LOCAL WELFARE REGIMES, FISCAL CRISIS, AND INSTITUTIONAL CHANGE IN POST-SOCIALIST GEORGIA

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Executive Summary

This working paper summarizes the results of research on fiscal crisis, institutional change, and social welfare regimes in the Republic of Georgia. The project explored the transformation of Soviet social welfare institutions in industrial cities that have faced varying levels of fiscal and social crisis. These are: (1) Tbilisi, the capital of Georgia and the country’s largest and richest city; and (2) Zestafony, a small industrial city whose economic base has been severely undermined in the post-Soviet period. The project employed institutional analysis and a household survey to examine changing criteria of access to, and overall levels of enfranchisement in, systems of social welfare in three areas: education, water provision, and heat provision.

We find that the provision of basic water, heat, and education in Georgia now involves a complex mixture of universalism, bureaucratic logics, rent-seeking and markets that cannot be mapped onto measures for efficiency or commitment to reform in a simple way. Water provision remains the most “universalistic,” though important adaptations to a weakened regime of access were observed in both cities. The provision of heat, by contrast, is marketized, as universalistic systems of provision have broken down. Finally, in education universalistic access to the classroom has been maintained, but access to extra instruction, which is broadly considered necessary, combines meritocratic, market, and rent-seeking logics.

These results suggest two important implications for our understanding of social welfare change and reform. First, marketization and reform should not be presumptively assumed to be associated with higher levels of enfranchisement or more efficient service delivery. On the one hand, “marketization” of access is frequently associated with systemic breakdowns that produce patterns of broad exclusion from basic services. On the other hand, “unreformed” and inefficient systems often support a level of inclusion—sometimes through simple institutional or material inertia—that may be hard to reproduce after major institutional reforms take place.

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1 The authors are grateful for the support of the National Council for East European and Eurasian Research for its support of this project. We also thank Jane Zavisca for her extensive and invaluable assistance in preparing the survey and sampling methodology. The authors hope to extend this research to Russia and Estonia to investigate similar questions in post-Soviet countries suffering from less severe fiscal crises than in Georgia.
I. INTRODUCTION

The project had two broad goals. First, it sought to understand the empirical transformation of social welfare delivery in the post-Soviet context. In particular, it sought to understand the relationship between changing systems of social service delivery and patterns of enfranchisement or disenfranchisement of households. Second, it sought to enrich our conceptualizations of these processes by moving beyond a simplistic opposition between “reformed” versus “unreformed”, and “efficient” or “market-oriented” versus “inefficient”, welfare institutions that has dominated much existing literature.

In place of such binary conceptualizations of “good” versus “bad” social welfare regimes, the research sought to develop a multidimensional framework for thinking about contemporary welfare state transformation. In doing so, it combined insights from a rich literature on the conceptualization of welfare state change in the European cases with a literature from economic geography that suggests the importance of the contingent material, spatial, and economic determinations of access to social service delivery. As such, the research provided a context in which to develop the concept of regimes of access to social welfare provisioning, a concept that captures both logics of distribution (marketized, bureaucratic, rent-seeking) and the institutional articulation of such logics that determine actual levels of access.

Second, the research suggests the need to revise our conception of the sources of transformation of social welfare systems. Most observers have seen welfare reform as the outgrowth of governmental commitment and a strong state able to withstand interest group pressures. However in Georgia, marketization of parts of the social sphere has been the outgrowth of fiscal and state collapse rather than any commitment to reform. In many cases “reform” or “marketization” occurs “by default.” It results from the inability of a profoundly weak state to maintain basic services. Such situations tend to lead to exclusionary results. Assessments of the appropriateness of welfare state reform, then, must be based on broader assessments of capacity to carry it out, rather than the presumption that, ceterus parabus, reforms are necessary.

The next section of this working paper addresses the broader context of welfare transformation against which contemporary changes are framed, as well as some conceptual questions in characterizing
this transformation. The third section addresses heat and water delivery, both of which are part of the so-called “communal sphere.” The fourth section addresses education. The final section draws some conclusions about welfare reform and state strength.

II. RESEARCH OBJECTIVES AND CONCEPTUAL PROBLEMS

Through much of the 20th century, advanced industrial countries consolidated regimes of social welfare provision that extended a range of social goods and services in an increasingly uniform manner across national populations. Institutions of social welfare did not, of course, take the same form in all cases. Gosta Esping-Anderson (1990) have examined basic differences in social welfare provisioning in the advanced industrial states, ranging from relatively marketized to high degrees of “decommodification” of basic income and social welfare provisioning.

In most countries the growth of entitlement and other social welfare programs encountered constraints, particularly during the fiscal crises of national and local governments that took place from the 1970s to the 1990s. Simultaneously, a distinctive paradigm often associated with neo-liberalism spread rapidly for reforming social welfare regimes. This paradigm of reform sought to introduce “real” prices into systems of provisioning, to increase user tariffs, to increase the level of accountability for service delivery, and to render systems of provisioning more efficient by introducing market mechanisms.

Soviet and Post-Soviet Social Welfare Regimes

A roughly similar general pattern of transformation can be observed in the Soviet and post-Soviet cases, although specific institutions vary in crucial ways. Soviet social welfare institutions were distinguished by the prevalence of universal versus targeted logics of bureaucratic distribution.2 This approach to social welfare provisioning is very different from that found in the Anglo-American cases. In

2 Titmuss (1969) has referred to universal versus “residual” logics of provisioning. See also Standing (1996) for a general description of this “universalistic” character of socialist social welfare regimes.
the latter social welfare institutions have tended to provide select groups of the population with subsidized access to certain goods and services based on given criteria (income, for instance).

Socialist social welfare institutions, by contrast, promoted a general de-commodification of access to a remarkable range of goods and services basic to subsistence. The result was virtually total enfranchisement of the population—or at least certain broad segments of the population—into systems of social welfare provisioning in an undifferentiated manner. We will refer to this pattern of social welfarism as universalism.

Important exceptions to this universalistic system of provisioning did exist. But research on the late-Soviet period has documented the emergence of a highly uniform regime of social welfare provision that was extended across urban industrial settlements with increasing uniformity as the Soviet period wore on. This regime included: universal primary education; universal though not uniform free health care; housing; centralized communal services for residents of apartment blocks, specifically water, heat, and sanitation; guaranteed full employment, organized primarily through industrial enterprises, and secondarily through public sector employment; and guaranteed retirement income.

As is discussed below in relationship to specific sectors, there is little indication that Georgia diverged substantially from this picture of social welfare provisioning. It is true that, as a republic with a substantially larger rural population than areas in the socialist core, levels of centralized social provisioning may appear lower in Georgia as a whole. Nonetheless, the pattern of provisioning in urban industrial areas seems to diverge little from the general Soviet pattern.

3 First, as in any country, important differences in welfare provisioning existed between rural and urban areas. For example, urban areas were much more comprehensively served by communal infrastructure. Second, within cities, important differences existed in the level of access to social welfare goods and services enjoyed by those living in apartment blocks versus those living in individual houses. As discussed below, the former were served in a quite uniform fashion by centralized regimes of service delivery for water, heat, and sanitation. Those in individual houses, meanwhile, were often served by remote facilities, or in some cases did not have access to water or sanitation in their houses. Third, as must be expected, important differences existed between centers of bureaucratic and administrative power—particularly republican or regional capitals—and peripheral cities, although there is extensive evidence that these differences decreased substantially over the course of the late Soviet period (Bahry 1987, Way 2001). Fourth, those parts of the social welfare regime controlled by industrial enterprises—particularly delivery of consumer goods and construction of housing—were less uniform. More powerful industrial ministries were able to provide a more robust regime of social welfare to their workers (Healey, et. al. 1999).
Since the collapse of the Soviet Union this socialist system of social welfare has been profoundly challenged in all post-Soviet states. The regime of full employment has collapsed precipitously. Those functions of social welfare that are the responsibility of public sector budgets—many of which were transferred from enterprises to local governments after the collapse of the Soviet Union—have been placed under tremendous fiscal pressure. The result has been dramatically increasing vulnerability of populations that were dependent on universalistic social welfare for education, communal services, housing, and, frequently, other social payments.

The Republic of Georgia has faced particularly acute collapse in the past ten years, even when compared to the hard-hit Slavic core of the former Soviet Union. Georgian GDP per capita declined dramatically as a percentage of Russian GDP per capita, from 34% in 1990 to 19% in 2001 (WDI Online). The public sector has also been ravaged, as government expenditure as a percentage of GDP has collapsed. While in Russia and Ukraine respectively, government expenditure are equal to 24% and 29% of GDP, Georgian government spending accounts for just 11% of GDP, suggesting a dramatic contraction not only of the state role in economic coordination and investment but in social welfare as well (WDI Online).

Reform and the Conceptualization of Welfare State Transformation

The technocratic response to the crises of social welfare regimes—particularly as it has been formulated by the multilateral development agencies—has focused broadly on bringing social welfare commitments into balance with state fiscal capacity and with making social welfare systems more efficient by targeting vulnerable populations and by “marketizing” certain elements of social welfare delivery.

