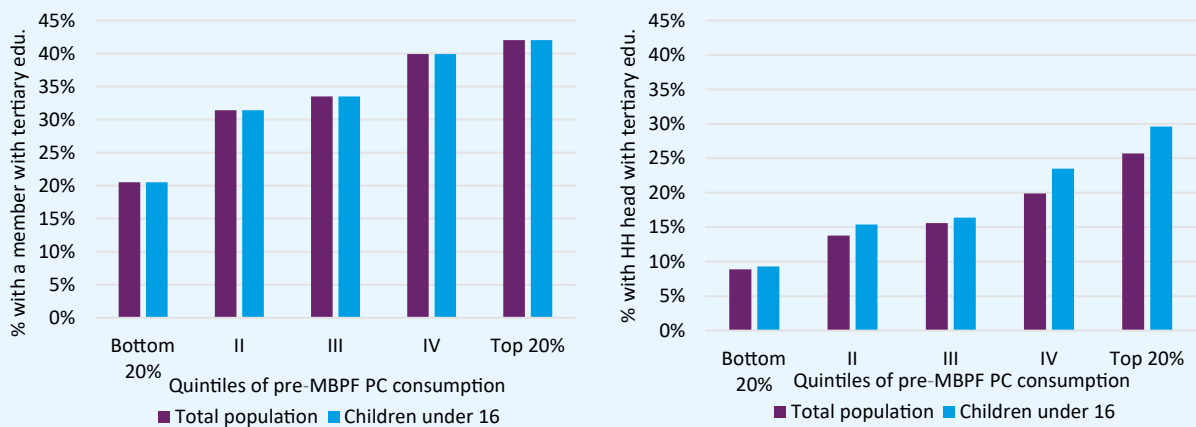
Finding the appropriate threshold for a living space filter comes with the familiar trade-off of exclusion and inclusion errors. In other words, the lower the threshold, the more of the affluent are correctly identified, but more of the poor are also falsely filtered out. Conversely, with a higher threshold, less of the poor are falsely identified as affluent, but also fewer of the better off are filtered out correctly. The accuracy of the filter is rather sensitive to the selected cut-off point (Figure 13), and there is no threshold that performs substantially better than the others in terms of balancing exclusion and inclusion errors. For the rest of this exercise, a cut-off of 18 square meters is used, because the share of individuals above it is modest in the lower quintiles, but it still filters out over 55% of the richest 20%. Moreover, an average living space of 18 square

meters per person is also included in the National Development Plan and is used as an indicator in the multidimensional poverty index.

Higher education in the household

Educational attainment is related to household well-being in various ways. Monetary well-being has (at least) a two-way connection to schooling. First, wealthier households are able to invest more in their children's education. Second, individuals with higher education are in a better position on the labor market and are typically able to secure jobs with higher wages. Citizens' school attainment can also be easily checked if these records are stored in a central database, for instance at the Ministry of Education.

Figure 14 Share of the population living in a household with a highly educated household member or head



Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

According to the KIHS 2018, 33% of individuals live in a household where at least somebody has higher education. The rate of higher education in households is heavily skewed towards higher income groups, reaching slightly over 40 among the richest 20% of the population. Considering only the education level of the household head, we find that 19.8% of the total population live in a household with a head with tertiary education. The first option (any household member) is

preferred as it better reflects that younger generations are more likely to attain tertiary education.

Combining filters

While each filter performs reasonably in identifying the wealthy, none of them is accurate enough to be used as a sole indicator. Hence, different combinations of the three filters are tested:

- a) all three indicators combined;
- b) the income filter and the living space or the education filter;
- c) one out of the three filters (income or living space or education).

As the combinations vary in strictness, they result in different balances of exclusion and

inclusion errors. It is clear that no combination of filters works perfectly in singling out the most of affluent: whenever inclusion errors are the lowest, exclusion errors also increase. The trade-off is similar to that of targeting approaches trying to identify the poorest. Table 19 and Table 20 show the performance of the different combinations in correctly identifying the affluent for the total population and children.

Table 19 Share of each quintile identified as affluent under different filter combinations, total population

	Bottom 20%	II	III	IV	Top 20%	Total
Option A: all indicators						
Not identified as affluent	99.2%	99.5%	98.8%	97.8%	91.3%	98.0%
Identified as affluent	0.8%	0.5%	1.2%	2.2%	8.6%	2.0%
Option B: at least two indicators						
Not identified as affluent	96.5%	93.5%	86.3%	78.2%	60.4%	85.7%
Identified as affluent	3.5%	6.5%	13.7%	21.8%	39.6%	14.3%
Option C: any indicator						
Not identified as affluent	69.3%	51.8%	39.6%	25.4%	14.1%	43.7%
Identified as affluent	30.7%	48.2%	60.4%	74.6%	85.9%	56.3%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 20 Share of each quintile identified as affluent under different filter combinations, children under 16 years old

	Bottom 20%	II	III	IV	Top 20%	Total
Option A: all indicators						
Not identified as affluent	99.5%	99.6%	98.9%	98.3%	91.0%	98.3%
Identified as affluent	0.5%	0.4%	1.1%	1.7%	9.0%	1.7%
Option B: at least two indicators						
Not identified as affluent	97.4%	94.4%	87.9%	80.0%	62.9%	87.9%
Identified as affluent	2.6%	5.6%	12.1%	20.0%	37.1%	12.1%
Option C: any indicator						
Not identified as affluent	69.9%	54.2%	41.4%	27.4%	16.0%	46.8%
Identified as affluent	30.1%	45.8%	58.6%	72.6%	84.0%	53.2%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 21 Share of each quintile identified as affluent under different filter combinations, infants

	Bottom 20%	II	III	IV	Top 20%	Total
Option A: all indicators						
Not identified as affluent	98.6%	99.2%	99.5%	96.3%	90.5%	98.0%
Identified as affluent	1.3%	0.8%	0.5%	3.7%	9.5%	2.0%
Option B: at least two indicators						
Not identified as affluent	96.9%	97.9%	91.9%	79.9%	53.9%	90.1%
Identified as affluent	3.1%	2.1%	8.1%	20.1%	46.1%	9.9%
Option C: any indicator						
Not identified as affluent	64.1%	58.0%	40.8%	24.5%	4.6%	46.6%
Identified as affluent	35.9%	42.0%	59.2%	75.5%	95.4%	53.4%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

While a less strict approach, as combination A, performs very well in minimizing exclusion of the lower quintiles, it also seems unable to identify the wealthy. Those above the threshold for all three filters are mostly concentrated in the most affluent quintile, but even among them only 8.6% would be successfully identified. The opposite is true for combination C, the strictest approach. It is accurate in selecting the affluent (correctly identifying 85.6% of the top quintile

living in households with children), but this would come at the cost of falsely classifying 30.7% of the poorest as affluent. The most balanced is combination B, which currently identifies more than 60% of the top quintile while excluding 3.5% of the poorest 20%. If only children or only infants are considered (as in Table 20 and Table 21), the results are very similar, and Option B is the most balanced in terms of exclusion and inclusion errors.