Typical elements of reform proposals include means testing, increasing user fees to reflect real costs of service provision, the installation of meters to measure use, the marketization of some elements of production and distribution of social welfare benefits. The broad purpose of these reforms is to try to make social welfare systems sustainable in a context of limited resources. Such a focus on efficiency and
targeting has provided key goal posts in the reform of socialist institutions characterized by extraordinary waste.

Scholarly discussions have mirrored this technocratic focus. Thus many academic observers of welfare state transformation in the 1990s emphasized the efficiency of service provision and the targeting of aid as the key variables for measuring the extent of “reform” and, more fundamentally, for characterizing social welfare systems. Such models envision an idealized “efficient” and “market-oriented” organization of welfare provisioning as both a norm and a telos—that is, an end to which transformation should be directed. As Lynne Haney has put the point with reference to discussion of social welfare reforms in Eastern Europe, “this scholarship tends to be fairly prescriptive in nature. Basing their analyses on idealized notions of the Western welfare state and models of how welfare states ‘should’ operate, these scholars have focused on how to bring Eastern Europe into line with dominant modes of welfare capitalism “(Haney 1999: 152).

Such scholarly discussions have made a valuable contribution by identifying a very important dimension of the challenges facing post-Soviet countries, and some of the political difficulties entailed by the actual implementation of reforms. At this same time, this literature has limited our understanding of contemporary transformations of social welfare regimes. The normative focus on idealized “marketized” and “reformed” social welfare systems has created what Michel Burawoy (1999) calls “deficit models” of transformation. Deficit models conceptualize diverse systems largely in terms of what they lack.

Such “deficit” models seem to be based on two important conceptual confusions. First, they assume that there is a normative model of social welfare provisioning upon which there is agreement. In fact, it is by no means obvious what a fully “reformed” welfare state looks like, and this question is very

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4 For example, Linda Cook has emphasized “obstacles” to restructuring (such as political opposition and economic stagnation that prevents the labor market from taking over some tasks previously managed by the welfare state) in which restructuring is understood to mean “eliminating broad subsidies, targeting benefits to the poor, and adapting the social sector to a market model” (Cook 2000). Similarly, Shleifer and Treisman (2000) have examined the transformation of fiscal federal systems with an idealized model of reform in view; the current system is seen largely in terms of rent-seeking and corruption rather than in terms of its very important welfare functions (Collier and Way 1999; Way 2001). Haggard and Kaufman (2001), by contrast, have proposed an approach that begins from the presumption that there is no normative model of the welfare state in “the west.”
much at stake in both theoretical and empirical discussions of the welfare state in the richest industrial
countries today (Haggard and Kaufman 2001; Rosanvallon 2000). What is more, a comparative literature
on advanced capitalist states has emphasized the very different ways various systems manage the balance
between social welfare provision and efficient economic institutions (Esping-Andersen 1990, 1996). The
notion that there is a single model of “efficient,” “reformed,” or “market-friendly” welfare regimes
toward which reforms are directed is a myth, one that is evidenced by even a cursory glance at the
complex structure of reforms themselves. Reform proposals inevitably incorporate a heterogeneous mix
of material structures, substantive values, market mechanisms, and administrative and juridical structures
(Collier 2004). To characterize the systems they envision as simply “marketized” or “efficient” is
misleading.

A second important confusion introduced by deficit models concerns their view of the
alternatives to “reformed” and “efficient” welfare systems. The latter are most often characterized simply
as inefficient, unreformed, corrupt, or simply inert legacies of the socialist welfare state.5 As we seek to
show in this project terms such as “unreformed” or “inefficient” can mask a great diversity in the logics
and patterning of social provisioning (see also Collier 2004; Way 2001, 2002). The post-socialist cases
present many examples of systems in which “efficiency,” “marketization,” “reform,” and effective social
protection do not coincide. “Unreformed” systems are not always characterized first of all by corruption
and rent-seeking. They may have important elements of bureaucratic impersonalism and play an
important role in social protection. For example, prior research has shown that in the Slavic core of the
Former Soviet Union local governments have responded to fiscal crisis through what we call
“preservationist” measures (Collier and Way 1999; Way 2001; Woodruff 1999). Rather than marketizing
social service delivery or substantially cutting back on social welfare guarantees, states in the Slavic core
of the Former Soviet Union, and local governments in particular, have sought to maintain existing social
welfare institutions and existing social welfare commitments.

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5 For a criticism of a focus on such inert “legacies” see Burawoy and Verdery (1999).
In Georgia, by contrast, preservationist tendencies have been weak. A great deal of marketization of social welfare regimes has in fact taken place: markets have become a critical determinant of allocation of many goods and services that were once valued and distributed according to a “universalistic” logic. In the discussion that follows this is most clearly the case for heat provision and the widespread practice of hiring extra tutors for students in public schools. As we show in this report, “marketization” of certain parts of the system of service provision is not always associated with substantial improvements in efficiency of delivery and may be associated with a dramatic disarticulation of centralized networks of social service delivery.

Such situations clearly require a more flexible and complex conceptual framework than that suggested by deficit models of reform. In seeking to develop such a framework for understanding welfare state transformation, the project shifted focus on social welfare regimes from an exclusive and narrow emphasis on decision-making and efficiency to a broader focus on the structural characteristics of specific systems of social welfare. In doing so, we found it useful to distinguish logics of distribution from regimes of access. Logics of distribution refer to abstract principles for the valuation and distribution of social welfare goods and services. A regime of access refers to how this logic is instituted in practice and its impact on overall enfranchisement.

1. Logics of Distribution

Logics of distribution are principles through which the valuation and allocation of resources are determined. A logic of distribution defines criteria of inclusion that determine which households are provided with (or denied) access to concrete goods and services. For the purposes of this discussion, four such logics—and, correspondingly, four criteria of inclusion—may be distinguished.
**A. Bureaucratic logics** follow impersonal “rules of office.” These may define a variety of different criteria of access that range from universalistic to highly differentiated:

1. **Universalistic criteria** provide undifferentiated access to all citizens or to certain sub-groups of citizens (school access for all children of a certain age, heat delivery for all residents of apartment blocks, etc.).
2. **Meritocratic criteria** provide access on the basis of performance (grades in school, university entrance).
3. **Need-based criteria** determine access on the basis of some index of need such as poverty or specific characteristics of a household.

**B. In market logics** production, distribution, and consumption decisions are driven by the calculative choices of formally free actors.\(^6\) Crucial in such logics is the determination of pricing through these calculative choices. The resulting criterion of access is the ability and willingness to pay for services—that is, effective demand.

**C. In rent seeking logics** bureaucrats use their position in juridico-administrative structures to determine access through informal payments. The resulting criteria of access bear a certain affinity to market criteria in that effective demand (the means and desire to pay) drives allocation. At the same time, rent-seeking logics are distinguished from market logics in that bureaucratic limitations on provision of services are imposed and these limitations provide the condition for the extraction of rents. Rent-seeking logics are distinguished from bureaucratic logics in that formal “rules of office” are corrupted, and the privileges of bureaucratic position (the power to grant grades, to collect fees, to control service shut-offs) are used to extract illegal payments.

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\(^6\) This definition of market allocation is borrowed from Nikolas Rose’s definition of neoliberal technology in his *Foucault and Political Reason* (Rose 1996).
Rent-seeking should not be confused with personalistic criteria of access (below) although they may empirically coincide in some cases. Rent-seeking may be associated with impersonal criteria of access: if rent-seeking is based purely on size of payment and not on personal connections of various types (family, friends).

**D. In personalistic logics** of access individual or group identity drives allocations. The criterion of access in this case is membership in such a group or association with such an identity.

**2. Regimes of Access and Patterns of Enfranchisement**

A given logic of distribution and criterion of enfranchisement does not automatically imply an actual organization of social welfare or a given degree or pattern of access. Thus, as we will see in the analysis below, universalistic forms of access may lead to highly satisfactory levels of service provision. But they may equally lead to very low levels of service provision that are nonetheless undifferentiated and, thus, still ‘universalistic.’ Likewise, a market-based logic of access may, in some cases, lead to low-cost services that are relatively inclusive. But in cases like Georgia, marketization may equally be associated with very high levels of exclusion and high levels of income-based differentiation. What is more, in any given system various logics of distribution may be at work in different parts of a system, affecting different users differently.

Consequently, in order to examine implications for enfranchisement, the analysis of social welfare regimes in a given sector must consider not only the logic of distribution itself but also the concrete material, organizational, and social mechanisms through which such a logic actually functions in a regime of social welfare provisioning. In other words, it is necessary to examine the process through which, to use Karl Polanyi’s term, a logic of distribution is instituted and reproduced, through certain material conditions, certain social institutions, and certain organizational structures (Polanyi 1977).
We refer to these instituted systems of social welfare provisioning as *regimes of access*. The relationship between a regime of access and a pattern of enfranchisement may be conceived on two levels: first, differences in the level of access or enfranchisement *within* a given regime of access, or a pattern of *intra-regime* enfranchisement; second, differences in the level of access or enfranchisement between different regimes of access, or *inter-regime* enfranchisement.

Patterns of intra-regime enfranchisement were analyzed through various characteristics of households that were studied in the survey, including household wealth, type of housing, and the material character of systems of social welfare delivery. For the purposes of this discussion we have found it useful to distinguish equalizing versus differentiating patterns of intra-regime enfranchisement. In equalizing regimes, the population dependent on a given regime of access receives relatively equal service. In differentiating regimes, there is significant variation in enfranchisement across households dependent on a single regime of access.

### A. Equalizing regimes

1. **Infrastructural universalism** is based on a universal logic of social welfare to the extent that individuals are connected to a common material apparatus of service delivery. Infrastructural universalism is a distinctively modern bureaucratic logic of state administration. One important feature of many infrastructural universalist regimes in the post-socialist cases is the material impossibility of shutting off individual users who are unable to pay for services without shutting down the entire system. Such systems are, in this sense, structurally impersonal.

   Infrastructural universalism does not necessarily include an entire population – although we only use the term to describe a system that covers the majority of households in an area. What is crucial is that within a population served by a given infrastructure, such regimes are non-differentiating.
(2) Inclusive market regimes have the calculative actions of formally free agents as a dominant mechanism for price-setting and distribution. Such regimes always involve some limitations on market operation, whether through means-tested social protection, tariff controls, or other kinds of market regulation (such as regulation of the kinds of contracts into which parties can enter). The establishment of market inclusive regimes in the post-Soviet cases would seem to require a relatively organized state withdrawal from service provision, one that establishes institutional mechanisms that align markets with welfare goals.

(3) Bureaucratic universalism shares with infrastructural universalism a basis in relatively impersonal principles of distribution that structure the legitimate behaviors of state bureaucracy. These principles are usually based on certain social norms—in other words, institutionalized and bureaucratically legitimate understandings of social need, and institutionalized and bureaucratically legitimate understandings of the material or institutional means for satisfaction of a given need in a given social sector. In contrast to infrastructural universalism, which is based on place of residence, bureaucratic universalism is based on citizenship and thus tends to encompass a greater share of the population. Education and the distribution of means-tested subsidies provide clear examples.

B. Differentiating regimes

4. Infrastructural differentiation describes cases in which varying levels of social service delivery result from the material features of the apparatus for social welfare provisioning. It rests, thus, not on a bureaucratic logic but on the exigencies of a material structure. Infrastructural differentiation often results from significant system breakdown that effectively reduces or eliminates access to certain populations within a given system. Such forms appear to be particularly significant in the post-Soviet cases. For example, problems in energy supply in
Tbilisi have severely limited water access to those who live on higher floors of particular buildings.

5. **Exclusionary market regimes** of input delivery are market-based and lead to highly differential levels of access. Exclusionary market regimes may emerge as the result of a comparatively disorganized state exit from service provision, as in Georgia, in which the hand of the state seems to have been forced by the exigencies of fiscal crisis.

6. **Rent-based exclusion** occurs in cases where a system that ought to work on principles of bureaucratic universalism or market-based delivery is corrupted by individuals who use a certain position in the bureaucracy to capture rents. These rents may be captured from the state itself. Of more immediate relevance to the present discussion are rents captured from households and individuals—whether in the form of payments to teachers for grades or extra lessons, or in the form of bribes to electricity fee collectors for turning a blind eye to electricity theft.

7. Finally, **householding** regimes refer to situations in which need fulfillment is based on production by a household for its own use. Such regimes are differentiating to the extent that household assets (social, material, and financial) determine access.

In analyzing specific patterns of intra-regime and inter-regime enfranchisement the project diverges in important ways from many studies of post-Soviet welfare transformation. Rather than taking a nationally-aggregated picture of reform, the project combined institutional analysis and a household survey to relate specific dimensions of institutional transformation to their household-level effects. Consequently, instead of telling a story about the “Georgian welfare state” as a whole it sought to recognize the specific material legacies and institutional patterns in localities that are being assembled in new ways to transform regimes of social provisioning today.
First, the project sought to understand the scales on which new forms of differentiation are emerging. By focusing on analysis of two cities it was possible to distinguish intra-urban forms of differentiation from inter-urban differentiation. Thus, it was possible to understand both the forms of differentiation emerging between two very different cities and the various vectors of differentiation (income, material infrastructure, and so on) that differentiate households within cities.

Second, the project did not treat social welfare systems as a whole. Rather, it examined dynamics of particular social sectors—water, heat, and education. All are fundamental to the satisfaction of the most basic household wants. Heat and water are essential for basic survival. Education, meanwhile, plays an important social function in two ways. It is both an important source of public-sector employment and an important institution of social reproduction.

### III. INFRASTRUCTURAL UNIVERSALISM AND POST-SOVIET TRANSFORMATION

This section discusses two areas—heat and water provision—that were part of the so-called “communal sphere” of the Soviet social welfare system. The communal sphere is a particularly contentious area of welfare reform. The massive expenditure associated with communal service delivery has made it a central focus of reform, and a casualty of fiscal crisis. Its intimate relationship to the satisfaction of basic needs—for warmth, for water—have made it politically explosive (Collier 2004).

#### A. The Communal Sphere and Infrastructural Universalism

During the Soviet period regimes of access to communal services were closely linked to the type of residence in which households resided. Generally speaking, two broad forms of housing—and two corresponding regimes of communal service delivery—can be distinguished. The first is the apartment block. Apartment blocks were automatically associated with a range of communal services—heat, water, sanitation, hot water, electricity, and gas delivery—that were provided either free or at nominal cost to residents through massive centralized facilities, such as boiler complexes that provided heat and hot water.
for entire cities. These centralized facilities were built and maintained either by local governments or, particularly in small industrial cities, by local enterprises, which often had a major role in housing construction as well.

The second type of housing was referred to as “private” (чastnyi).7 The variation of the pattern of social service delivery among houses in this category is greater than it is among apartment blocks. Virtually all “private” houses were connected to electricity service and a large percentage were connected to natural gas. Some “private” houses were connected to centralized water and heat facilities, but a large number relied on free-standing heating units inside the house that ran on coal or gas. Likewise, some residents of such “private” houses depended on wells located either in the yard of the house itself or in the surrounding area.

For those households—whether “private” or in apartment blocks—whose communal services were connected to dedicated networks the Soviet regime of access was one of an infrastructural universalism. As discussed above, these regimes were not universal in the sense that they included all households in a given city. They were universal in the sense that they provided undifferentiated access to all households on a common network of communal service delivery. In most cases the very nature of the apparatus of delivery itself—which generally did not have metering devices or shut-off valves—meant that universalism was literally inscribed in the material structure of these systems.

Post-Soviet Transformation.

In all post-socialist states communal services impose massive burdens on public sector budgets. On the one hand, prices for inputs have risen, and hard constraints have been placed on local production and delivery enterprises; on the other hand, governments are often unwilling to impose hard constraints on users, either in the form of tariffs that more realistically reflect the prices of services delivered or in the form of a threat of shut-offs in the case of non-payment, which is widespread. In such cases local utility

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7 This term did not designate an ownership status but a separate single family dwelling of a type that was built in the Soviet Union in urban areas largely in the years immediately after World War II.
systems—both secondary producers and delivery networks—are caught in a low efficiency trap characterized by: (1) low levels of cost recovery and difficulty in imposing hard constraints; (2) production and/or distribution networks that are much too large given current demands on the system, and, thus, require high levels of expenditure on system maintenance; (3) corruption or rent-seeking that takes advantage of weaknesses in institutional set-up.

B. The Communal Sphere in Georgia

When compared to Russia or other parts of the Slavic core of the Soviet Union, the extent of enfranchisement into houses with the full range of urban services is comparatively low in Georgia. Official data show that in 1980 fully 62% of the housing in Georgia was “chastnyi.” But for that portion of the population residing in a given type of housing, the communal service regimes in Georgia seem to have been roughly equivalent to that found in the Slavic Core.

In the post-Soviet period, however, the collapse in the communal sphere has been much more precipitous in Georgia than in Russia, and important dimensions of Georgia’s centralized and universalistic systems of delivery have disintegrated. To a much greater degree than in Russia or Ukraine, both upkeep of housing and delivery of communal services have become affairs for individual or household rather than collective life.

In some sectors of the social welfare system, patterns of transformation in the communal sphere have progressed in roughly the same manner across the cities we examined. Thus, the collapse of centralized heating is a common process to which there are no exceptions in Georgia. Nevertheless, inter-urban differentiation in regimes of communal service delivery was one of the striking findings of the research. Water and electricity function on a much more normal regime in Tbilisi than in Zestafony; the regime of gas delivery has collapsed entirely in Zestafony but usually works normally in Tbilisi. More broadly, the level of satisfaction with communal services and living conditions was much lower in
Zestafony, where, as we will see, a much more substantial collapse of the communal sector has occurred, and the base level of communal service was substantially lower. Thus, in Zestafony 48.6% of respondents evaluated their communal services as “terrible” as opposed to 31.3% in Tbilisi.

C. Gas and Electricity

The focus of the survey was on heat and water. However, some attention was also paid to two other systems of service delivery—gas and electricity, which are critical inputs to centralized heat and water delivery. Gas and electricity are also delivered directly to households for domestic consumption in cooking, and lighting, and are therefore crucial to some household level adaptations to changes in the centralized regime of heating. Consequently, before moving to a discussion of heat and water it will be worthwhile to briefly consider the situation with respect to gas and electricity.