Table 22 Performance of filters in identifying the affluent population (households with children): Option B

	Bottom 80%	Top 20%
Not identified as affluent	89.1%	60.4%
Identified as affluent	10.9%	39.6%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 22 summarizes the performance of Option B, the most balanced combination, in filtering the affluent. It would bring about a modest exclusion of households with children who are not in the affluent quintile, it would identify only 39.6% of the top 20%. This reflects the trade-off between inclusion and exclusion errors once again.

Comparative accuracy of the PAT and the filter-approach

The previous section analyzed options for an affluence-test as envisioned in the draft law submitted by the Members of Parliament. The main take-away is that identifying the most affluent has similar trade-offs as targeting the poor, but that such an approach could be a successful to better balance exclusion and inclusion errors in the context of Kyrgyzstan.

Table 23 Summarized targeting performance of a PAT versus a combination of filters

	PAT		Filter (Option B)	
	Total population (households with children)	Infants	Total population (households with children)	Infants
Top 20% successfully identified	34.7%	34.0%	39.6%	46.1%
Bottom 80% wrongfully classified as affluent	5.4%	5.2%	10.9%	7.3%
Bottom 20% wrongfully classified as affluent	1.1%	1.8%	3.5%	3.1%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Comparing the best performing PAT-model with the best performing combination of filters, we find that both approaches can be modestly successful in identifying the top 20% of the population and would exclude a low share of poor infants (Table 23). The expected outcomes under perfect implementation would be similar. The decision between a PAT and filters is not obvious, and will have to be made based on whether exclusion or inclusion errors are considered the larger problem and which option is more likely to be successfully implemented in the Kyrgyz Republic.

In principle, exclusion errors are more harmful to the objectives of a child benefit since excluded children are deprived from this support to their well-being and development. Inclusion errors on the other hand are a less efficient use of resources and potentially jeopardizing the political and societal support for the program. Using filters would identify almost half of infants living in the top 20% being eligible for the child grant, but it would also contain the risk of more poor children not receiving support. The PAT would exclude a lower share of the wealthy, causing a higher inclusion error, but would exclude less of the non-affluent infants.

Other important criteria for the targeting method are clarity and ease of implementation. A simple formula reduces the burden on applicants and staff alike and increases transparency and public understanding of the selection criteria. Filters suit these requirements better than a PAT, because they are easy to communicate and understand, and can be easily checked. Although the expected outcome of the PAT

would be slightly more equitable (assuming perfect implementation), it would require a long list of household assets to be verified (e.g. value of car, number of cattle etc.) and home visits to be conducted for each applicant. This would also make it more challenging for the targeting method to respond to transient changes in a household's economic situation. Moreover, the MBPF (allegedly) has a history of downward pressure on the number of beneficiaries. A less transparent and complex targeting method such as the PAT could increase public perceptions of corruption or manipulation in the process. In conclusion, using a combination of filters seems to be the more effective, acceptable and feasible way to carry out the affluence-testing envisaged by the Members of Parliament (even if the overall program costs would be higher than with a PAT due to higher leakage).

Distributional impacts of policy options

This section simulates the alternative scenarios using data from the KIHS 2018. This exercise allows the estimation of the distributional outcomes of the policy options if they would have been rolled out in 2018. Table 24 summarizes the four scenarios.

Targeting is never perfect. This is supported by empirical evidence on the MBPF. Hence, targeting errors and take-up rates are important methodological decisions to be made in such a simulation exercise. Estimating targeting errors ex-ante may be a difficult task. The KIHS allows estimating the coverage and distribution of MBPF transfers at different levels of incomes. Since the MLSD's proposal (P1) would keep

the current method of targeting, but raise the threshold for eligibility, observed targeting errors from the KIHS 2018 can give guidance on what to expect. For the purpose of this exercise, we assume that exclusion and inclusion errors would occur at the same frequency under the draft law as they do under the MBPF. The MBPF had a 74% success rate of covering the extreme poor (bottom 5% of the consumption

distribution), and an inclusion of 11% of the not extremely poor (those in higher percentiles). In this simulation model, the rate of exclusion and inclusion errors are mirrored so that the MLSD's infant benefit would reach 74% of the poor and 11% of the non-poor. For older children, coverage of the MBPF is assumed not to change, because the proposed policy does not envision changing the mode of targeting for them.

Table 24 Overview of simulated targeting options

	P1 (MLSD's Draft Law)	P2 (MPs' Draft Law)	P3 (benchmark 1)	P4 (benchmark 2)
Target population (infants below 18 months old)	Infants in households with per capita income below the poverty line	Infants in households belonging to the bottom 80% of the income distribution	All infants	All infants
Target population (18 months up to and including 15 years)	Children in households with per capita income below the GMI	Children in households with per capita income below the GMI	Children in households with per capita income below the GMI	All children
Targeting method	Means-test	Affluence-test using filters for infants, means-test for others	Categorical for all infants, means-test for others	Categorical for all children
Benefit value per child	810 KGS			

Source: Stakeholder meetings held in Bishkek in September 2019 (P1 and P2) and authors' own elaboration (P3 and P4).

For the MP's proposal, we simulate targeting errors by design and targeting errors that occur by implementation. Targeting errors by design are rather straightforward: we assign the benefits to those who are not affluent based on the affluence filters constructed above. For children over the age of 18 months, coverage of the MBPF is assumed to remain unchanged. Implementation errors have to be taken into account for P2, P3 and P4, in which we assume that take-up is not universal since not all eligible people would claim their benefits. Take-up rate is differentiated between quintiles of consumption. We assume that most (90%) of the eligible population in the poorest 20% would claim the transfer, because the marginal utility of these transfers to household consumption would be

highest for them. We assume that only 50% of the top quintile would claim transfers, because the 810 KGS per month would have little value for them. For quintiles 2, 3 and 4 we assign a take-up rate of 80%, 70% and 60%, respectively.

Based on estimates using the data from 2018, all of the simulated policy scenarios would reach a higher coverage of Kyrgyz children compared to the current situation (Table 25). The coverage in the bottom quintile would also increase (reducing exclusion of poor children). However, this would come at the cost of higher inclusion errors in the top of the income distribution. Even with an imperfect affluence-test and limited take-up, P2 (the MP's proposal) would cover more poor children of all ages than P1 (the MLSD's

proposal), which would simply increase the eligibility threshold for infants. Overall, the data confirms the trade-off between the two types of targeting errors: in scenarios with a higher coverage of the poorest quintile, the coverage of the richest quintile is higher as well.

The distribution of benefits for the different policy scenarios is presented in Table 26. A policy option is usually labeled as being pro-poor if it the distribution of transfers is concentrated at the lower segments of the welfare distribution. However, the pro-poor allocation of resources only signals that the poor benefit proportionally more than the wealthy. A pro-poor or progressive benefit distribution itself does not imply that a larger share of the poor is covered than under

other scenarios. In terms of limiting transfers to the poor, the current MBPF performs relatively well. This is a result of the narrow and strict targeting criteria which is focused on reducing inclusion errors rather than minimizing exclusion. Except for option P4, where all children up to the age of 16 would receive a transfer, the simulated policy alternatives would allocate approximately an equal share to the poorest 20%, but with a slight reduction of the share of benefits captured by the top quintile. Only P4 would lead to a more equal distribution of benefits across quintiles of consumption, but even there one third of transfers would be captured by the poorest 20% because more children live in these households (and because we assume a higher take-up rate among them).