There is every indication that gas and electricity delivery functioned according to an infrastructural universalism during the Soviet period. Gas and electricity were transported from other parts of the Soviet Union—for the most part from Russia. But the material dependence on inter-republican energy deliveries was relatively insignificant during the Soviet period. The Soviet Union was, after all, a single economic and administrative space. In general, despite frequent shortfalls, inter-republican energy deliveries were guaranteed.

In the post-Soviet period, by contrast, the dependence on foreign supplies of energy and gas is the most central factor affecting the communal sphere and, arguably, post-Soviet developments in Georgia more generally. In contrast to the situation in Russia—where domestic energy production can effectively be used to cross-subsidize both industry and the communal sphere—Georgia’s communal sphere has largely been subject to the whim of foreign energy suppliers. Thus, while Russian energy users have

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8 This simple point is the basic argument of Gaddy and Ickes’ widely cited article “The Virtual Economy.” For a critical treatment see Woodruff (1999).
benefited from relatively soft constraints that have allowed substantial levels of “preservation,” hard constraints in the Georgian case has led to a quite precipitous collapse of its communal service infrastructure.

In the case of gas, deliveries to centralized heating facilities, discussed below, were cut off early in the post-Soviet period. Difficulties have also been encountered by household users. Because national or foreign entities have no capacity to impose hard constraints on individual users constraints have sometimes been imposed on entire cities. Thus, as of May 10, 2002 gas delivery had been completely cut off in Zestafony. Gas for residential consumers was also cut off entirely in Tbilisi during our stay in summer 2003. In the latter case the reason may have been, in part, to apply decisive pressure in the context of ongoing negotiations between the Russian gas monopoly (GAZPROM, or its affiliate that deals with foreign transactions, ITERA) and the Georgian government.

Major governance reforms in the electricity sector took place in 1998. Local distribution, national distribution, the wholesale market, and regulatory functions were separated. In this context, the post-reform trajectories of urban electricity grids have varied. The grid in Tbilisi and part of Rustavi was purchased by an American firm, AES, which controlled the system through summer 2003, when its stake was sold to UES of Russia. AES introduced a regime of hard constraints in Tbilisi, installing (at its own expense) meters in all households and imposing a threat of shut-off on non-payers.

The survey strongly indicates that the tenure of AES shifted regimes of access to electricity delivery for its customers. First, it dramatically improved electricity service in Tbilisi, a fact which is particularly vivid when compared to Zestafony. Fully 90% of households in Zestafony reported shutoffs every day for four hours or more, while only 21.1% of households in Tbilisi reported this frequency of shutoffs (figure 1).
Second, institutional changes have led to new forms of disenfranchisement. One example emerged from qualitative interviews. A very poor family in Tbilisi was accused by AES of stealing electricity by by-passing meters. Since the family had two meters, it was fined 600 Lari. Consequently, a subsidy normally paid by USAID to families for electricity use was transferred directly to AES as payment of the fine. Proceedings on the matter were ongoing as of our visit, and family members considered it quite likely that their electricity would be shut off entirely.

Although the survey suggested substantial differentiation in access to electricity, this differentiation was not strongly correlated with poverty. The reason, perhaps, is that shut-offs due to systemic problems are so frequent that the specific effect of hard constraints was difficult to extract from survey data (see further discussion below).

For present purposes, the real importance of the transformation of electricity and gas systems concerns their impact on water and heat delivery, to which we now turn.

D. Water

For households connected to centralized systems of delivery, the regime of access to urban water service during the Soviet period can be characterized as one of infrastructural universalism. The survey
showed that most residents in the two cities had piped cold water in 1988. Although cut-offs sometimes occurred, their frequency was low, particularly when compared to the post-socialist situation. After Soviet break-up, urban water systems in Georgia were transformed into semi-public limited liability companies with 100% state ownership. They are, technically, on a regime of self-financing, meaning that 100% of their financing should come from the collection of tariffs. Tariffs for water are set by local governments. For this reason, water remains an issue over which local governments have quite a bit of influence despite the fact that budgetary financing is limited.

Household use of water is not metered in either Tbilisi or Zestafony, and rates are established based on a flat tariff. As in the Soviet period, tariffs collected from enterprises and from public sector organizations effectively subsidize residential consumers. Rates of payment are low, and urban water systems are racked by cascading debts that begin with non-paying consumers and tariffs that are too low to cover costs, extend through the organizations responsible for maintenance of water systems, and end with the accumulation of massive debts for electricity deliveries upon which water systems depend. The central problem with water service in Georgia concerns not the availability of water—which is generally abundant—but the deficit in electricity to work pumping stations, which are required to maintain pressure in the system.

In this context local water production and distribution systems are badly squeezed, their physical condition is rapidly deteriorating, and leakage in the extensive transport systems is high (by official estimates 50% in Zestafony and 45% in Tbilisi). Physical deterioration is exacerbated by underutilization of the material apparatus for production and delivery of water. Alongside economic inefficiencies inherent in running systems under capacity, low and inconsistent levels of use decrease the lifetime of

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9 These data are roughly consistent with the Georgian State Department for Statistics data, which show that in 1990 84.1% of the entire urban housing stock and 97.7% in Tbilisi had access to piped cold water.

10 According to local officials, residential users in Zestafony owe 600,000 Lari to the water utility (Zestafonvodkanal). Collections constitute roughly 14-18% of what residential users should pay, and only 6.8% of the cost of production. The water system, in turn, has 3,000,000 Lari in debt for electricity.

11 The water system in Zestafony is composed of bore holes many kilometers from the city and Tbilisi water is drawn from the river Aragvi. Both require extensive pumping to function.
pumps, place strain on transport pipes, thus increasing water loss, and decrease water quality (since
materials from outside the system may be sucked into the system during periods of reduced pressure).

These problems noted, the centralized system of piped water has not entirely collapsed in
Georgia. In contrast to the situation with heat supply, discussed below, most households that were
previously connected to centralized networks remain connected to those networks, although in some cases
the quality has deteriorated so substantially that piped water has ceased to be a viable source of drinking
or cooking water. Beyond some continued universalist features, the most striking characteristics of the
emerging regimes of access to water are: (1) dramatic inter-urban differences in water access, quality, and
use; (2) the importance of certain features of material infrastructure in determining access; (3) widespread
household-level adaptations, which take different forms in the two cases. The present section first
examines the regime of access to pipeline water, different household adaptations to its weakness in the
two cities, and emerging forms of differentiation in water delivery that were discovered in the survey.

1. Pipeline Water

In Tbilisi nearly all households have access to pipeline water and pipeline water is considered to
be of good quality. Virtually all respondents reported that they drink pipeline water without a filter, and
about half consider piped water to be entirely safe for drinking.\textsuperscript{12} Shutoffs are common. Only 56.7% of
respondents report that they have access to water at all times, and 29.9% report that they have water 6-12
hours a day or less. In contrast to Zestafony, these shutoffs were more often than not reported as
scheduled.

The survey suggested that these deficiencies in the water system result in some deprivation,
measured as the percentage of households that report having to go without water for various uses with
some frequency. Thus, 20% of respondents in Tbilisi report that they must go without water for washing
themselves and for laundry at least once a week; 12% of families reported that they had to go without

\textsuperscript{12} Only 24.4% consider the water to be either very unsafe or quite unsafe.
water for cooking at least once a week; and 8% report that they go without water for drinking at least once a week.

The specific pattern of this deprivation, however, did not suggest income-based differentiation. Indeed, no mechanism for differentiation—such as hard constraints on water delivery—was found. Of those who have access to pipeline water in Tbilisi most respondents said that shut-offs were due to system-wide problems that affect an entire building or district. No respondents report shut-offs due to non-payment and only 10% of respondents thought that shut-offs would result from the non-payment of communal service bills. This situation stands in stark contrast to two other important networked services—gas and electricity—both of which are perceived to operate on regimes of hard constraint.

In Zestafony, a substantially lower percentage of respondents (65.1%) have access to centralized pipeline water. Access to pipeline water is highly concentrated in households that live in apartment blocks. As in Tbilisi, no evidence was found for a regime of hard constraints on water delivery. Of those with pipeline water, 90.1% said that shut-offs were due to problems that affected an entire building or region. Only 2.7% reported shut-offs due to non-payment. A very small portion of respondents with access to pipeline water believed that their water would be shut-off in the case of non-payment.

In stark contrast to the situation in Tbilisi, however, pipeline water in Zestafony is delivered on a very limited regime and is not considered safe for drinking and cooking. The dramatic difference between the two cities in access and quality of piped water is illustrated in figures 2 and 3:
In short, the basic patterns of delivery vary between the richer Tbilisi and the poorer Zestafony, suggesting dramatic spatial differentiation of a type that did not exist in the Soviet period.

2. Household adaptations

The weakened regime of centralized water delivery in both cities has led to various household adaptations, ranging from storage of water for times of shutoff to extensive use of alternative sources of water. In Tbilisi the predominant household adaptation to periods of shut-off is storage of water in bathtubs or other containers. Notably, recourse to such adaptations varies by floor. The percentage of those reporting such adaptations increases from 58% of those on the first and second floors to 69% of
residents of the 3rd through 5th floors to 84% of those on the 6th floor or above. These dramatic variations in adaptation by floor are explained by an important technical feature of the water system. Shortages of electricity and the breakdown of equipment mean that pumping stations often do not operate at levels adequate to provide water to those living on higher floors in multi-story apartment blocks. In Tbilisi little evidence was found that households adapt to supply interruptions by turning to other sources of water.

In Zestafony storage was also a widespread adaptation. 97.3% of those who have access to piped water store water for times of shut-off (versus 68.1% in Tbilisi). But in stark contrast to the situation in Tbilisi, over 90% households in Zestafony with access to centralized piped water also make use of other sources of water (versus only 7% in Tbilisi). The most important sources of drinking and cooking water in Zestafony are, in order of importance, piped water (30.2%), a private well (24.6%), a public well (24.9%), and natural springs (19%).

Household adaptations to inadequate or unsafe centralized water in Zestafony require households to employ a range of resources. Some depend on household income or wealth. For example, in order to rely on spring water one must have access to a car or truck. In others, social ties may play an important role, a phenomenon best grasped through qualitative interviews. In one interview, a resident of an apartment block reported that she and other residents had tried to collect enough money to dig a well in the yard of their apartment block. They were unsuccessful. However, a neighboring apartment block had managed to collect enough money to dig a well, and she reported no difficulties in using the water from the well in the neighboring apartment block. Similar accounts were found among those who live in private houses. In two cases, very poor families reported exclusive reliance on a neighbor’s well. Again, they indicated no particular difficulties with this arrangement, which provides a reliable and relatively convenient source of drinking water.

3. Differentiation

The survey found only limited evidence for differentiation based on income or various measures of consumption in Tbilisi. For reasons explained above, a much more striking determinant of household
water access was the floor on which households reside. Both the frequency of interruptions and the difficulties with access to water for all uses is dramatically higher for those living in upper stories of apartment blocks than for those living in lower stories (figure 4).

![Figure 4: Access to cold water and floor of residence in Tbilisi](image)

In Zestafony, a statistically significant relationship was found between the level of access to water and residence in higher stories of apartment blocks, though this relationship was much lower than in Tbilisi. The reason for lower levels of differentiation may be, in part, that in Zestafony answers were concentrated in the lowest part of the scale (in other words, in answers corresponding to the lowest possible level of access, thus not accurately reflecting differentiation among households).

The survey suggested moderate but statistically significant poverty-based stratification in Zestafony. Thus, three times more respondents from the poorest category of households report not having access to drinking, cooking, washing and showering water at least once a week than in the richest category (14% versus 4% of households). As has been noted, the centralized water system itself does

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13 For examining correlations between household income and access we used a poverty variable that combined answers to three questions on the survey: concerning consumption of meat, general consumption, and per capita total income. Households were then given a binary score if they belonged to the poorest third of respondents in each case (i.e. the third of the respondents who reported lower consumption/income). For meat consumption: those who answered that they had no meat in last month/only once in last month (about a third of all respondents); for general consumption: those who answered they had difficulty buying food (about a third of respondents); for income: the third of respondents with the lowest reported income). Thus, a score of ‘3’ means that respondents were poorest, reported lowest consumption on these three questions. A score of ‘0’ means that the respondents did not report low income/consumption on any of these questions.
not suggest a mechanism of wealth-based differentiation. Some indications of possible sources of differentiation could be gleaned from the survey, although further investigation would be required to understand sources of differentiation more thoroughly.

4. Conclusions: Regimes of Access to Water Provision

The most striking finding of the survey with respect to water provision concerns the massive divergence in regimes of access in Tbilisi and Zestafonv. Water access in Tbilisi still bears important features of an infrastructural universalism. Some deprivation is reported in Tbilisi. But households still depend on a dedicated network, and for those households on the network services are delivered for very low cost with no apparent threat of hard constraint. The major exception to a regime of universalism seems to be the profound differentiation in access for those living in lower versus higher stories of apartment blocks. In this case, differentiation is the product of a relatively contingent feature of the material infrastructure of water delivery creating a regime of infrastructural differentiation.

In Zestafonv, by contrast, infrastructural universalism has broken down substantially, and various forms of household adaptation—whether storage or true “householding” (that is, production by the household unit for household consumption)—has taken its place.

Surprisingly, the result of these different regimes of access has not been substantially higher levels of deprivation in Zestafonv than in Tbilisi. Having noted that the various adaptations required of households in Zestafonv have a “cost” of substantial investment of household resources, it is significant that these adaptations are in a very important respect “successful.” Residents of Zestafonv do have somewhat higher levels of deprivation than those in Tbilisi—though the disparity in levels of deprivation is much less than the disparity in the level of breakdown of centralized water systems. 83.4% of respondents in Zestafonv reported always having enough water for drinking versus 88.3% in Tbilisi. 61.3% of households in Zestafonv report always having enough water for washing as against 73.9 in Tbilisi. On the other hand, the quality of water consumed by residents of Zestafonv is thought to be better than in Tbilisi. As is evident in figure 3, above, the quality of piped water is perceived to be dramatically
worse in Zestafony than in Tbilisi. However, among all residents in Zestafony (including those who depend primarily on pipeline water and those who depend primarily on other sources) 72.3% think their primary water source is entirely safe—as opposed to only 55% in Tbilisi who consider their primary source of drinking and cooking water to be entirely safe. Indeed, the survey results suggest distinct advantages gained from living in a relatively peripheral city in which alternative sources of water are available for times when centralized distribution networks have broken down.

E. Heat

During the Soviet period the pattern of heat provision in urban industrial areas in Georgia was roughly the same as in other parts of the Soviet Union. For those who lived in apartment blocks, the major source of indoor heat was pipes that extended from massive urban heating complexes that could serve entire cities the size of Zestafony or large sections of cities the size of Tbilisi. State statistical committee data suggests that the percentage of residents with access to centralized heat at the end of the Soviet period in Georgia was roughly the same as the percentage of individuals who lived in apartment blocks—about 60% in each case (State Statistical Committee)—mirroring the pattern in other urban areas in the Soviet Union. Meanwhile, those living in individual houses in urban areas tended to rely on gas or, less frequently, wood or coal-fired stoves.14

In the first years of the post-Soviet period urban-level centralized heating systems that served apartment blocks and some individual houses collapsed across Georgia. According to interviews, pipes and other parts of heating systems were dismantled to be sold for scrap. Household heating has shifted to free-standing individual units that operate either on networked inputs (electricity and natural gas) or on non-networked inputs sold by entrepreneurs (primarily wood and kerosene). The patterns that have emerged in each city, however, are divergent.

14 Thus, in parallel with the divergent composition of the housing stock, substantially different levels of centralized heat provision existed in Zestafony versus Tbilisi in the Soviet period. Of those who had not changed residence since 1988, 31% in Zestafony and 87% in Tbilisi had centralized heat.
1. Heating by electricity and gas—Tbilisi.

Households in Tbilisi have shifted to heaters working on, in order of importance, natural gas (39.7% of households), propane, kerosene, or other liquid or gas fuels not delivered through a dedicated network (22.7%), electricity (16.2%) and wood (16.0%). Households living in “private” houses as opposed to apartment blocks rely much more heavily on wood stoves than on electricity and gas. The explanation for this difference may simply be the greater inconvenience of operating wood stoves and storing large quantities of wood in an apartment block. It may also be that wood stoves are cheaper—if much less convenient—and the population living in private houses tends in general to be poorer than the population living in apartment blocks.

Households that rely on gas or electricity as their primary heating fuel experience frequent shut-offs. 85.9% of respondents in such households reported that they were sometimes unable to heat their households due to gas or electricity cutoffs. Of this group, 56% said that they were unable to set heat a quarter of the time, and 12.7% responded that they were unable to heat half the time.

As is the case with water delivery, a major reason for heat shutoffs is the systemic weakness of regimes of networked input delivery rather than constraints placed on individual households; in other words, most shut-offs affect all users regardless of their ability to pay. Thus, 96.5% of respondents who use piped gas or electricity for heat in Tbilisi said that heating interruptions were due to shut-offs of gas or electricity that affect an entire building or district.

However, in contrast to the situation with water, the survey also suggested that a system of hard constraints exists for gas and electricity delivery used for heat. Thus, of those who said that they were unable to heat with gas or electricity due to shutoffs, 19.7% said that they had been cut off due to non-payment against virtually none in the case of water. More generally, respondents in households that rely on gas and electric heat perceive that gas and electricity would be cut off in the event of non-payment (44.9% and 90.1%, respectively).
Significantly, these results suggest a harder payment regime for electricity (managed by a private American company at the time of the survey) than for gas. Of those who did not think that non-payment would result in shut-offs, 31.8% said that gas could not be cut off because it is technically impossible to cut off individual households. Virtually none of the households that rely on gas and electricity for heat thought that these services could not be turned off because they are socially necessary. In these areas the moral economy of Soviet social welfare is dead.


In contrast to the situation in Tbilisi, the percentage of households served by centralized heating in Zestafony was low during the Soviet period. As in Tbilisi, centralized heating has vanished. But the dominant tendency in Zestafony has been to turn not to gas and electric heating but to wood stoves. Notably, this shift has occurred not only among those households once connected to the centralized urban heating system but also among those households that resided in “private” houses and relied on electricity or gas during the Soviet period. In Zestafony, 93.6% of all households reported using wood stoves as their primary source of heat. Heating with electricity and gas has shrunk to insignificant levels: 1.3% for electricity and 0.4% with gas.