Table 25 Coverage of children under different policy scenarios

All children under 16						
	Bottom 20%	II	III	IV	Top 20%	Total
Status quo	22.0%	16.5%	6.3%	4.0%	2.1%	12.0%
P1 (MLSD)	36.9%	21.9%	9.0%	6.8%	4.4%	18.6%
P2 (MP)	38.9%	34.2%	17.6%	10.6%	3.7%	24.4%
P3	39.3%	32.8%	18.4%	15.6%	4.1%	25.3%
P4	98.5%	96.9%	94.3%	82.8%	71.4%	91.5%
Infants up to 18 months						
	Bottom 20%	II	III	IV	Top 20%	Total
Status quo	20.3%	7.8%	4.9%	3.5%	0%	9.3%
P1 (MLSD)	82.7%	34.5%	19.6%	22.3%	25.1%	42.9%
P2 (MP)	89.6%	82.4%	66.9%	40.7%	14.3%	69.0%
P3	93.8%	82.0%	76.3%	64.4%	22.9%	77.0%
P4	99.4%	98.9%	92.7%	78.0%	78.5%	92.4%
Children between 1.5 to 16 years						
	Bottom 20%	II	III	IV	Top 20%	Total
Status quo	22.1%	17.3%	6.5%	4.1%	2.2%	12.2%
P1 (MLSD)	32.6%	20.7%	8.3%	5.4%	3.3%	16.5%
P2 (MP)	34.0%	29.7%	14.0%	7.9%	3.2%	20.7%
P3	34.1%	28.2%	14.2%	11.1%	3.1%	20.9%
P4	98.4%	96.7%	94.4%	83.3%	71.1%	91.4%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Table 26 Distribution of benefits under different policy scenarios

	Bottom 20%	II	III	IV	Top 20%	Total
Status quo	47.1%	35.6%	10.1%	4.3%	2.9%	100%
P1 (MLSD)	51.4%	30.4%	10.2%	5.9%	2.0%	100%
P2 (MP)	48.3%	31.7%	11.7%	6.5%	1.8%	100%
P3	48.1%	31.4%	11.7%	7.0%	1.9%	100%
P4	33.1%	26.4%	20.1%	12.9%	6.9%	100%

Source: authors' calculations based on KIHS 2018 data. Quintiles are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Finally, the effectiveness of alternative approaches to targeting can be assessed by individual-level distributional outcomes. If one assumes that the target population of child benefits is children, and the primary objective is to support the wellbeing of children and prevent them from growing up in poverty thereby promoting both human rights and the households' ability to invest in their children's human capital, thereby reducing the likelihood that children from poor families will become poor adults, child poverty reduction is a good indicator of ex-ante effectiveness. This is summarized in Table 27.

The poverty reduction effectiveness of the MBPF is rather modest. The first three alternatives (P1, P2 and P3) would perform slightly better than the current MBPF, but the low benefit value would still limit their effectiveness in tackling child poverty. The sharpest reduction would be achieved by providing the benefit to all children as simulated in Option P4. Overall, efforts to limit inclusion errors also limit the poverty reduction effectiveness of the program driven by exclusion errors.

Table 27 Child (<16) and infant poverty reduction effect under different policy scenarios

	Children <16				Infants			
	Headcount	Change	Gap	Change	Headcount	Change	Gap	Change
Pre-transfer	30.3%	---	5.3%	---	34.5%	---	5.6%	---
Status quo	29.1%	4.0%	5.0%	5.9%	34.0%	1.5%	5.2%	0.8%
P1 (MLSD)	28.8%	4.9%	4.9%	7.0%	32.6%	5.5%	4.9%	7.0%
P2 (MP)	28.8%	4.9%	4.9%	7.2%	32.6%	5.6%	4.8%	8.9%
P3	28.8%	5.0%	4.9%	7.2%	31.9%	7.4%	4.8%	9.1%
P4	25.7%	15.3%	4.0%	23.6%	28.4%	17.6%	4.3%	19.0%

Source: authors' calculations based on KIHS 2018 data. Figures are based on per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume out of benefits.

Fiscal space for social assistance has traditionally been an issue in the country since its independence. Given the scarce resources directed at the MBPF throughout its history, it is a reasonable assumption that political support for the program is limited (see also the next chapter). Costs and cost-efficiency therefore

need to be considered when evaluating various options for targeting. Yet, they should not be the decisive measure if protecting the wellbeing of children is to be taken seriously. Table 28 presents the costs and number of eligible children for each alternative, extrapolated from the KIHS 2018 after assigning transfers according

to the design parameters of simulated programs. The higher the number of eligible children, the higher the overall cost of the program. The two draft laws, P1 and P2, are estimated to cost 0.54% and 0.64% of GDP in 2018. The Ministry's law (P1) would be more cost-efficient than affluence-testing (P2) despite being slightly

less effective in poverty reduction. Opting for universal coverage of infants (P3) would only cost marginally more than an affluence-test. A categorical child grant for all children under the age of 16 would be expensive both in the share of GDP and in the unit cost of reducing the child poverty gap by 1%.

Table 28 Costs of the two draft laws

	Number of beneficiary children	Cost in KGS millions¹⁵	Cost as % of 2018 GDP (without admin. costs)	Cost of 1% poverty gap reduction (KGS millions)
Status quo	273,458 ¹⁶	2,658.0	0.47%	402.73
P1 MLSD	314,997	3,061.8	0.54%	444.72
P2 MP	372,184	3,617.6	0.64%	502.45
P3	383,074	3,723.5	0.65%	517.15
P4	1,681,416	16,343.36	2.85%	692.52

Source: authors' calculations based on KIHS 2018 data. Nominal GDP in 2018 was 569,385.6 million KGS according to NSC: <http://www.stat.kg>.

¹⁵ Number of beneficiary children x KGS 810 x 12.