The shift away from gas and electric heating can be explained in two ways. First, gas and electric heaters are more expensive to acquire and operate than wood stoves, making them an unattractive option in the poorer city, Zestafony. Second, and more importantly, given the non-continuous regime of gas and electricity supply in Zestafony (gas, as noted above, had been shut-off for the entire city as of summer 2003) heating with these inputs may have become materially non-viable, even for that portion of the population that could afford to pay for it.

The predominance of heating based on wood in Zestafony suggests an important shift in the institutional mechanisms of input delivery. In Tbilisi, where gas and electricity are still dominant sources of heating fuel, either state or private entities provision a majority of households with fuel through
existing dedicated distribution infrastructures (pipes and wires). Private entrepreneurs provide other forms of fuel to a minority—34.7%—of the population.

In Zestafony, by contrast, private entrepreneurs provide 84.6% of households with heating fuel. In interviews respondents indicated that the most common approach to acquiring wood is to purchase a supply for an entire winter. Wood is usually purchased from residents of rural settlements in the surrounding area who bring wood to the city in cars or trucks. One respondent reported that for a relatively small sum (20 Lari, or about 10% of the cost of having wood delivered) it was possible to cut wood in a nearby forest. But this approach requires a great deal of time (she estimated ten days of work cutting wood) as well as access to a car.\textsuperscript{15}

3. Deprivation

Levels of deprivation—here measured by the frequency with which households lack fuel for heating for any reason—are substantial in both cities. In Tbilisi, 20.7% of households reported having fuel less than half of the time during the heating season. An additional 36.1% estimated that they lacked fuel about a quarter of the time, and only 23.4% of households estimate that they always have enough fuel for heating. Reported rates of deprivation in Tbilisi are substantially higher for houses dependent on gas and electricity versus wood. This result is initially surprising given that households dependent on wood are more likely to be poor. The explanation likely lies in the delivery mechanism. Electricity and gas deliveries are dependent not only on the ability to pay but on the functioning of a centralized system that experiences frequent shut-offs. Most shut-offs—and, thus, an important cause of deprivation—are due to systemic problems rather than household-level constraints.

This difference in delivery regimes also explains another apparently paradoxical result: as shown in figure 5, reported levels of deprivation in the poorer Zestafony are much lower than in the

\textsuperscript{15} It is noteworthy that this form of heating has led to substantial deforestation in the area around Zestafony; a development that should be considered a major negative impact stemming from the collapse of infrastructural universalism in the city.
comparatively rich capital city, Tbilisi. This result may be explained again by the dominant type of heating fuel in each city. Thus, if we compare rates of deprivation among those households depending on wood as a primary heating source in Tbilisi and Zestafony they are nearly identical.

From this discussion we may assume that the convenience associated with gas or electric heating—which includes how inputs are handled, the levels of indoor pollution, and the quality of heat for a whole house—outweigh the frequent shut-offs associated with gas or electric heating for those richer families that can afford them.

4. Differentiation

In contrast to the situation with water delivery, high correlation in levels of deprivation (measured, again, as the lack of heating fuel) and the poverty variable was discovered in both cities. This general relationship is characterized in figure 5.
If we use another measure of access to heat – how much extra clothing the respondent wears inside during winter – we find a strong negative correlation between poverty and warmth in Tbilisi both among those with and without gas and electricity heating.16

**Figure 6:**

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Similar results are found for households relying on wood. Of respondents that used wood stoves as their primary source of heating 51.2% said that there were times when they did not have enough fuel for heating. Of these, 96% said cited a lack of money as a reason. These data are reinforced by cross-tabulations of the poverty variable with rates of deprivation, illustrated in part in figure 5 above. As can be seen in figure 6 above, 65% of the richest group reported always having adequate fuel for heating compared to just 26% of the poorest group. Meanwhile, 43% of the poorest families reported having fuel half of the time or less, and only 9.7% of rich families reported this level of deprivation.

5. Conclusions: Marketized and Exclusionary Regimes of Access

In both Tbilisi and Zestafony marketized and exclusionary regimes of access to heat inputs have emerged over the course of the last twelve years. Inputs are distributed through systems that allow for

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16 The poverty measure describes how many consumption and income variables respondents reported on the low end: consumption of meat, general consumption, and per capita total income. A score of 3 means that respondents were on the bottom third of each of these three questions. A score of 0 means that the respondents were not on the bottom third of any of these questions.
differential levels of delivery to households and for the imposition of hard constraints: whether through shutoffs of gas and electricity or through entrepreneurs who deliver only to those who pay for wood.

The exception to this pattern of exclusionary marketization is the infrastructural differentiation in centralized gas and electricity delivery in Tbilisi. There, deprivation is associated not with the inability to pay for inputs but, rather, with shut-offs that affect all users on a given material network.

IV. EDUCATION

In the Soviet era, education came closer than any other social program to meeting the ideal of equal and universal access. Overall, education financing and student-teacher ratios were highly equalized across various republics and across areas within republican boundaries in the Soviet Union (Way 2001). Post-communist countries continue to have higher education levels than other developing countries of equivalent income level.

However, this system of education has come under severe strain in the post-Soviet period. Financing for education, together with other social expenditures, experienced an historically unprecedented collapse in Georgia in the 1990s. In 1998, public expenditure on education in real terms was below 10% of its level in 1990. GDP declined by more than 75% between 1990 and 1994 and the share of state spending on education declined from 7% of GDP to less than 1% in 1994 to just over 1% in 1995-1998. As of the late 1990s, spending on education was significantly below the average for developing countries.

<table>
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<th>Table 1: Public expenditure on education as % of GDP</th>
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<td>Georgia</td>
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<td>Av. Developing countries</td>
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<td>Av. Developed countries</td>
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(Source: Perkins 1998)
The immediate response to fiscal crisis has not been to dramatically cut back the number of schools. Indeed, the numbers of schools is quite high. There are 3,200 schools in Georgia as compared to 1,500 in Finland where there are more students.¹⁷ Rather, the strategy of the government has been to focus on wage expenditures and to dramatically cut back other current expenses and capital expenditures. As in other post-Soviet countries, the number of teachers has remained relatively constant. There has been little or no reduction in the number of teachers. As a result, teacher salaries in Georgia are very low. The average teacher’s salary is about half per capita GDP—much lower than the international norm of 1-2 times per capita GDP (Orivel, 1998).

The result of this strategy of education financing has been a post-Soviet education system that combines universalistic, market-based, meritocratic, and rent-seeking logics. Universal access to the classroom has been mostly preserved. Access to grades retains important elements of meritocracy but has become open to rent seeking for those with effective demand. Finally, access to better education – in the form of extra tutoring, better school infrastructure, and lower class size – has been partially marketized.

A. Access to the Classroom

The survey indicates that basic access to the classroom is based on place of residence, and not on payment or on personal ties. A universalistic regime of access to some (if not necessarily good quality) education remains in place. Parents generally felt that placement in general primary and secondary education institutions was based on principles of universal free access. Only 4.3% of parents in Tbilisi and 1.5% of parents in Zestafony reported difficulties in placing a child in a school in the past year. Of the small number who had difficulty placing a child in school an even smaller number reported that this difficulty was due to a lack of money—27 cases in both cities or less than 1% of all parents with children.

¹⁷ Gigi Tevzadze interview.
General Education.

Enrollment rates in general education (grades 1-9) have remained relatively constant since the collapse. Between the 1990/1991 and 2000/2001 school years, enrollment has dropped off by a mere 3% in primary schools (ages 5-9) and 6% in general education schools (ages 10-14). At the same time, in the final two grades – 10 and 11 – enrollment has dropped from 33% in 1990 to 22% in 2000/2001.

The survey did not suggest that attendance is a major problem. Roughly 70% of oldest and 80% youngest almost never misses school\textsuperscript{18}. A very low 0% and 2% reported that their youngest and oldest child (respectively) missed school “several weeks at a time” in both cities. Of those parents with children who miss school, the overwhelming majority (60-80%) in both cities report the child’s health as the main reason.

The survey did not show a relationship between stratification of income or consumption and attendance. Less than 1% reported that their children did not attend school because of lack of money or clothing. No statistically significant correlation was found between poverty and attendance levels in either city.

Preschool.

Access to preschool has followed a somewhat different dynamic. In the post-Soviet period, attendance in Georgia has declined dramatically according to available nationwide data – from 54.4% (urban) and 24% (rural) in 1990 to 28% (urban) and 14% (urban) in 2000. This drop is more significant than in other post-Soviet countries. However, the survey found that a relatively large number of parents appear to continue to send their children to preschool in both Tbilisi and Zestafony. Among households with preschool age children (2-6), just above 40% in Tbilisi and about 60% in Zestafony report sending at least one child to preschool\textsuperscript{19}.

\textsuperscript{18} Because of limits on the length of the questionnaire, we were forced to ask many questions about education only about the oldest and youngest school aged child in the family. This appears to have been relatively representative – accounting for 87% of all of the school-aged children in the families interviewed.

\textsuperscript{19}
It is plausible that the drop in attendance over the 1990s is a product of increased costs and the inability of the poor to afford preschool services. User fees have been introduced that total roughly 8-12 Lari ($4-$6)\(^{20}\) a month (5%-7% of the reported average monthly household income in Tbilisi and 25%-35% of that in Zestafony). Clearly, this amount is too much for some families. One preschool teacher in Tbilisi reported, for example, that in the previous year about twenty children (of a total of 140) had been forced to withdraw because of high cost.

Compared to attitudes toward general education, there is a somewhat broader perception that money is the most important factor in admittance to preschool. As in general education, this perception was somewhat greater in Tbilisi than in Zestafony. Thus, in Tbilisi 65.7% of respondents believe that place of residence is the most important factor in placing children in preschools and 19.9% believe that money is the most significant factor. In Zestafony, meanwhile, 83.2% of respondents believe that place of residence plays the most important role in admittance to preschool, while 7.8% believe that money is most important.

Nevertheless, the research suggested that the cost of preschool does not represent a significant barrier for the vast majority of families. Most families we interviewed did not view preschool fees as a significant sum. Only 2.5% of parents (in each city) reported that they had not sent at least one of their children to preschool because of high cost. Rather, the main reason parents do not send their children to preschool is the availability of home care. About 55% of parents in Tbilisi and 35% of parents in Zestafony reported their children were not in preschool because an adult is always at home.\(^{21}\) Simultaneously, we found no statistically significant correlation in either city between our poverty measure and preschool attendance.

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\(^{19}\) We were unable to identify the reason for the difference in preschool attendance rate in the two cities. It does not appear to be a function of differences in family structure or wealth.

\(^{20}\) In Tbilisi we were told that roughly 5 Lari is charged by the city government and that the school administration has the discretion to charge an additional amount to cover costs.

\(^{21}\) These figures are for all parents with school aged children ages 2-17.
From these data we may conclude that the severe decline in preschool attendance discussed above has had less to do with increased cost and more to do with a decrease in demand for preschool that results from the fact that more caretakers stay home now than in the past. According to the 1989 census, 28% of urban households were extended multi-generational households. In 1996, that number had increased to 50%. Similarly, single parent households declined from 15% in 1989 to 2% in 1996 in urban areas (Dudwick 1999). In addition, while we found no correlation between family poverty or income and preschool attendance, there was a small correlation between lower attendance and a higher share of unemployed adults in the family; unemployed adults are likely to have greater free time for child care than employed adults.

In sum, to the extent that access to education involves “just showing up” the research suggests that the regime of access has remained more or less universalistic. We find extremely widespread and unstratified access to the general school classroom, and to a surprising extent, to preschool.

**B. Grading**

In the Georgian education system, meritocratic and rent-seeking behaviors coexist. This is most clear with regard to grades, which are bought by some students and not by others. As in other parts of the former Soviet Union, grade buying – obtaining higher grades by bribing a teacher – is widespread. 53% and 30% of parents with children in school in Tbilisi and Zestafony, respectively, felt that “money and/or connections” play at least some role in grading in general schools.

In essence, two parallel systems of grades exist in many Georgian schools. One system of grading is based on the teacher’s estimation of merit, while the other system of grading is based on money and connections. As we see in table 2, most students and parents agree that it is almost always possible to get a good grade if you work hard. But the current system also provides opportunities for those who do not

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22 Our survey shows a robust correlation between the number of aunts and grandparents in the household and lower preschool attendance.

23 But only statistically significant in Zestafony.
want to work hard, or are not very good students, to receive a decent grade. Thus, several parents in Tbilisi said in interviews that bribes could be used to secure a good grade if a student was not particularly interested in a topic. A family in Zestafony reported that they bribed teachers to pass their 17 year old child in topics not considered important for the university entrance exam.

<table>
<thead>
<tr>
<th>Determinants of grades (parents of school-aged children)</th>
<th>Tbilisi</th>
<th>Zestafony</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only knowledge</td>
<td>47</td>
<td>70</td>
</tr>
<tr>
<td>Mostly knowledge but some money and connections</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>About half and half</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Mostly money</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Only money</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>N=</td>
<td>286</td>
<td>309</td>
</tr>
</tbody>
</table>

Simultaneously, it is very significant that the vast majority of parents do not feel that they have been treated poorly because of an inability to pay. 3% in Tbilisi and less than 0.5% of parents in Zestafony report that they have suffered in some way because of an inability to pay either bribes directly to teachers or other kinds of formal or informal payments to schools.

Rent-seeking payments for grades appear to be demand-driven. Payments are made by those who want to avoid work and have the money to pay, but can be avoided by those who either do not want to work or lack the ability to get higher grades. Differences in demand likely explain why payments appear more prevalent in Tbilisi than in Zestafony (Table 2). Parents in Tbilisi have greater effective demand in that they are both wealthier and are more likely to seek higher education for their children.
C. School Infrastructure

The fiscal decline described above has led to a dramatic decline in the conditions of Georgian school facilities. In 1997, 18% of school buildings were in dangerous or unusable condition, while a further 55% needed significant capital repairs (Perkins 1998). Maintenance personnel have been largely or entirely eliminated.24

Parents in our survey felt that heating was the most problematic area of school infrastructure. 30% and 45% of parents in Tbilisi and Zestafony, respectively, reported that heat was either poorly provided or nonexistent in their children’s school. An English teacher in Zestafony reported that only classrooms for lower grades are heated with wood stoves. The same teacher reported that about 10 days out of the year, the classrooms are simply “too cold to study”—a situation that was confirmed in interviews with parents. A school director in Zestafony reported that about seven percent of students regularly miss school during winter because of problems with heating. five percent of parents in Zestafony and ten percent in Tbilisi reported that they had kept their children home from school because schools were too cold. Helen Shahriari (1999) reported that “most schools” in Georgia reduced the class hour from 45 minutes to 30 or 35 minutes during the winter months.

There are also severe problems in electricity provision in many schools. Officials in the Zestafony electricity office reported that one general school of seven did not have any electricity at all. Outside of the city, “35%” don’t have electricity. Generally, parents and officials interviewed often felt that electricity was not so important for schools since they operate in the daytime. A Tbilisi preschool teacher told us that it is only a problem in winter when it does not get light until later. The quality of infrastructure in wealthier Tbilisi is significantly better than it is in much poorer Zestafony25 particularly with respect to heat, electricity and water provision.

24 The head of the Department of Education in Zestafony rayon reported that they had ceased hiring janitors. In other cases, the situation has been less severe. Helen Shahriari (1999) reported that “in an incomplete secondary school in Tbilisi with over 500 students only the positions of cleaners, five of them, and two guards were kept. The positions of carpenter, yard cleaner, sanitary unit technician, and electrician were abolished.”
Partially in reaction to this fiscal crisis, school directors must rely extensively on voluntary parental contributions for school upkeep. An overwhelming percentage of parents with children under 19 in school (82% in Tbilisi, 86% in Zestafony) reports paying some kind of general collection at their children’s school in the previous year. 67% in Tbilisi and 76% in Zestafony report paying whenever asked. Parents reported paying on average 2.5 Laris per month (25 Laris total for the year) in Zestafony and 5.5 Laris per month (55 Laris for the year) in Tbilisi. This money is used for various purposes, including specific items of capital expenditure, and heat during winter months. In interviews parents did not express reservations about the use to which these funds were put. Some parents said they were not sure for what, exactly, such funds were used, but they did express confidence that they were used for basic needs, particularly heating and minor repairs (of windows and door, for example).

Stratification.

Within both cities, there is evidence of mild, market-based stratification in access to better school facilities. Access to better infrastructure is partially contingent on being wealthy enough to pay for private schools with better facilities. Attendance in private school is robustly correlated with greater satisfaction in the school infrastructure in both Tbilisi and Zestafony. As a result, in both Tbilisi and Zestafony satisfaction with school infrastructure is negatively correlated with our poverty variable. At the same

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25 Questions on quality of education and facilities were asked concerning a maximum of two children—the oldest and youngest child in families of more than two children. Only a very small number of households (25) reported that the child went to a different school than the oldest child—thus implying that the scores on infrastructure quality questions would be the same for both children. Therefore, we excluded for these purposes the small number of cases in which children went to different schools, leaving an N of 582 for these questions (those who had one child, or who answered these questions for two children who attend the same school).

26 The evidence suggests that such payments are overwhelmingly voluntary. Some teachers reported that they did not ask payments from parents who they knew could not afford to pay. Under 2% of respondents reported that they were treated poorly because of an inability to give money to the school.

27 The correlation is .185 with a statistical significance of less than .01. We constructed a single measure for satisfaction in school infrastructure by adding scores for satisfaction in heat, water, electricity, sanitation, and cafeteria—“0” that there are no such facilities; “3” indicates positive view of such facilities. A total score of 0 would mean that the parents’ child’s school had none of the five facilities while a score of 15 indicates high satisfaction with every type of facility. Private schools cost on average 404 Laris per year in Tbilisi (20% of the average reported total income in the capital) and 225 Laris per year in Zestafony (54% of the average reported city income)
time, this stratification affects a small share of the population – just seven percent and nine percent of parents in Zestafony and Tbilisi send their children to private school. The vast majority of parents send their children to the nearest school.