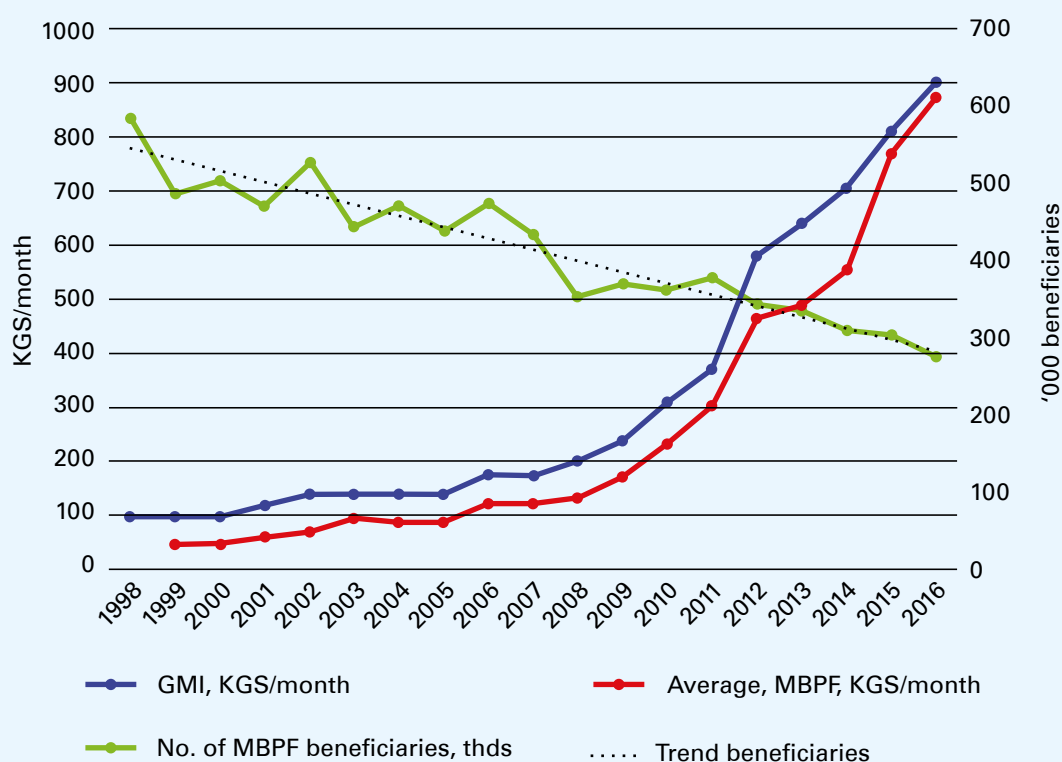
¹⁶ Extrapolated from KIHS 2018. Numbers might not match administrative data.

6. The political and practical feasibility of targeting options

The previous chapters have evaluated the targeting performance and poverty reduction impact of the MBPF (as captured by data from the KIHS 2018) and of simulated alternatives. The demographic and poverty profile of the country, as well as the political will to allocated financial resources to child benefits will determine which option is most feasible. Yet, stakeholder perceptions of the role of social assistance, and their willingness to pay for redistribution are unclear in Kyrgyzstan. There is a need to understand the political economy of targeting the MBPF to know what shapes the acceptability and political feasibility of the reform proposals.

On paper, both policy proposals brought forward would allow more households with children to opt into the program by raising the eligibility threshold. In reality, however, raising the thresholds while maintaining the same approach to assessing family income might not lead to the expected outcome. Twenty years of experience with the MBPF has shown that the social protection system of the Kyrgyz Republic is impaired by economic, technical and financial barriers, which challenge the accurate identification and effective coverage of the poor. Moreover, experience has shown that an increase of the eligibility threshold, the GMI, in the past rarely led to more recipients (Figure 15).

Figure 15 Trends in the GMI, average benefit amounts and number of beneficiaries



Source: Gassmann and Timar (2018)

Given their importance in the policy process, eliciting the preferences of policymakers is a critical step in mapping the political environment. It can lead to more transparent decision-making

processes (Obse et al., 2016) and support evidence-based policy formulation (Mirelman et al., 2012). Further, preference-based techniques can strengthen advocacy for inclusive child

benefits, as they generate information needed to increase the acceptability of policy proposals by decision-makers.

To understand preferences and the political economy of child benefits in the Kyrgyz Republic, qualitative data has been collected in two rounds. During the Inception Mission in September 2018, field visits have been conducted to two Departments of Social Development in Bishkek city and Chui oblast, where unstructured interviews have been conducted with the local specialists. Between December 2018 and January 2019, Key Informant Interviews have been implemented with a range of stakeholders from national and international agencies involved in the social protection of the population.¹⁷ Questions were organized into four thematic areas: (1) perceptions about the poor; (2) preferences for redistribution; (3) the objective and performance of current child benefits; (4) and past and future reform to the MBPF. Respondents were asked to share their personal views rather than those of their institutions.

Poverty and the Government's role in providing support

In the first thematic area, respondents were asked about their views on poverty and its causes in Kyrgyzstan. According to participants, poverty is on the one hand inadequate resources to meet all basic needs; on the one hand, it is also intertwined with barriers to access essential services such as education, healthcare and social services. Most respondents highlighted the country's economic context as the decisive driver behind poverty: the overall lack of jobs, the size of the shade economy and precarious work, and internal and external labor migration. Some respondents also mentioned household-level factors that trap people into poverty, such as illness, disability, alcoholism or negative attitudes towards work.

When asked about helping people to improve their situation, facilitating access to education, healthcare, social services and active labor market interventions were repeatedly cited alongside monetary social benefits. The importance of access to quality education and care, and personal social services (e.g. day care)

were pressed when asked about the needs of children. Regarding the responsibility to provide protection, most responses echoed the principle of subsidiarity: first, families should help themselves; second, local governments (ail okmotus) should step in; and if those mechanisms fail to make a change, state support systems should kick in. In general, all of those who need help should be able to access it, but whenever possible, active rather than passive measures should be provided. Respondents saw the role of the national Government in creating an enabling environment for inclusive economic development, strengthening basic services and providing monetary support for those who truly need it (for instance children or people with disabilities).

The objective and performance of child benefits in the Kyrgyz Republic

According to respondents, the objective of the MBPF is to support children in meeting their basic needs (nutrition, clothing, schooling etc.), to protect their well-being and to contribute to having an equal opportunity to develop even if they have been born to a poor family. Regarding the Birth Grant, various objectives were cited: demographic goals (to increase fertility); a contribution to the costs of having a newborn child; providing an equal start at life for all children. One respondent said that the ultimate purpose of the Birth Grant is to motivate poor households to register the birth of their children, because many children in the poorest families do not have a birth certificate.

All except one respondent agreed that the MBPF is not very effective in protecting children from poverty. The reasons cited behind this relative ineffectiveness were (a) the low value of the transfer; (b) targeting errors; (c) the inadequacy of the GMI as a threshold for eligibility; and (d) the need for broader, systematic solutions such as active labor market policies. The lack of reliable information on incomes was frequently mentioned as major challenge to the MBPF, since it makes it impossible to channel resources to the program's actual target population: extremely poor children. With the size of the informal economy, incomes are not verifiable; and corruption at the local governments poses an

¹⁷ In total, 10 interviews were held with the following stakeholders: 5 with the MLS D, 1 with the Mayor of Bishkek's office, 1 with Ministry of Finance, 1 with UNICEF, 1 with the Social Fund and 1 with the Parliamentary Committee on Social Affairs.

additional threat to implementing the targeting process the way it is envisaged. Nearly all respondents referred to both inclusion errors and exclusion errors. Yet, inclusion of the non-poor was mentioned more frequently as a problem than exclusion errors, with one respondent explicitly saying that excluding those who would by law be eligible is not an existing issue.

Challenges and opportunities to alternative targeting approaches

Respondents were asked to reflect on the feasibility of various options to target child benefits, including political, financial and technical aspects. The challenges and opportunities for the feasibility of these alternatives are summarized in Table 29.¹⁸

Table 29 Challenges and opportunities of targeting options according to KIIs

Option	Challenges	Opportunities
All children under the age of 16	<ul style="list-style-type: none"> Unaffordable 	<ul style="list-style-type: none"> Would eliminate exclusion errors Technically feasible due to simplification
All small children	<ul style="list-style-type: none"> Unaffordable Affordable (as shown in Law of 2017) Lack of public understanding on equity and efficiency issues of poverty-targeting 	<ul style="list-style-type: none"> Affordable (as shown in Law of 2017) Would eliminate exclusion errors There is considerable political and public support Technically feasible due to simplification
Families with three or more children	<ul style="list-style-type: none"> Would increase exclusion of poor children in small households Politically not feasible as existing beneficiaries would have to be removed 	<ul style="list-style-type: none"> These families are likely to be poor Technically feasible due to simplification
Only the poorest children	<ul style="list-style-type: none"> Technically not feasible due to the immeasurability of incomes Risk of corruption 	<ul style="list-style-type: none"> Politically feasible since it is already in place and gained support from Parliament recently Financially feasible since it is in place and budgeted for
All children except for those in the wealthiest households	<ul style="list-style-type: none"> Unaffordable 	<ul style="list-style-type: none"> Politically more feasible alternative to categorical targeting Technically more feasible than selection of the poor

Source: Key Informant Interviews

The first option respondents were asked to reflect on was to provide transfers to all children under the age of 16. While some voiced that in an ideal world, this would be desirable, nobody

saw a realistic chance for such a proposal to be taken seriously. Participants felt that this would be largely unaffordable and would not garner adequate political support.

¹⁸ Interviews reflect the options that were discussed at the time of the interviews. That was before the proposals of MLSD and Members of Parliament that were discussed in the previous chapter.

The second option was to introduce a categorical child benefit to all children under the age of three, which in fact reflects the largest component of the former Law of 2017. Opinions about the affordability of such a grant diverged. Some respondents felt that there would not be adequate financial resources for this. Others said that its affordability has explicitly been proven with the Law of 2017, in accordance with which the budget had already been prepared to cover the increased costs of the categorical child grant. Several respondents mentioned a risk to the public support of such a categorical benefit which they had observed in the debates around the Law of 2017. According to these interviewees, neither the public nor policymakers understood the problems around targeting the MBPF, how a categorical grant could overcome this, and why protecting children in the first 1,000 days of their lives is important. A recurrent example was that politicians themselves would receive transfers as well even though they did not feel the need for it. This would be a risk for any further attempt to introduce a categorical child grant to all children up to the age of 16, but public information campaigns could turn this challenge around. Still, respondents felt that there was and would be considerable public and political support for a categorical child grant up to the age of 3.

As an alternative to broad age-based categorical targeting, and in the spirit of the second regular cash transfer component of the Law of 2017, respondents were presented the option to target only households with at least three children. While it was acknowledged that many poor families have more than three children, none of the respondents felt that this would be a desirable and feasible solution by itself. Financial risks were not brought to forefront with regards to this alternative, but respondents said that it would politically not be feasible. First, it would require many current beneficiaries to be removed from the system; second, it would by design exclude poor children who do not have at least two siblings. Public support for this option would hence be difficult to garner.

Targeting only the poorest of children (as it is done now) was presented as an option to elicit respondents' views about the feasibility of means-testing in the country. Most respondents did not see any financial or political risks to this. In their views, the simple fact that a poverty-

targeted transfer is in place and budgeted for every year is evidence that it is feasible. The core challenges that emerged with regards to means-testing were corruption and the technical difficulties of measuring and verifying incomes. Some felt that transfers should be targeted only to the poor even if there are challenges and if it inherently means inclusion and exclusion errors. Field visits in Bishkek and Chui provided some additional information on the technical challenges of implementing poverty targeting; albeit this is a reflection on means-testing the way it is done now rather than on poverty targeting in general. According to the social workers in the field, not only the verification of incomes, but also the requirements of home visits and checking filters place substantial burden on both applicants and officials, contributing to further errors of exclusion and inclusion.

Finally, to turn around the approach of including only the poorest, an alternative of excluding only the rich was presented to respondents. Since such an option never made it to the policy debate in the Kyrgyz Republic, respondents did not seem to have a strong opinion about it. It was mentioned that this would likely be politically more feasible than the purely categorical options, as it would eliminate the idea of wealthy politicians receiving social assistance. While technically it could have similar challenges as means-testing, one respondent felt that verifying incomes to exclude only the wealthy would be a much easier administrative task and involve less corruption. Respondents could not form a strong position on whether this would be financially feasible.

Past and future reform to child benefits in the country

Under the last thematic area, the interviews contained questions about the reform process over the last years (2017-2018) and about the scope for future reform in the coming five-year period. When asked about what started and drove the process to reform the MBPF, both challenges of targeting the transfer and political considerations were mentioned. As one respondent put it: "It was a mix of good intentions and bad politics" (KII-4). Discussions on reforming the MBPF were initiated by Members of the Parliament, and the proposal gained relatively broad support among policymakers, the public and some of

the Government's international development partners. However, there was at the same time political pressure to make decisions that favor other groups of the population; and a general lack of understanding of the targeting challenges of the MBPF and how categorical targeting could contribute to increased equity. This, coupled with the coming elections, led to a political decision to re-direct the amount budgeted for the categorical child benefit for other purposes.

Respondents were rather divided in their views whether further reform will occur in the

following five years, despite the fact that all felt like there was a need for additional changes. The approaching elections were seen as a window of opportunity for the horizontal expansion of child benefits – assuming that the public and policymakers can be adequately educated on why this is important. Others voiced that some time has to pass to see how the recent amendments will perform, and only after will additional fixes be introduced.

7. Conclusions and policy position

Child poverty is an issue in many countries around the world, and governments have opted for different ways to provide effective monetary support for children. The optimal choice for child benefits depends on context-specific factors, including the objective of the policy, the structure and growth of the economy, demographics of the population, the financial resources of the Government, as well as politics, attitudes towards the poor, perceptions of the role of social protection and societal preferences for redistribution. The MBPF has very limited impacts on child poverty, indicating that its design and implementation is likely suboptimal. If the goal is to protect the well-being of today's children and invest in the productive capacity of Kyrgyzstan's future generations, further investments in child benefits and alternative designs have to be considered. The objective of this report was to inform the policy discussions on what options there are to target child benefits, and what are the risks and opportunities associated with in the context of Kyrgyzstan.

The recent years have seen a turmoil around the MBPF, with fast appraisal and abolishment of a categorical child grant in 2017, followed by a return to the old program with some design tweaks, and finally alternative proposals from the Ministry of Labor and Social Development and a Parliamentary Working Group.

Due to both its narrower design and the inherent shortcomings of verified means-tests in the Kyrgyz Republic, the proposed law of the Ministry of Labor and Social Development would achieve a lower reduction in child poverty than that of the Members of Parliament, but the difference would be marginal. The larger effect of the MPs' law would also come at a larger cost. While the MLSD's poverty targeting would leave an estimated 17% of infants in the poorest quintile of the population uncovered, the MPs' approach would fail to support 10% of the same group. The final decision on which option to choose partially depends on whether policy makers are more inclined to tolerate exclusion or inclusion errors. If the objective of the reformed

package of child benefits is to protect the youngest from deprivation and support their development, exclusion errors are a cause for more concern.

The picture however is more complex: feasibility and political economy considerations should also be included in the decision. Key informants suggested that purely categorical approaches have not been and are unlikely to be successful in Kyrgyzstan, but affluence-testing might neutralize discontent with the wealthy receiving benefits. It could also minimize the social costs and stigma faced by beneficiaries. Poverty-targeting is politically acceptable but stigmatizes beneficiaries and is technically unfeasible due to the difficulty in measuring incomes. This means that attempts at poverty-targeting are likely to exclude the most vulnerable children and hence jeopardize the objective of the program. An important take-away on affluence-testing is that it has similar challenges as poverty-targeting. There is no household characteristic that would uniquely identify the wealthy in Kyrgyzstan.

If the long-term goal is to cover all children in the Kyrgyz Republic, the MPs' proposal seems like an appropriate starting point (but the MLSD's proposal would also be a large step in the right direction). This would keep initial costs manageable while balancing political economy and technical feasibility considerations. It would also cover nearly all poor infants and achieve a sharper reduction in all child poverty indices compared to the status quo and the MLSD's proposal. With time, additional cohorts could be rolled under the affluence-tested scheme, which would likely face less public and political resistance than a sudden switch to a universal child grant. Success in this quest for progressive universalization will require a clear set of policy objectives shared by all stakeholders, including different branches of the government, the Parliament, international and national non-governmental organizations, and the public. Stakeholders should learn from the mistakes around the Law of 2017 and invest in effective communication among each other and with the public.

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Appendix

Regression output with income as dependent variable

Table 30 Coefficients and marginal effects of stepwise regression predicting income

Variable	Rural – total population	Urban – total population
Dependent variable: log of per capita income before MBPF		
Household size	0.022 [0.0104]	0.01 [0.0061]
Number of children	-0.184 [0.0098]	-0.177 [0.006]
Number of rooms owned	0.124 [0.0085]	0.016 [0.0045]
Total living space owned	-0.007 [0.0006]	-0.007 [0.0004]
Per capita living space	0.017 [0.0018]	0.016 [0.001]
Owns at least two dwellings (any type)	0.202 [0.0643]	0.167 [0.0415]
Owns dwelling built before 1991		0.06 [0.0115]
Owns dwelling built after 2010	-0.052 [0.0305]	0.053 [0.0138]
Quantity of cars owned		0.285 [0.0518]
Price of most recent car (KGS)	0.000 [0.0000]	0.000 [0.0000]
Quantity of trucks owned	0.281 [0.0852]	-44.607 [9.839]
Price of most recent truck (KGS)	0.000 [0.0000]	
Year of issue of most recent truck		0.022 [0.0049]
Year of issue of most recent car	0.000 [0.0000]	0.000 [0.0000]
Total number of agricultural equipment	-0.144 [0.0321]	
Total size of land owned (sqm)	0.000 [0.0000]	
Total number of cattle	0.018 [0.0056]	

Sheep and goats	-0.008	
	[0.0008]	
Donkeys	0.192	
	[0.0864]	
At least one household member completed higher education	0.183	0.107
	[0.0237]	[0.0139]
Household head completed higher education	0.114	0.064
	[0.0342]	[0.0154]
Constant	10.59	11.116
	[0.0496]	[0.0224]
N	9090	10176
r2_a	0.227	0.346

Source: authors' calculations based on KIHS 2018 data. Dependent variable: natural logarithm of per capita consumption before MBPF transfers assuming a 33% marginal propensity to consume.

Interview guide for Key Informant Interviews

Introduction

You have been invited to participate in an interview as part of a research and consultancy project that we at Maastricht University are working on together with UNICEF. The project looks at social benefits for children in the Kyrgyz Republic, and the different options there are to target it. As part of this project, we use statistical methods to see how poverty would change under different arrangements for social benefits and we calculate how much these would cost. But numbers by themselves cannot tell us what is feasible in the economic and political context of Kyrgyzstan, which is why we decided to do such interviews.

This interview will take approximately an hour. We are doing these interviews with a range of people from various national and international organizations that are somehow involved in social assistance for children in the country. You were invited because we would like to learn about your personal views and experiences. There are no right and wrong answers, and I would like you to feel free to express your own opinion. Anything you tell us will be anonymous, will be analyzed along with the responses of all other interviewees, and cannot be traced back to you. I would like to emphasize that your participation is voluntary – if you do not wish to answer any of the questions, or would like to stop the interview, you are absolutely free to do so at any time.

Before we begin, do you have any other questions about the interview process?

Part A: Poverty in the Kyrgyz Republic

First, I would like us to discuss about poverty in the country and some of the possible ways of tackling it.

1. In your view, what does it mean to be poor?
2. In your view, is there poverty in the country?
 - If yes → Who are the poor? What groups of the population are poor?*
 - If no: → Jump to Part B.*
3. In your opinion, what are the main reasons that people are poor in Kyrgyzstan these days?
4. What would they need to improve their situation?
5. Who should help the people who live in poverty?
6. How do you see the role of the Government in helping the poor?
7. If the poor is to be supported by the Government, who should receive help? (All of the poor, or specific groups?)

Part B: Child poverty in the Kyrgyz Republic

[Note: SKIP IF RESPONDENT SPECIFICALLY MENTIONED AND DISCUSSED CHILDREN IN PART A]

We have talked about poverty in the country. You have mentioned that [...]. Let us now talk more specifically about the challenges that children face in the Kyrgyz Republic.

8. In your opinion, what are some of the challenges and needs of Kyrgyz children in poor families?
 9. Whose responsibility is it to ensure that their well-being is protected?
 10. How do you see the role of the Government in supporting poor children?
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Part C: Objectives of existing social assistance programs

I would like to ask about your opinion of some of the support the Government currently provides to children. You might be aware that there is a program providing monetary support for children in the country, called the MBPF (Uybulugu komok) and Birth Grant (Suyunchu). Check with respondent: Are you aware of these programs?

11. In your opinion, what is the purpose of the MBPF?
12. In your opinion, what is the purpose of the Birth Grant?

Part D: Performance of the MBPF

Over the last years, there have been several studies assessing the MBPF. These studies say that the MBPF was not very effective in protecting Kyrgyz children from poverty.

13. Do you agree with these findings?

Yes → *Continue with Question 14*

No → *Jump to Question 17*

14. What do you think are the reasons and challenges that can explain these findings?
15. In your opinion, how could some of these reasons and challenges be resolved?

Part E: Options for targeting

Poverty and child poverty is a problem in many countries; and countries have chosen different ways to provide more effective support to poor families with children. I would like to hear your opinion about the feasibility of some of these options within the context of Kyrgyzstan. Please consider the political and economic situation in the country, and the problems with the MBPF you told me about.

16. On a scale from 1 (very unlikely) to 5 (very likely), how feasible do you think these options would be?
 - a. Target all children up to the age of 16?
 - b. Target all children up to the age of 3?
 - c. Target all children who live in a family with three or more children?
 - d. Target only to the poorest children in the country?
 - e. Exclude only the wealthiest households and provide benefits to all other children?

Part F: Reforms

Now I would like to talk about the reforms that have been made to the MBPF recently. To clarify, I am talking about the reforms to the targeting that have been implementing in the summer of 2018.

17. Are you aware of the recent changes to the MBPF?

Yes → *Continue with Question 16*

No → *Jump to Question 11*

18. In your view, what were the reasons to reform the previous design of the MBPF?
-

19. Were there any options for reform discussed other than what has been implemented in the summer of 2018?

Yes → *Continue with Question 18*

No → *Jump to Question 20*

20. How were these options received by different stakeholders? (Probe for: President, MPs, Ministries, Development Partners, international community)

21. What do you personally expect from these reforms?

22. In your opinion, and given the political and economic context in the country, how likely is it that further changes will be made to social assistance for children in the next five years? Please elaborate.

ANNEX 1

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

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 and is based on four economic scenarios developed and simulated by the World Bank. 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%

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

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%

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 be a tool to 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 children	14.0%	16.4%	17.3%	18.6%

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	Scenario B	Scenario C	Scenario 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]

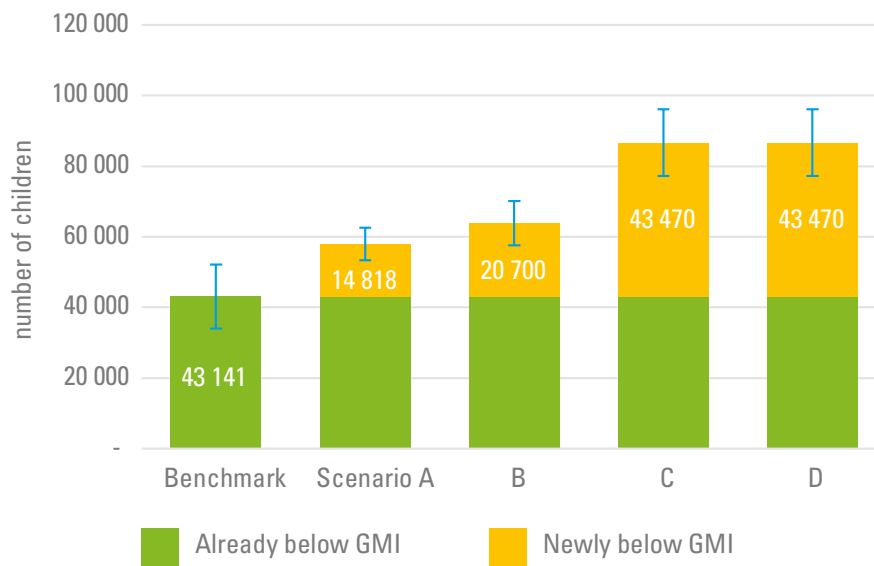
Note: poverty is based on per capita consumption using consumption and income estimates under different economic scenarios simulated by the World Bank. 95% confidence intervals in parentheses.

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 1000¹ per month. 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. It is likely that the crisis around the COVID-19 pandemic will push more families, and especially children, below this threshold (Figure 1 and Figure 2). However, estimates of those living below the GMI should be treated with caution because they are based on low number of observations.

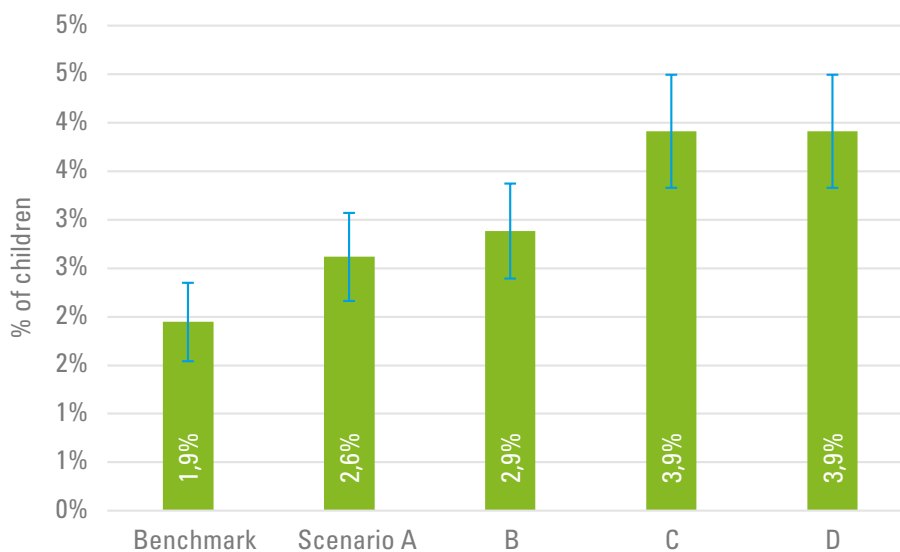
¹ The GMI determining benefit eligibility is set at KGS 1000, but the monthly transfer amount of the UBK is KGS 810.

Figure 1 Number of total and newly GMI-poor children (<16), by economic scenario



Note: GMI-poverty is based on per capita income 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.

Figure 2 Share of children with per capita income below the GMI, by economic scenario



Note: GMI-poverty is based on per capita income 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
Children below poverty line without UBK	529,093 [497,759 – 560,427]	656,367 [690,908]	753,392 [716,560 – 790,223]	901,015 [860,752 – 941,278]	1,006,683 [963,694 – 1,049,672]
Children below GMI without UBK	16,090 [10,313– 21,867]	41,958 [33,016 – 50,900]	43,151 [34,163 – 52,130]	61,329 [50,077 – 72,571]	61,329 [50,077 – 72,571]

Note: poverty is based on per capita consumption, GMI-poverty is based on per capita income, using consumption and income estimates under different economic scenarios simulated by the World Bank. GMI is kept constant at KGS 900 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 GMI 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 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 25% to 29% of children whose income would fall below the GMI would be excluded from the program based on their households' assets (Table 7). The corresponding shares for children who will fall below the poverty line are between 31% and 37%.

Table 7 Share of newly poor children (<16) (not already covered by UBK) not passing asset filters

Reason for not passing filters	Scenario A	Scenario B	Scenario C	Scenario 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-poor children				
Has more than 4 livestock units per member	6.4%	9.1%	14.2%	14.2%
Has agricultural machinery/draught animal	0.0%	0.0%	0.0%	0.0%
Has car, truck, or van	24.7%	24.0%	18.0%	18.0%
Has at least one of the above	24.7%	27.2%	29.4%	29.4%

Note: poverty is based on per capita consumption, GMI-poverty is based on per capita income, 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.

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 all² children living in a

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

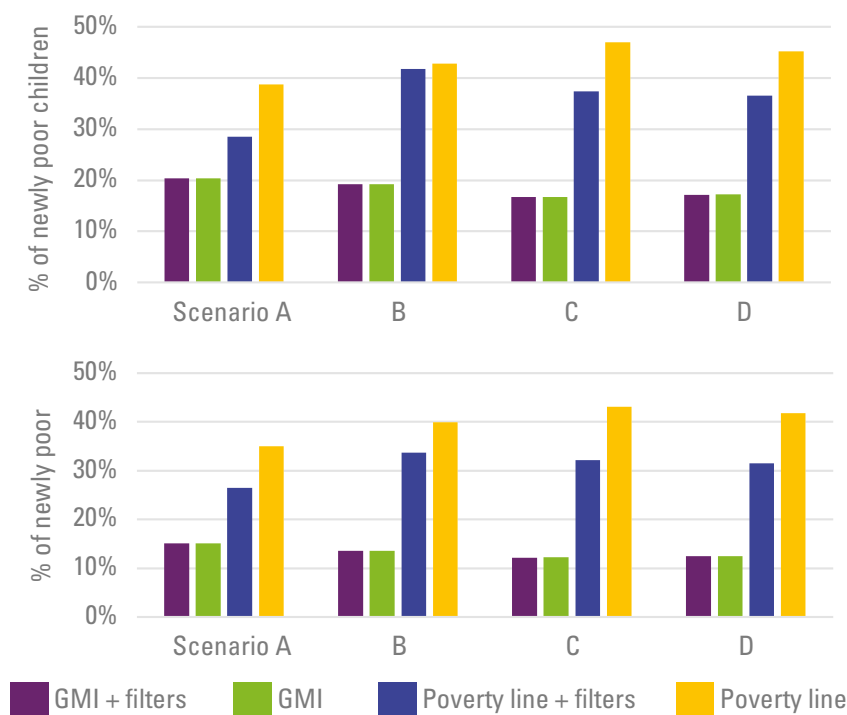
household whose per capita income falls below the GMI due to the pandemic's labor market effects. Option 1 keeps the asset filters while Option 2 would drop the filters. In Option 3 and 4, all children whose per capita consumption is expected to fall below the national poverty line (of 2018³) due to 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 UBK⁴. The parameters of the simulated options are summarized in Table 8 below.

Table 8 Simulated options for extending the UBK

	Option 1	Option 2	Option 3	Option 4
Income eligibility threshold	GMI	GMI	Benchmark poverty line ⁵	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 typically yield a coverage twice as high as 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).

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



Note: poverty is based on per capita consumption, GMI-poverty is based on per capita income, using consumption and income estimates under different economic scenarios simulated by the World

³ The poverty line for 2018 was 32,675 KGS per person per year.

⁴ 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.

⁵ We could also use scenario-specific poverty lines, if preferred.

Bank. Figures using GMI should be interpreted with caution due to the low number of observations below the GMI. 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 for 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%	27.5%	27.1%
% reduction	-	0.2%	0.2%	2.8%	4.4%
Poverty gap	5.3%	5.3%	5.3%	5.2%	5.2%
% reduction	-	0.2%	0.5%	2.1%	3.3%
Child poverty rate	36.3%	36.3%	36.3%	35.3%	34.7%
% reduction	-	0.2%	0.3%	2.9%	4.6%
Child poverty gap	7.1%	7.0%	7.0%	7.0%	6.9%
% reduction	-	1.2%	1.2%	2.2%	3.5%
Scenario B					
	No extension	Option 1	2	3	4
Poverty rate	32.9%	32.8%	32.8%	31.3%	30.5%
% reduction	-	0.2%	0.2%	4.7%	7.3%
Poverty gap	6.7%	6.6%	6.6%	6.4%	6.3%
% reduction	-	0.6%	0.8%	4.1%	6.0%
Child poverty rate	41.6%	41.5%	41.5%	39.3%	38.2%
% reduction	-	0.3%	0.3%	5.6%	8.2%
Child poverty gap	8.8%	8.7%	8.7%	8.4%	8.2%
% reduction	-	1.1%	1.1%	4.6%	6.6%
Scenario C					
	No extension	Option 1	2	3	4
Poverty	39.9%	39.9%	39.9%	37.3%	35.8%
% reduction	-	0.1%	0.1%	6.5%	10.3%
Poverty gap	8.6%	8.5%	8.5%	8.2%	8.2%
% reduction	-	0.9%	1.1%	5.5%	4.9%
Child poverty	49.2%	49.2%	49.2%	45.5%	43.6%
% reduction	-	0.1%	0.1%	7.5%	11.5%
Child poverty gap	11.2%	11.0%	11.0%	10.5%	10.6%
% reduction	-	1.3%	1.5%	6.2%	5.3%

Scenario D					
	No extension	Option 1	2	3	4
Poverty rate	44.8%	44.8%	44.8%	41.9%	40.5%
% reduction	-	0.0%	0.1%	6.5%	9.7%
Poverty gap	10.1%	10.0%	10.0%	9.5%	9.2%
% reduction	-	0.8%	0.9%	5.5%	8.5%
Child poverty rate	55.1%	55.0%	55.0%	50.9%	48.7%
% reduction	-	0.1%	0.1%	7.5%	11.6%
Child poverty gap	12.9%	12.8%	12.7%	12.1%	11.6%
% reduction	-	1.0%	1.3%	6.2%	10.1%

Note: poverty is based on per capita consumption, GMI-poverty is based on per capita income, using consumption and income 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. The difference between Options 1 and 2 in covering the consumption poor is low due to the low number 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.

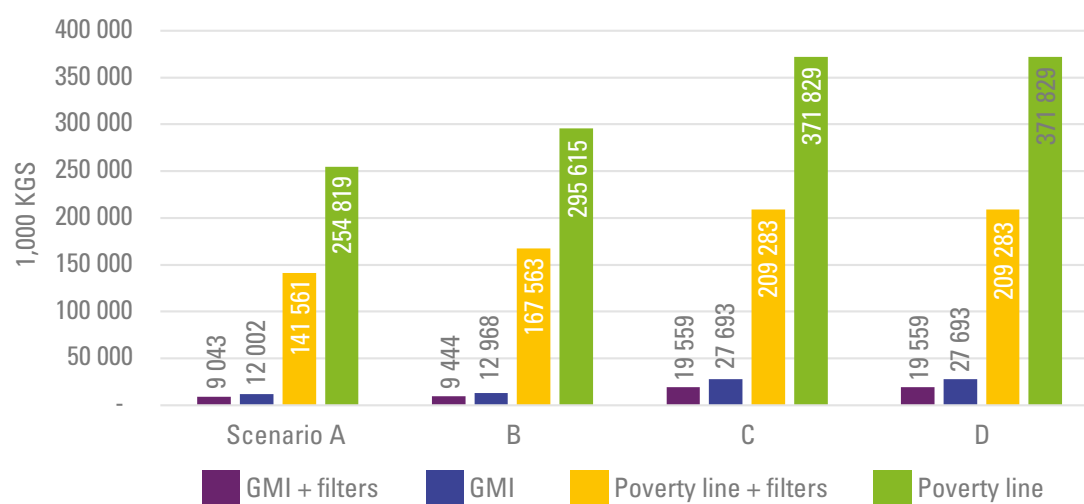
Finally, we estimate the costs of each of the four options under each of the four economic scenarios. Because the administrative infrastructure for the implementation of the UBK is already in place, the estimated costs of extending the UBK is a function of the number of new beneficiaries and the benefit 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.

Figure 4 Estimated number of new beneficiaries



Note: poverty is based on per capita consumption, GMI-poverty is based on per capita income, using consumption and income 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



Note: poverty is based on per capita consumption, GMI-poverty is based on per capita income, using consumption and income 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.

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. The current crisis may present an opportunity to transition towards a more inclusive targeting approach of the UBK.

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Wherever he lives.

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