D. Teaching

Access to the classroom, quality infrastructure, or meritocratically determined grades tell us little about the quality of teaching. In fact, the quality of teaching appears to be a significant problem in Georgia. About 60% of parents interviewed felt that it is important to seek out extra tutoring for their children—suggesting that they found the existing education provided in schools to be of unsatisfactory quality.

Stratification is obviously much more likely to be reflected in the quality of education provided. Unfortunately, measuring differences in access to good education using large-n surveys of parents is significantly more difficult than measuring access to water or heat. Parents often have little information about what goes on in the classroom and little basis to judge the quality of instruction. Moreover, variations in the ‘demand’ for education are significantly greater than they are for water or heat. For some parents, it is important that their children pass university entrance exams while for others it is enough that someone takes their children off their hands for part of the day. For these reasons, it can be difficult to interpret responses to questions about quality.

We thus used a variety of more and less subjective measures to understand the quality of education provided to parents. We looked at four views of teaching: parental attitudes towards their childrens’ teachers, class size, and the incidence of tutoring.

The survey measured quality of teaching in three ways. First, we examined parental perceptions of how well teachers relate to their students and whether or not teachers explain subjects well. Second, we examined class size. Finally, we asked about the incidence of extra tutoring to compensate for perceived inadequacies in the system of general education.

28 However, in Zestafony, this relationship is not statistically significant.
Parents in Zestafony assess the quality of teaching received by their children more positively than do parents in Tbilisi. This is somewhat surprising since the general availability of well-qualified teachers is greater in Tbilisi. However, it is difficult to know how to interpret these results. They may reflect tighter social ties between teachers and parents in the smaller community of Zestafony and a greater desire by Zestafony parents not to criticize teachers they know personally.

Another measure of teaching quality is class size. It is generally accepted that – all other things being equal – students learn better in smaller classes. Average class size of the youngest and oldest children is lower in Zestafony (25) than in Tbilisi (28). This is not surprising, given Zestafony’s lower population density. There seems to be a slight degree of income/consumption stratification in class size. Thus in both cities, class size in private schools (16 in Zestafony; 10 in Tbilisi) is significantly lower than in public schools (26 in Zestafony, 30 in Tbilisi). Given the small number—7-9%—who attend private school, this difference does not have a significant impact on the population as a whole. Nonetheless, in Tbilisi those with lowest reported “poverty” (income/consumption) report an average class size (26) somewhat lower than those reporting higher poverty (30). No such difference was found in Zestafony.

Perhaps the most stratified feature of the system of general education is access to private tutoring. While private tutoring existed in the Soviet era, it has become much more widespread in the post-Soviet period, and it has become an important source of income for many teachers, particularly teachers of foreign languages and math—subjects that are in higher demand (Shahariari 1999). Thirty percent of parents in both cities reported hiring a tutor for either their youngest or oldest child. Tutoring among younger children is used to provide extra assistance in certain topics. A primary school teacher in Tbilisi also reported holding extra classes after school for certain students. For older students tutoring is widely employed to prepare for the university entrance exam. Such tutoring is often extremely intensive and may replace public school for almost two years. One family in Zestafony reported that their eldest son had tutoring for 20 months before the entrance exam in four topics (English, German, Math and Georgian) three to four times a week, reporting that “He rarely shows up at public school even though he is enrolled.”
In contrast to bribes for grades—which involve bureaucratic limitations on supply—private tutoring comes close to a pure market logic. On the supply side, there is relatively open entry for those who want to provide tutoring. Pricing is determined by supply and demand. On the demand side, access to tutoring appears to be determined by the desire for better education and the ability to pay for it. Parents with higher education (who are presumably more likely to think that education is important for their children) are more likely in both Tbilisi and Zestafony to provide tutoring to one of their children than those parents with lower education.

Figure 7:

Table 3:

<table>
<thead>
<tr>
<th>Access to Tutoring Among Families with School-Aged Children (oldest and youngest child)</th>
<th>Tbilisi</th>
<th>Zestafony</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received tutoring</td>
<td>30%</td>
<td>32%</td>
</tr>
<tr>
<td>Did not receive because unable to pay</td>
<td>32%</td>
<td>30%</td>
</tr>
<tr>
<td>Don't need tutoring</td>
<td>38%</td>
<td>39%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>N=</td>
<td>293</td>
<td>314</td>
</tr>
</tbody>
</table>
There is a strong correlation between consumption/income (combined into a “poverty” score) and the hiring of tutors. As we see in figure 8 below, about 41% of those with the lowest poverty score in both cities report hiring tutors – as compared to about 14% of those with the highest poverty score. This correlation gives further evidence of the marketized character of tutoring.

These results are not surprising, although the cost of tutoring varies dramatically – ranging from a few Lari a month for extra attention after school for younger children to the equivalent of a year’s income for tutoring for university entrance. In Tbilisi, the top third of parents paying the most for tutoring spent between 47% and 270% of the average annual income in the city. In Zestafony, the top third spent between 80% and 630% of the average annual income in the city. The higher costs are overwhelmingly spent on tutoring preparation for university entrance exams. Thus, a family in Zestafony reported spending 1,200 Lari for a year’s worth of tutoring in four classes – while a mother in Tbilisi reported spending the same for
English lessons 2 times week for her daughter in preparation for university entrance.\textsuperscript{29} Such costs are clearly beyond the reach of a great many families. In both cities nearly half of those respondents who felt that tutoring was necessary were unable to provide tutoring to their children because of an inability to pay.

E. Conclusion

More than any other sector in our study, education combines multiple logics and regimes of access. Access to the classroom remains bureaucratic universalistic. Thus, the overwhelming majority of parents send their children to the school nearest them. Even preschool, which does exclude some poorer families, remains accessible to the vast majority of parents. At the same time, grading includes important elements of rent-seeking. Finally, tutoring is almost completely marketized. Overall then, the Georgian education system creates serious problems of access.

V. CONCLUSION: STATE STRENGTH AND “REFORM BY DEFAULT”

This report has sought to move discussion of social reform beyond an exclusive focus on questions of efficiency, need-based targeting, and the search for greater cost-recovery that have dominated most of the discussions in the last ten years. Such analyses have often relied on a “deficit model” approach that analyzes social welfare regimes in terms of what they lack (“reform” vs. “no reform”, efficient versus inefficient institutions). This approach obscures the wide array of social welfare institutions emerging from the collapse of communism. The provision of basic water, heat, and education in Georgia now involves a complex mixture of universalism, bureaucratic logics, rent-seeking and markets that cannot be mapped onto measures for efficiency or commitment to reform in a simple way.

\textsuperscript{29} It should be noted that doing well on the university entrance exam is far from the only way of gaining university entrance. Although the question falls outside the scope of the study, in our interviews, we heard numerous reports of bribes for university entrance. At the same time, as with grades in general school, respondents felt that it was possible to gain entrance to university on the basis of merit alone.
Our goal has been to introduce the kind of nuanced understanding of social welfare institutions in the post-Soviet collapse environment that policymakers and scholars need to consider.

This research has also given us a better understanding of very different paths to “marketization” or reform of the social sphere, and their relationships to state strength. Research on post-socialist transformation of social welfare regimes has frequently assumed that the divergence in reform trajectories can be understood largely from the perspective of interest groups that pose impediments or obstacles to processes of reform. The underlying assumption is that strong states are able to carry out reform, and that weak states tend to be co-opted by short-term resistance to reform.

The reason for “marketization” however cannot always be reliably traced to the strength of reformers, or to a strong commitment to reform. The capacity of a state like Russia to resist reform in a highly inefficient and expensive domain of state social service delivery like heat, for example, can be traced to relative strength of the state apparatus. In other words, the Russian state can resist reform because it has the capacity to mobilize resources—in this case the material resources required for need fulfillment (gas for heat boilers)—required to run state-subsidized or financed systems of welfare provisioning.

In Georgia, by contrast, a relatively “marketized” situation in many domains such as heat or tutoring is obviously not so much the product of the reformist orientation of a strong state but a product of the profound weakness of the state. It is the product of the state’s simple fiscal incapacity to maintain educational and heating systems. In short, we might say that the Georgian case represents an example of reform and marketization as a last option—a “reform by default.”

One important policy implication of this research, then, concerns the need to think more carefully about the plausible alternatives to inefficient systems of provisioning that were characteristic of Soviet social welfare institutions. For the most part, it has been assumed that “marketization” and “reform” can only lead to more efficient regimes of social provisioning. However, it is equally plausible that marketization can lead to profound disenfranchisement.
In suggesting this emphasis, we do not mean to take the side of those who criticize efforts at reform in a blanket manner. The simple fact of the matter is that Georgia—like much of the developing world—is far too poor to allow inefficient and wasteful systems of social provisioning to persist. However, it is not always obvious that the likely alternatives to inefficient systems are more efficient marketized systems of social service delivery (Way 2002). Eliminating an inefficient system of universalism is much easier than creating a viable new system. Indeed, it seems entirely plausible that in an environment like Georgia’s, characterized by deep of state weakness and fiscal crisis, further reform—metering and marketization of water, for example, or introduction of school choice—would only lead to a broad disintegration of the remnants of universalistic regimes of access in post-Soviet Georgia and further disenfranchisement of vulnerable populations.
BIBLIOGRAPHY:


