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Georgia
Urbanization Review

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Toward an Urban Sector Strategy
Georgia's Evolving Urban System and its Challenges

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List of Abbreviations

ABE	Apartment Building Extension
EBRD	European Bank of Reconstruction and Development
ECA	Europe and Central Asia
EU	European Union
GAO	Government Accountability Office
GDP	Gross Domestic Product
GEL	Georgian Lari
GIS	Geographical Information System
HOA	Homeownership Association
IDP	Internally Displaced Person
LSG	Local Self-government
MCG	Millennium Challenge Georgia
OECD	Organization for Economic Co-operation and Development
PPP	Public-Private Partnership
UR	Urbanization Review
USD	United States Dollars
USSR	Union of Soviet Socialist Republics
WDI	World Development Indicators

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Georgia: An Urban Snapshot	
Total Population:	4.515 million (2012)
Main Economic Sectors:	Services 67.2% (Trade, Hotel & Restaurant Services 19.1% of GDP)
Urban Growth Rate:	0.9% annual (2012)
Urbanization Level:	53% of population in urban areas
Population Density:	64 people/km^2
Number of Cities:	62 cities and 48 townships
Capital City:	Tbilisi
Other Key Cities:	Batumi, Kutaisi, Rustavi, Gori, and Poti
Population of Capital City (% of total population):	1.47 million (33% of total pop.)

Executive Summary

Overview

This Review analyzes the profile, trends and challenges of Georgia's changing urban landscape since independence in 1991 and provides policy suggestions to facilitate the economic transition of the country through its cities[1]. In its analysis and subsequent recomendations on policy interventions, this report draws on a program of diagnostics called the 'Urbanization Review' (UR).[2] The UR diagnostic is based on three main pillars of urban development which have emerged as key areas of policy engagement for successful cities. These are: a) planning—charting a course for cities by setting the terms of urbanization, especially policies for using urban land and expanding basic infrastructure and public services; b) connecting—physically linking people to jobs, and businesses to markets; and c) financing—raising and leveraging up-front capital to meet the increasing demand for infrastructure and services.

The Georgia Urbanization Review finds that the country continues to face challenges arising from its dual transition from a planned to a market economy and from a rural to an urban economy. The transition from a planned to a market economy was accompanied by an economic decline and increasing regional disparities. This was exacerbated by the 2008 financial crisis. As the economy transitioned from a planned to a market economy, Georgia's economy also became more urbanized and there are strong indications that building on the urban economy can assist Georgia out of its current economic malaise. However, growing regional disparities emerge as a challenge of this transition from a rural to an urban economy.

[1] The Review has been enriched through extensive discussions with the government of Georgia, local academia, and various development partners involved in the country's urban sector. It also builds on a strong portfolio of World Bank operations and knowledge development for the government.

[2] The World Bank, together with SECO and Cities Alliance, has carried out Urbanization Reviews in 12 countries across 4 continents to help mayors and other policy makers identify the bottlenecks of urbanization and to propose policy options to tackle such challenges. The lessons from these diagnostics were distilled into a practical framework for sustainable organization around three pillars: planning, connecting, financing. This was distilled into a book - *Planning, Connecting and Financing Cities–Now: Priorities for City Leaders* (2013). More than 10 countries have so far been reviewed across four continents.

The Review also finds that Georgia has successfully implemented reforms in each of the diagnostic pillars of urban development. Its land registration system is highly rated in the World Bank 'Doing Business' Surveys; its planning legislation is gradually moving away from its Soviet past; intergovernmental fiscal transfers are regular and transparent, and the government is in the process of financing several highway infrastructure projects to improve intercity connectivity and reduce regional disparities.

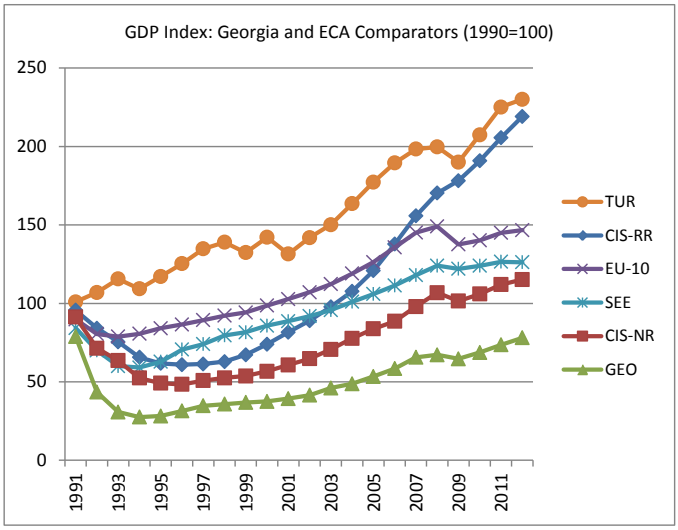
In moving forward, the Review recommends that Georgia focus on: a) developing a national urban strategy that recognizes the contribution of each city to the overall economy, i.e. a 'systems of cities' approach that can assist in reducing regional disparities; b) assisting cities to develop urban plans – including local economic development plans, c) reforming building and planning codes; and d) assisting cities in improving their local governance and finances.

The Urban Challenge

The Georgia Urbanization Review finds that the country continues to face challenges arising from its dual transition from a planned to a market economy and from a rural to an urban economy. The transition from a planned to a market economy was accompanied by an economic decline and increasing regional disparities. This was exacerbated by the 2008 financial crisis. At the same time, the economy has become more urbanized and there are strong indications that building on the urban economy can assist Georgia out of its current economic malaise. However, as the economy urbanized, regional disparities have worsened. Consequently, as it supports a growing urban economy, the Government should also carefully address the emerging regional disparities.

Figure 1: Real GDP, Georgia and ECA Countries

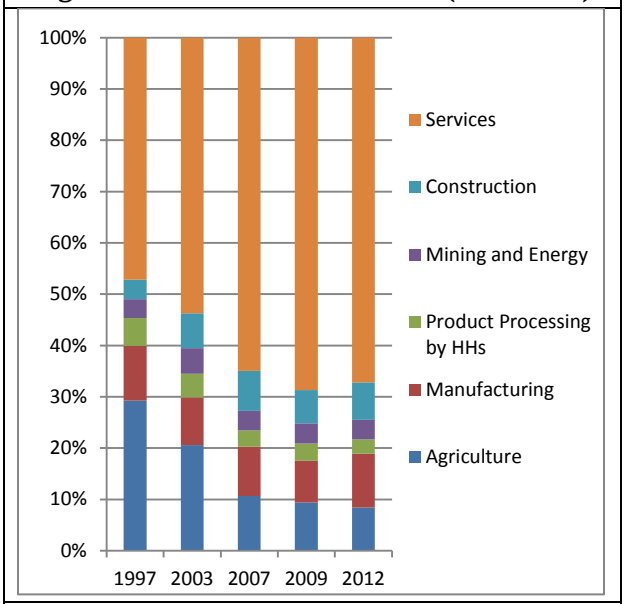
(Index, 1990=100)



Source: From World Bank, 2013. *Georgia Rising*, pg. 3.

Georgia has faced a difficult economic transition since independence. Prior to the fall of the Soviet Union, Georgia stood as one of its most prosperous republics, boasting a per capita income of over USD 6,000. But the transition towards a market economy in the years following independence saw its per capita income plummet to less than USD 2,000. Georgia's fall from a leading to lagging economy is clear when comparing its economic performance since independence to neighboring countries and regions. Although the comparators in the region also faced sharp declines in real GDP in the early nineties, their GDP growth rates have converged and GDP figures have caught up or exceeded 1990 levels. However, Georgia's GDP remains at levels considerably lower than that of its neighbors' (see Figure 1), with still only 78 percent of the GDP level in 1990 (World Bank 2013a).

Figure 2: Sectoral Share of GDP (1997-2012)



Source: World Bank 2013, *Georgia Rising*

At the same time, Georgia's economy has become more urbanized and there are indications that economic recovery can be led by its cities. Already 54 percent of the country's population lives in cities. The Tbilisi region is home to almost 50 percent of urban dwellers, and responsible for over 50 percent of national production. Yet, there is still significant potential to further tap economies of scale and agglomeration that accompany urbanization.

However, two key regional disparities – between urban and rural areas and between Tbilisi and the remaining cities – have emerged as the economy urbanized. First, although agricultural contribution to GDP has shrunk from about 30 percent in 1997 to less than 10 percent in 2012 (see Figure 2), it still accounts for about 50 percent of national employment, primarily for subsistence farmers who also live in extreme poverty. About 64 percent of the country's poor now live in rural areas, despite the fact that rural areas comprise less than 50 percent of Georgia's total population. Second, the primacy of Tbilisi is evident from the fact that it accounts for about 50 percent of national population and GDP, and also has the highest average population density countrywide with 15,000 people per km^2. This is comparable to cities such as Rio de Janeiro, Brazil and Bilbao, Spain.[3] The cities of Kutaisi and Rustavi have much lower average densities of around 1,000 people per km^2.

The seemingly disproportionate concentration of economic activity and population is not unique to Georgia, but in Georgia this spatial dispersion manifests in regional disparities in basic services. In fact, economic concentration characterizes the world economy: only 1.5 percent of global land produces half the world's GDP (World Bank 2013c: 24; World Bank 2008: 96). In countries like Japan and France, 30-40 percent of GDP is concentrated in the capital cities (World Bank 2013c). What differentiates these countries from Georgia is their success in achieving convergence among sub-national regions in access to basic infrastructure and social services. In Georgia, in contrast, access to basic services mirrors the country's income disparity – for example, only 4 percent of rural people are connected to a piped sewage network compared to 78 percent of their urban counterparts. Furthermore, Georgia's current market economy, in the context of spatial dispersion of mono-cities inherited from the Soviet era, has prevented market forces from concentrating adequately. Together, these present a unique challenge to closing disparities during Georgia's time of transition.

As Georgia moves forward it will need to find the correct policy mix to ensure that its cities maximize their economic potential while, at the same time, achieving convergence amongst sub-national regions in their access to basic infrastructure and social services. International experience from both developed and

[3] Demographia, World Urban Areas, March 2013.

emerging economies clearly shows that urbanization and agglomerations are central to economic growth, and each city has its role to play. Urbanization policies for Georgia should therefore set priorities appropriate to their levels of urbanization by adopting a 'system of cities' approach (World Bank 2009). This approach recognizes that cities and regions, ranging from those in incipient stages to advanced stages of urbanization, can complement each other's production systems through a coherent urban strategy. For cities to be able to lead this process efficiently, efforts will also be required along the three pillars discussed earlier – planning, connecting, and financing – to accelerate Georgia's pace of economic growth, and to help it regain its status as an economic leader in the region.

The Policy Response: Addressing planning, connecting and financing

Planning - Recalibrating markets and planning for vibrant cities.

Streamlined administrative procedure for property registration and the successful one-stop-shop program for planning applications, emerges as Georgia's success story in the planning pillar. But there is room for improvement in land management systems, ensuring coordinated urban development and infrastructure provision across the decentralized levels of government, and improvement in housing and infrastructure quality.

Why Planning is Important

Cities thrive when people and firms can benefit from being close together, creating agglomeration economies. But this beneficial transformation can be thwarted by policies that stymie development. Two key obstacles are inefficiency in land use and lack of co-ordination between land use and infrastructure planning. Three sets of policies are required to overcome these obstacles:

a) develop transparent and systematic land management including property registration, land valuation, and land use to respond to the demand for urban land as cities grow;
b) coordinate land management with infrastructure, planning and building codes, natural resources and hazard risks; and
c) leverage markets and regulation to ensure the adequate expansion of basic services.

Georgia has made significant progress in streamlining administrative procedures, and ranks number one across all 185 economies surveyed in terms of registering property, and number three in terms of dealing with construction permits (World Bank, 'Doing Business' 2013). Georgia's property registration procedure requires only one step compared to an average of six steps in ECA countries and five in OECD countries. Likewise, the city of Tbilisi has implemented a "single window" mechanism for residents to submit planning applications, which allows applicants to submit applications to a single place, obviating potential delays or the hassle of having to interact with multiple agencies.

A national urban strategy is needed to exploit economic potential of urbanization and to strengthen coordination for urban development. A major planning deficiency is Georgia's lack of a long-term strategy for urban development where the contribution of each city to the nation is maximized based on its comparative and competitive advantages. A closer examination of the economy of each city reveals distinct differences and inherent advantages which, if exploited, could maximize its potential for development, contribute to the overall economy, and reduce inter-city and regional disparities. For example, Tbilisi specializes in services; Batumi and Kutaisi are oriented towards trade and markets; and

Rustavi, Gori, Porti and Zugdidi have heavy industries (including construction, transport and communications).

Weak standards and lack of enforcement of regulations in the housing sector are exacerbating concerns on its safety, quality, and aesthetics. This is particularly problematic as over 80 percent of Georgia's current housing stock with a lifespan of 40-50 years was produced in the Soviet era, which is now in need of serious maintenance and structural retrofits. Much of the housing stock from the Soviet era is in need of urgent retrofit or reconstruction, and building construction codes need to be upgraded and enforced. In addition, building systematic mechanisms for tracking information on risk and making it publicly available can help. Making maps that identify sensitive areas easily accessible, e.g. flood risk areas or fault lines, would make property owners and developers more aware of risks and allow them to take preventive measures as they design, build and maintain the buildings.[4]

Connecting - Reorienting the direction of trade among cities.

Georgia is attempting to re-orient its road networks towards its new emerging trade partners, as a way to integrate lagging regions into the broader economy. However, maintenance costs emerge as a key constraint in the full realization of this strategy.

Why Connecting Is Important

A city's external and internal connections bear heavily on its future. Where cities and city neighborhoods are disconnected, labor and product markets are disconnected. City and national leaders can take the following steps in improving connectivity, by:

a) valuing the city's external and internal links;
b) coordinating amongst transport options and land use; and
c) leveraging investments for highest returns.

Georgia is shifting away from its dependence on Russia as the dominant import and export market. Today, the country has an increasingly diverse set of trade partners at various distances and directions from its borders which extends far beyond its legacy of a north-south trade during the Soviet era.

Georgia has responded by investing in several roads and highway projects to capitalize on these shifts. The key intervention at the national level is the rehabilitation of the East-West highway, which will connect the ports of Batumi and Poti with neighboring countries. The investment in the East-West highway is also positively impacting urbanization and, therefore, reducing regional disparities. Recent studies have found that municipalities that are within 20km to the East-West highway are more urbanized, more dense, and growing at a faster pace than other regions in the country. Investment in secondary and local roads connecting lagging regions such as Kakheti, Imereti and Samtskhe-Javahketi to Tbilisi will also assist in reducing regional disparities.

However, maintenance costs are emerging as a key constraint in addressing connectivity. While the cost was not fully considered in Soviet times because of the State's subsidization of railways and roads across widely dispersed cities, Georgia today grapples with the high cost of funding the expansion, rehabilitation and maintenance of these roads and highways. In 2010, the government allocated only GEL 28.6 million for routine road maintenance as compared to an estimated requirement of GEL 42.7 million. Similarly,

[4] World Bank (2010). Natural Hazards Unnatural Disasters: the economics of effective prevention".

the government allocation for periodic maintenance in 2010 was GEL 3.1 million, compared to an estimated requirement of GEL 123.1 million. (World Bank 2012c: 84).

Financing - Restructuring municipal finance and developing a framework for public-private partnerships.

Georgia has a reasonable intergovernmental fiscal framework, with spending focused on the equalization of living standards among local self-governments (LSGs). However, stronger institutions are required to implement and manage public investments. In addition, Georgia needs to leverage private sector financing through public-private partnerships to capitalize on benefits that such relationships may bring to city development.

Unlike many other former Soviet republics, Georgia has substantially altered the structure of its subnational governments, and has paved the way for a smoother, more equal, and more transparent process for intergovernmental transfers; however, municipal own-source revenues need to be improved. The majority of LSGs' revenues come through equalization grants from the central government, which derives its revenue from five tax sources. Equalization grants are intended to enable different jurisdictions to achieve reasonably comparable levels of local taxation (Shah 2013: 216). These grants are an essential component of Georgia's efforts to move towards improved subnational financing, which focuses on decentralization and encourages local autonomy through transparent intergovernmental transfers. While transfers help smooth differences between municipalities in the short term, municipalities also need to develop and harness their own sources of revenue as Georgia continues its transition away from a planned economy.

Why Financing is Important

Building modern cities and developing connective infrastructure will need additional financing for both the basic services and infrastructure that make planning and connecting possible. Limited expenditures for roads, municipal services and infrastructure, for example, highlight Georgia's need to close the gap between its own resources and investment requirements. In order to close this gap, cities have two mechanisms at their disposal: 1) securing cash flow through user fees and taxes, and 2) borrowing from the public or private sectors.

Although a good framework for intergovernmental fiscal relations is in place, stronger institutions are needed to implement and manage public investments. While priority investment needs have been identified well and investment decisions at the national and regional levels appear to be sound, the institutional set-up for public investment management at the LSG levels still requires significant improvement, including human resources development (e.g. establishing minimum qualifications of municipal officials, job description, competitive selection, incentives-oriented career development, etc.), accountability, improved governance, and community participation.

Finally, Georgia lacks a robust legal framework for private participation, which is essential for infrastructure development and municipal service delivery. Rules for coordination across administrative units and between public and private investments are unclear. Out of 33 transition countries rated by the European Bank of Reconstruction and Development (EBRD) on the quality of PPP legislation, Georgia ranked second to last, placing the country squarely in the "low compliance" and "very low effectiveness" categories (EBRD 2012b). The legal framework under which PPPs fall is the Georgian law "On the

Procedure for Granting Concessions to Foreign Countries and Companies," a law which was adopted in 1994 and has not been revised since.

Moving Forward:

Georgia needs to exploit its geographical advantage and become the entry point for international investments in the region. To do this, Georgia's policymakers need to encourage urbanization, allow market forces to strengthen economic concentration, ensure that basic services are accessible to all across the national landscape and reduce regional disparities.

As Georgia's policymakers move forward in implementing this agenda, the report recommends focusing on the following areas of engagement:

- First, an urban strategy should be developed, bearing in mind the current spatial layout of settlements and their relationship to their peripheries. A 'systems of cities' approach which recognizes that cities, from those in incipient stages to those in advanced stages of urbanization, can complement each other's production systems would be particularly useful.
- Second, the 'systems of cities' approach by extension, also acts as an argument for a strong focus on examining the economic potential of the different cities, based on their existing patterns and inherent advantages. For example, supporting Tbilisi's service economy, strengthening trade and market services in Batumi, Poti, and Kutaisi, and building on the strong industrial sectors in Rustavi, Gori, Zestafoni, and Zugdidi.
- Third, the strategy should focus on planning for land use management, particularly on how existing and planned laws and codes should and could be implemented.
- Fourth, examining municipal institutions from the starting point of municipal functions and financing emerges as a key area of intervention. Ensuring a sound public-private partnership framework particularly with respect to infrastructure development is also a key.

Addressing these issues will enable policymakers to better understand policy priorities which include incentives, regulations, and investments.

Structure of the report:

This report starts by reviewing the state of Georgia's economy and demographics since independence in Chapter 1, provides a description of the urbanization process in Georgia since its independence and the changes it has undergone in the transition process. It highlights the regional differences in growth and demonstrating that the rural-to-urban transition is not yet complete. The report then introduces the Planning-Connecting-Financing framework as a springboard into an analysis of where Georgia stands with respect to these three pillars of sustainable urbanization. Chapter 2 discusses the challenges of planning, stressing how despite advances in doing business, streamlined systems of submitting planning applications, and the incorporation of urban development into strategic planning documents Georgia has yet to fully embrace necessary planning instruments. Chapter 3 focuses on the connecting pillar, and highlights how Georgia must balance trade between hardwired trade routes to Moscow and others, towards those that reflect the diverse set of trade partners to the east and west. In the final chapter, the

report focuses on the challenges that Georgia faces in terms of financing cities; the third pillar. This chapter draws attention toward the need to develop sources of own revenues, particularly through shared tax arrangements and private participation in urban infrastructure investment, in order to assist in achieving related planning and connecting goals.

Chapter 1 : An incomplete rural-urban transition – a bird's eye view of Georgia's urban system

Around the world, countries that have faced rapid urbanization have also experienced a dramatic spatial transformation. In most cases, such a transformation entails strong shifts in the spatial distribution of demographic, social, and economic characteristics. The 2009 World Development Report *Reshaping Economic Geography* argues that countries that have done well promoted transformations along three dimensions: higher densities in growing cities, shorter distances, and fewer divisions within the country and between the country and the rest of the world. Georgia is still in the midst of rural-urban transition, and challenges along the lines of density, distance, and divisions still remain. In what follows, this chapter provides a description of the urbanization process in Georgia since independence and the transformations it has undergone through its rural to urban transition.

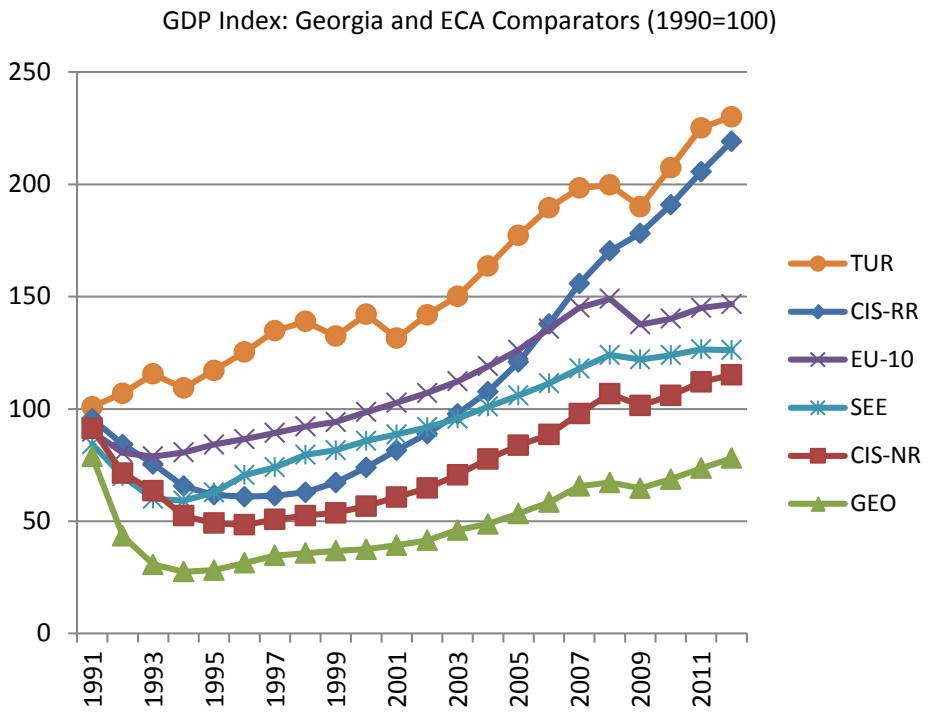
The end of the Soviet era marks a sharp decline in economic and population growth in Georgia.

Before the break-up of the USSR, Georgia had one of the highest GDP per capita among all republics, at over USD 6,000 per capita. Just a few years after independence, GDP per capita had collapsed to less than USD 2,000. In 1992, Georgia also exhibited the largest single year drop in GDP growth when the GDP growth rate fell by 45 percent (WDI 2012). This decline in GDP was due to civil unrest and ethno-political conflicts, combined with the abrupt disintegration of the Soviet economic system and hyperinflation. Since the mid-1990s both GDP and GDP per capita have started to grow, but the pace and scale have not yet allowed it to reach the pre-independence levels.

Georgia's fall from a leading to lagging economy is clear when comparing its economic performance since independence to neighboring countries and regions. Although the comparators in the region also faced sharp declines in real GDP in the early nineties, their GDP growth rates have converged and GDP figures have caught up or exceeded 1990 levels. However, Georgia's GDP remains at levels considerably lower than that of its neighbors' (see Figure 1.1), with still only 78 percent of the GDP level in 1990 (World Bank 2013a).

Figure 1.1: Real GDP, Georgia and ECA Countries

(Index, 1990=100)



Note: TUR (Turkey), CIS-RR (resource rich CIS countries), EU-10 (the ten Central and Eastern European countries that joined that EU in the 2000s), SEE (Southeastern European countries), CIS-NR (non-resource rich CIS countries), GEO (Georgia)
Source: From World Bank, 2013. *Georgia Rising*, pg. 3.

Before independence, Georgia was classified as an "agrarian-industrial" country, according to the Soviet economic terminology. An abrupt collapse of industry, which was strongly tied to enterprises all across the USSR, dramatically decreased industrial share in the national economy in the first years after independence. In the meantime, agriculture, despite also contracting but at much lower scale than industry, significantly increased its share in the national GDP.

The collapse of particular manufacturing branches and enterprises and reduced industrial volumes of the remaining plants catastrophically worsened the socio-economic conditions in industrial centers. The urban population either emigrated or tried, with limited success, to establish other businesses. From 1990-2000, the number of those employed decreased 37 percent, from 2,763,300 to 1,732,700 (Geography of Georgia 2003: 78). As a result, some cities and towns, especially those with single (mono) industries (e.g. Rustavi, Zestafoni, Tkibuli, Chiatura) shrunk, losing nearly one third of their population. A partial industrial rebound starting in 2005 somewhat reversed this process but did not fully compensate for previous population, employment and income losses.

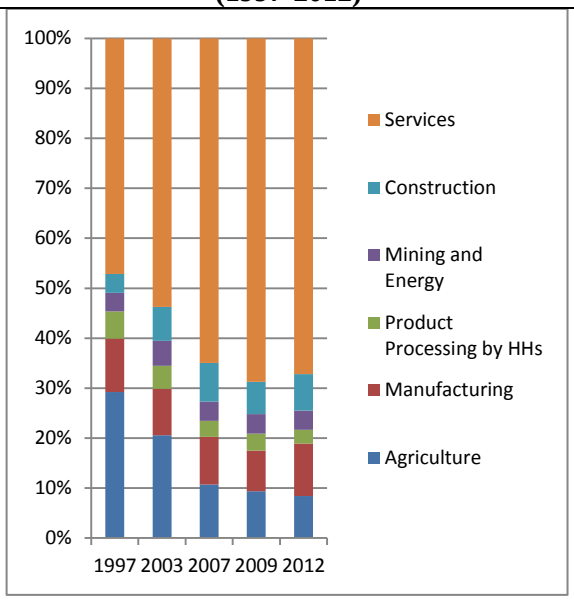
Mass privatization of formerly collective agricultural land in the 1990s required that the land be kept for agricultural use. However, in the following years, especially after 2004, the share of agriculture's contribution to GDP gradually decreased, in spite of keeping up and even slightly increasing absolute volumes of production (Figure 1.2). This occurred as a result of the more rapid recovery of industries,

and, especially the growth of the service sector, like banking, telecommunications, energy, tourism, construction, community services, as well as the relative growth of public services – such as education, healthcare and public administration. Capital inflows from foreign direct investment and local private investments into industry and other non-tradable sectors bolstered the services industry while agriculture saw relatively little capital investment (Geostat 2012).

The current composition of GDP reflects this reduction in the share of agriculture in relation to the growth of services and the recovery of manufacturing activities. From 1997 to 2012, services grew from less than one-half of GDP to two-thirds. Meanwhile, agriculture contracted significantly, from nearly 30 percent of GDP to less than 10 percent (Figure 1.2). In 2011, compared to the world average and Russia, Georgia still had a higher share of agricultural GDP (8 percent versus 3 percent and 4 percent), and a lower industrial share (23 percent versus 27 percent and 37 percent). The share of value-added from the service sector is similar to the world average (67 compared to 70 percent) (WDI 2012). The strong performance of services is anchored by the trade, hotel and restaurant industry, which has consistently constituted roughly 30 percent of the service sector since 1997 (Figure 1.3). Slight declines in shares of transport and communications as well as public administration in recent years offer avenues for Georgia to focus on expanding such areas to encourage sustained GDP growth.

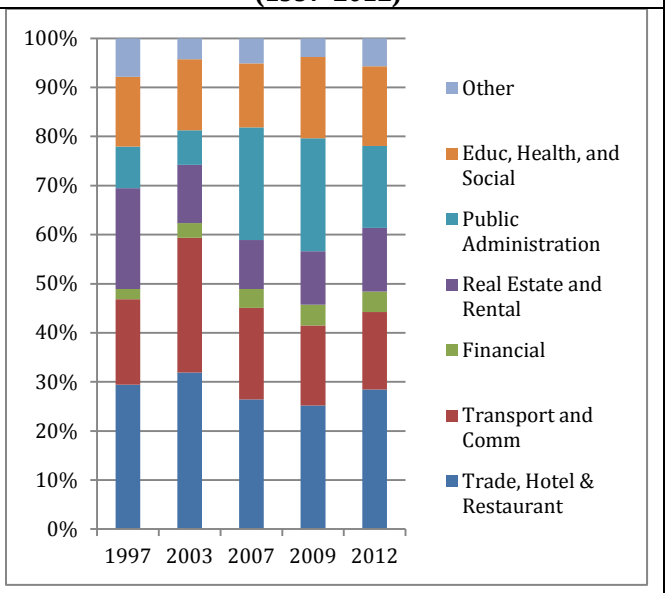
A comparison of employment and GDP at the national level reveals disparities stemming mostly from the agriculture sector. The economy is still dominated by rural employment, with unemployment strongly concentrated in urban areas (Rutkowski 2008). While agriculture's contribution to GDP has shrunk from about 30 percent in 1997 to less than 10 percent now, it still accounts for about 50 percent of national employment/underemployment, most of which is comprised of subsistence farmers living in extreme poverty.

Figure 1.2: Sectoral Share of GDP (1997-2012)



Source: World Bank 2013, *Georgia Rising*

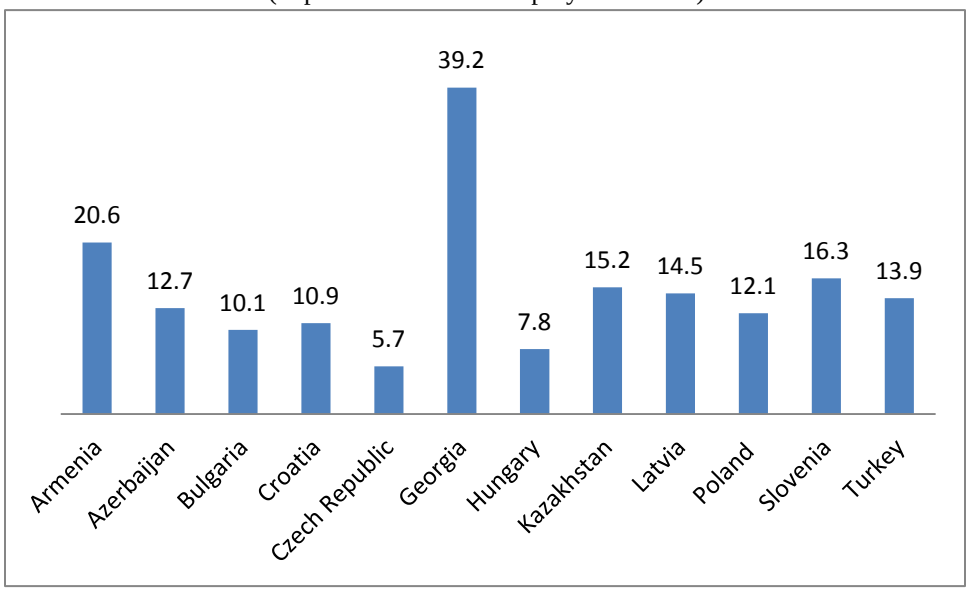
Figure 1.3: Composition of Service Sector (1997-2012)



Source: World Bank 2013, *Georgia Rising*

Unemployment in Georgia is a phenomenon that affects highly educated workers disproportionally. Unlike most ECA countries[5], where the majority of unemployed have low education levels, the dominant unemployed groups in Georgia are workers with tertiary (higher) education. Of the total number of unemployed, Georgia's highest educated comprise almost 40 percent, nearly double the percentage of Armenia, the country with the next highest (Figure 1.4). These figures point to an apparent skills mismatch in the labor market. Those with tertiary education levels are forced to take on low-skill jobs, leading to a wage penalty of as much as 25 percent for those who are highly educated (World Bank 2013: 47) and are forced to take sales jobs but have a college degree. This phenomenon also explains the "brain drain" afflicting Georgia, as the country's well-educated young population emigrates to better wage opportunities that match their skills.

Figure 1.4: Unemployed workers with tertiary education
(in percent of total unemployed workers)



Source: World Bank, 2013. *Georgia Rising*

Georgia's economic fall went hand in hand with dramatic decreases in population.

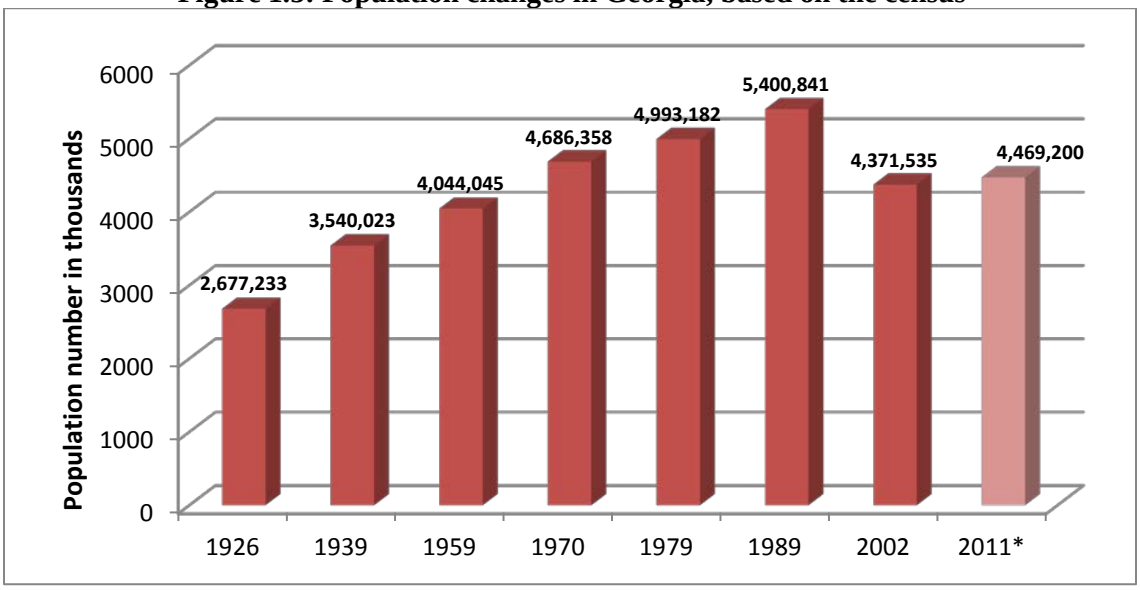
After 60 years of continued population growth, Georgia experienced a considerable population contraction after independence. Between the first (1926) and the last (1989) Soviet censuses (Figure 1.5), the population count doubled from 2.67 million to 5.4 million. Although hundreds of thousands of Georgians died during several turbulent events, such as during Stalin's repression and World War II, high natural growth rates and a positive migration balance led to a rise in population during the earlier Soviet era.

[5]European and Central Asian countries.

Between 1990 and 2005 Georgia lost 20 percent of its population, ranking it as the second highest population decrease in Europe after Serbia.[6] The population loss was largest between 1993 and 1997, when it dropped by almost 1 million people in just five years. Since the mid-2000s, population decline slowed before stabilizing at roughly 4.4 million people (Figure 1.5). However, today, total population numbers remain below 1970 figures, and population estimates for 2030 forecast that the population will continue to decline to 3.8 million.[7]

After the collapse of the USSR, Georgia's population loss was characterized by two distinct factors: the first is that the country faced a decline in natural population growth; the second is that large-scale out-migration was driven by a loss of skilled white-collar workers. The first factor, the decline in Georgia's natural population growth, began in the 1960s. Until then Georgia was the most populous country in the South Caucasus, and its capital Tbilisi was the region's largest city. In the 1960s, Georgia's birth rate dropped below 25 births per 1,000 people and its natural growth rate was below 20 births per 1,000 people.

Figure 1.5: Population changes in Georgia, based on the census



Note: The 2011 number is estimated. See Geostat 2011.
Source: The 2002 General Population Census of Georgia, Chapter 3. Tbilisi, Georgia, 2003.

The second important force that drove population decline after independence was the significant outmigration of its urban, white-collar workers. These workers were those who sought better economic opportunities as Georgia's economy declined as well as those who were ethnic minorities returning to their countries of origin. During Soviet times, the government guided location decisions of individuals and firms through policies that attempted to balance regional population by encouraging the young in densely or 'overpopulated' areas to relocate to industrial and economic centers in remote and under-populated locations across the USSR.

[6]Meladze, 2007: p. 117
[7]World Urbanization Prospects: The 2011 Revision, New York 2012

Despite a lack of precise migration data, it is estimated that net emigration exceeded one million between 1990 and 2006,[8] The main destination was Russia, with that 64.5 percent of Georgian emigrants, according to the 2002 census,[9] until the mid-2000s when rising political tensions and armed conflict in 2008 made migration between these two nations more difficult. Since then, the flow shifted mainly to the EU, Turkey and the US.

The patterns of migration and population decline observed in Georgia are common to other Eurasian cities. The dissolution of the Soviet Union led to massive repatriation as people were no longer tied to the industrial cities to which they had been forced to move. Russians made up the bulk of these migrants; 1.7 million Russians, or 14 percent of the total population residing in non-Slavic states, returned to Russia from 1990 to 1994 (World Bank 2012a). In general, however, most ethnicities saw negative net migration in the years leading up to the fall of the Soviet Union, with net migration leveling out or becoming positive by 1993 or 1994.

Box 1 – Defining Urban Areas in Georgia

Georgia, traditionally a rural country, made its transition to an urbanized nation in the second half of the 20th century when urban populations began to grow. Today, Georgia has a population of almost 4.5 million in an area of 69.7 thousand km.,² and for the last two decades has had an urbanization rate above 50 percent.

In Soviet times, the legal status of an urban settlement (city/town) was applied mainly according to two criteria – 1) having a population of at least 5,000, and 2) having less than 15 percent of workers in agricultural and other primary sectors, such as fishery, forestry, etc., but excluding mineral extraction.

Today, 'urban' and 'rural' are defined by the Georgian Law on Local Self-government (December 2005),[10] which still reflects the strong influence of the earlier Soviet legislation. The law distinguishes[11] between three types of settlements: villages, townships[12] and cities (or towns).[13] The law also states that a city must have at least 5,000 residents and an urban economy, and serve as an economic-cultural center. However, the city status can also be given to settlements with under 5,000 if they are self-governing entities or have an 'immediate perspective[14] of economic/population growth.' Townships (*'Daba'*, in Georgian), another type of urban settlement, should have at least 3,000 residents and accommodate industries, social services, healthcare networks and socio-cultural establishments that fulfill the functions of a local economic and cultural center.

[8] Sakartvelos geografia, 2003: 36-37; Meladze, 2007: 95
[9] Meladze, 2007: 100
[10] See http://www.parliament.ge/ [in Georgian].
[11] The 'Georgian Law on Local Self-government', 2005: Chapter 1, paragraph 1d.
[12] The term 'township' is used in this review to refer to the concept of 'Daba' [in Georgian], which is the same as the Russian term 'PGT' for *posyolok gorodskogo tipa,* or urban-type settlement
[13] There is no distinction between the terms 'city' and 'town' in the Georgian language; however, such a distinction is used in this review according to international practice.
[14] However, this perspective is not explained.

Based on these definitions, Georgia has 110 urban settlements[15] of which 62 have city status and 48 are townships. However, not all meet the population requirements: 10 cities (16 percent) have fewer than 5,000 people and 27 townships (56 percent) have fewer than 3,000 people. In these cases, they have gained urban settlement status because they are municipal administrative centers or are not considered agricultural economies. However, these urban settlements are not defined strictly by the population and sector requirements given in the law.

Population and economic activity is concentrated in Tbilisi.

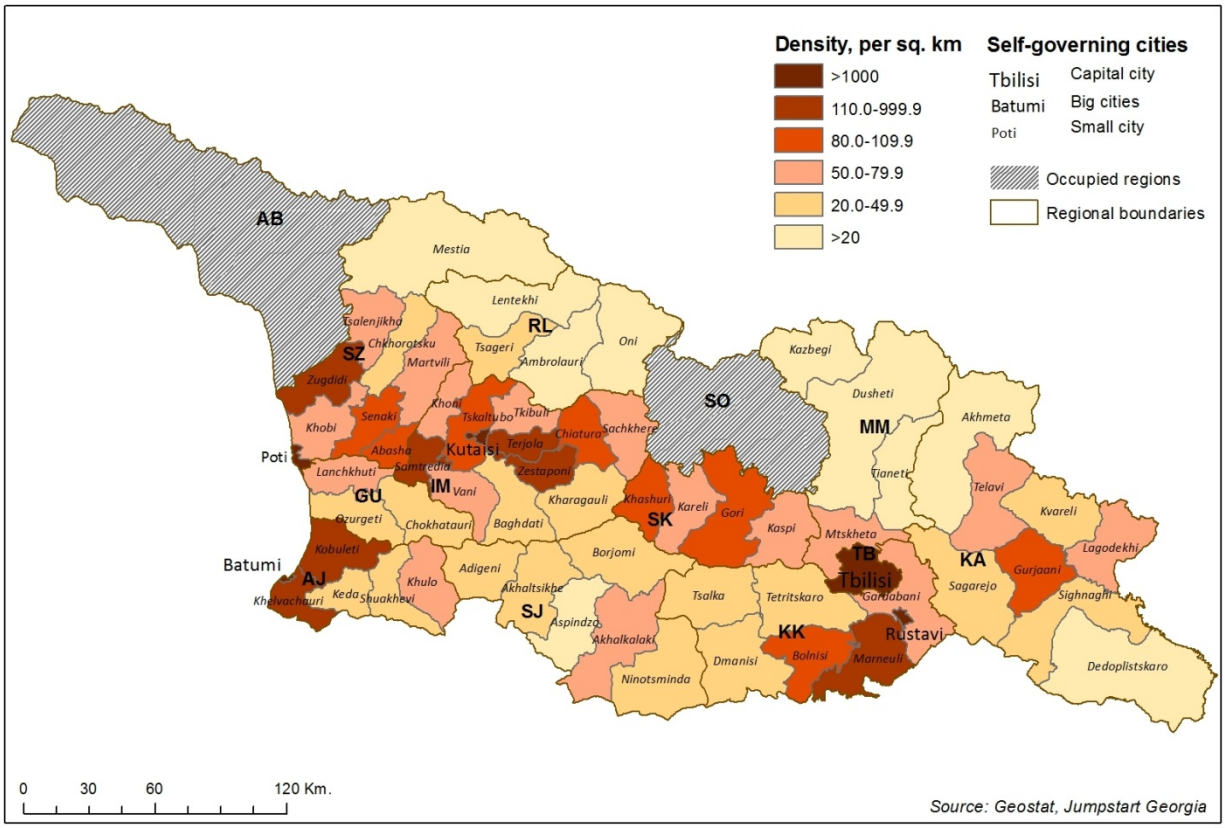
Today, the regional distribution of the population varies considerably across the country by the composition of settlements, population figures and the urban-rural population balance (Figure 1.6).[16] The complex topography accentuates the variations of population distribution across the territory. Tbilisi, which is both a municipality and a region, is by far the most populous area with a population of 1.13 million people. Several studies suggest that after independence, almost all cities and towns lost population to Tbilisi, which was seen as the one place in the country offering non-agricultural job opportunities. Several studies report that after 1990, as much as 25 percent of residents of some residential districts (*mikrorayons*) in Tbilisi were recent in-migrants. [17] Among other regions, anchored by their main city, only two – Imereti and Kvemo-Kartli – have a population that exceeds a half million, and Samegrelo-Zemo Svaneti has the next highest population with 480,000 inhabitants. Not surprisingly, the mountainous northern regions exhibit very low population densities.

The movement of internally displaced persons (IDPs), who were forced to migrate because of ethnic and political conflict, was another layer that accelerated the population concentration of Tbilisi. Internal displacement enhanced the effects of natural population dynamics with large movements of refugees and IDPs moving to Tbilisi in search of safety and opportunities. In total, 250,658 IDPs (87,112 families)[18]were displaced from independence until 2010. These included 231,861 individuals who were displaced from 1992-1993 during ethno-political conflicts, and the remaining 16,223 after the2008 conflict. Most of the refugees and IDPs moved to the largest cities. Tbilisi alone accounted for almost 38 percent of the registered Georgian IDPs. Other major concentrations were in the Samegrelo-Zemo Svaneti region, next to the conflict area of Abkhazia and the Russian border (almost 85,000 IDPs), with Zugdidi municipality alone accommodating nearly 50,000 IDPs. The concentration was also high in the cities of Zugdidi and Gori, as well as in Georgia's second-largest city, Kutaisi, and neighboring Tskaltubo. IDPs constitute a range of a given town's population, from about 10 percent in some towns to close to 30 percent in Zugdidi.

[15] Currently, only 93 urban settlements are controlled by the Georgian state.
[16] In this section regional data is mostly used with the assumption that the region's main cities represent the dominant urban agglomeration, Municipal level data are used when available.
[17] Studies have been conducted at Tbilisi State University, Department of Human Geography, from 2007-2011 in students' research projects, usually of a smaller scale and mostly unpublished (or locally published, e.g. bachelor or master thesis). Altogether, almost 2,000 cases (household/respondents) have been studied.
[18]Unofficial/unpublished data of the Ministry of Refugees and Resettlement of Georgia from 2010.

As with regional population density, there are large contrasts in population counts at the municipal level. On one end is Tbilisi, with a population of 1,473,511 followed by the city of Kutaisi which has less than 200,000 residents. Combined, these two cities comprise one-fourth of Georgia's 2012 population of roughly 4.5 million people. After these two cities, only six municipalities have more than 100,000 residents. Another 19 municipalities are considered 'medium-sized,' with populations between 50,000 and 100,000. Most interestingly, 29 municipalities (which represent 45 percent of total municipalities) actually have populations between 20,000 and 50,000, and nine have less than 20,000.

Figure 1.6: Map of population density by municipalities and self-governing cities (2012)



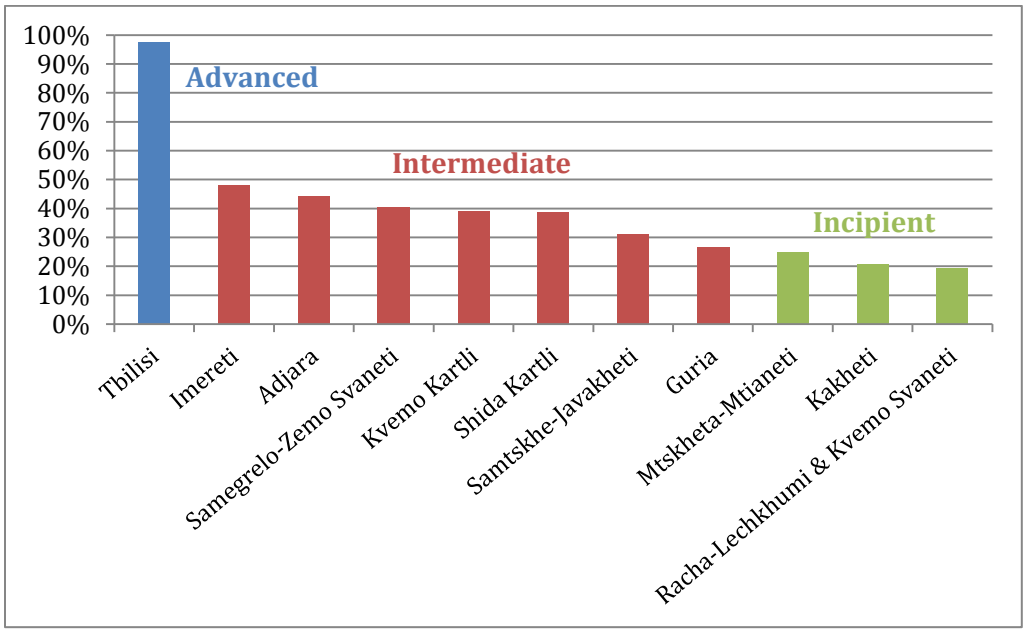
With the exception of Tbilisi, most regions are still predominantly rural. While 97 percent of the population in Tbilisi lives in urban areas, the next most urbanized region, Imereti, has only 48 percent of its population living in urban areas (Figure 1.7 and Figure 1.8). The cities of Tbilisi, Kutaisi, and Rustavi are particularly notable because they have population densities that exceed 1,000 people per km.^{2} Tbilisi has the highest population density in Georgia with 15,000 per km.^{2} This density is comparable to cities such as Rio de Janeiro, Brazil and Bilbao, Spain.[19]

The regions of Georgia can be categorized into urbanization typologies based on stages of urbanization. Figure 1.7 presents urbanization rates by region, each of which is anchored by the region's major city. These city-regions fall into three categories: 1) advanced urbanization stage - highly urbanized areas with

[19] Demographia, World Urban Areas, March 2013.

dynamic urbanization economies with urbanization rates above 75 percent[20]; 2) intermediate urbanization stage - urbanizing areas where the benefits of colocation and agglomeration are beginning to translate to economic returns; and 3) incipient urbanization stage - low economic and urban density areas with urbanization rates at less than 25 percent (World Bank 2008). This categorization allows for an exploration of variation across urbanization types. Georgia, like most developing countries, contains a mix of urban settlement types. This system of cities (and regions) play a complementary role in the nation's economic development, but each stage of urbanization requires different set of urban policies[21]. Likewise, their roles in Georgia's economy vary in intensity and pace of growth.

Figure 1.7: Urbanization stages by region

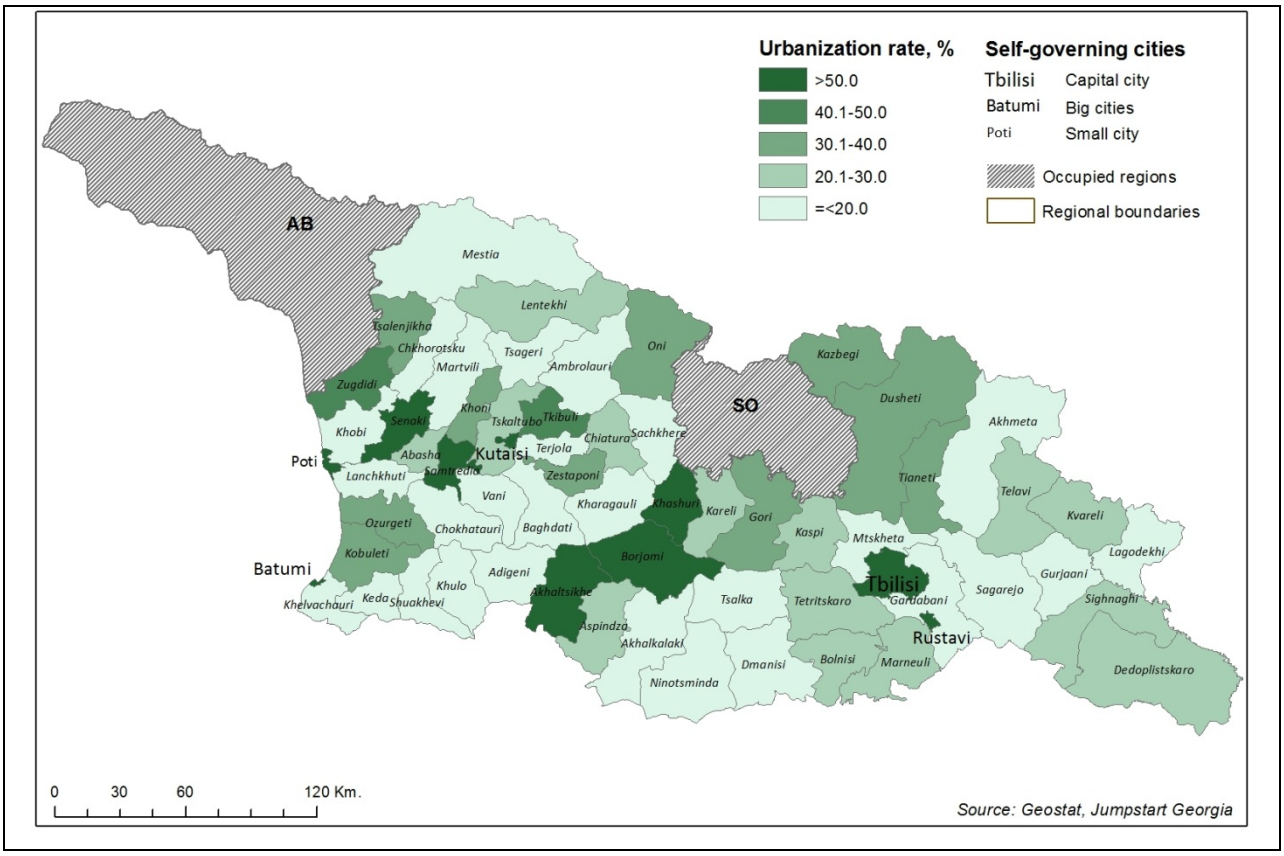


Source: Geostat 2012

[20] For the purposes of this report, urbanization rates are defined as the percentage of the population that lives in urban areas.

[21] Areas of incipient urbanization are predominantly agricultural or resource based, with low economic density. The priority is to facilitate agglomeration forces and to encourage internal economies of scale for plants, mills, and factories in towns. As urbanization progresses, economic alliances strengthen within and between urbanized areas. Many firms and plants in the same sector colocate to take advantage of sharing inputs and knowledge spillovers. In such areas—intermediate urbanization areas—the promotion of localization economies is the highest priority. For highly urbanized areas, productivity and consumption benefits arise from urbanization economies associated with the diversity and intensity of economic activity. While functionality is the goal for industrial towns and cities, the watchword for postindustrial metropolises, with urban shares of about 75 percent, is livability (World Bank 2008).

Figure 1.8: Map of urbanization rate by municipalities (2012)



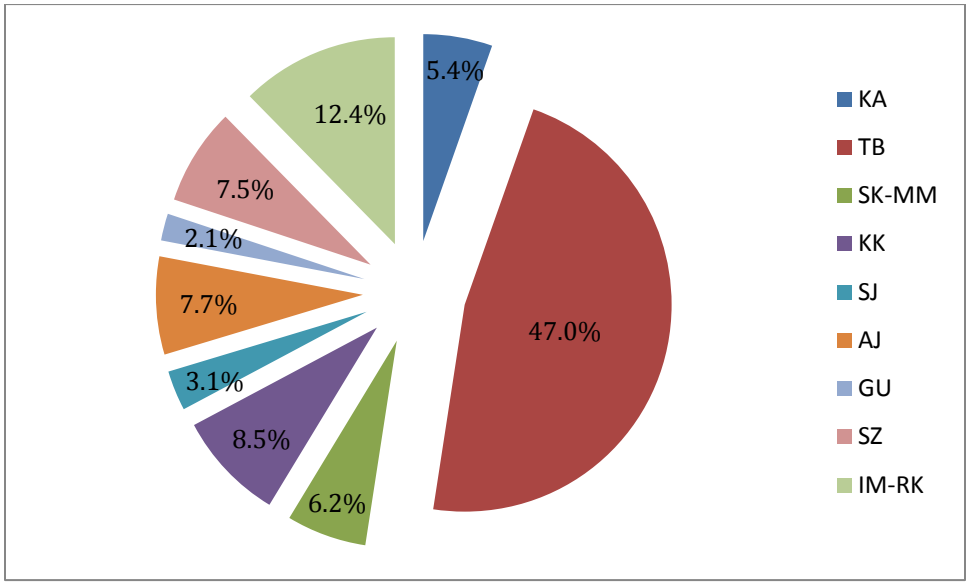
With the concentration of population, there is also some concentration of economic activity.

Just as population is unevenly distributed across Georgia, so is GDP. Tbilisi alone accounts for almost half of Georgia's total GDP, which is consistent with its share in urban population. The intermediate urbanization regions that have a big city – Kutaisi in Imereti, Rustavi in Kvemo Kartli, Batumi in Adjara, and Zugdidi in Samegrelo – have significantly higher shares of GDP than more rural regions such as Kakheti and Mtskheta-Mtianeti, despite the latter's favorable location with respect to the main transport routes and proximity to the big cities of Tbilisi and Rustavi. While the economic density of Tbilisi is as high as GEL52 million per square kilometer, economic density in Ajara is only GEL409,000 per square kilometer and it falls to GEL74,000 per square kilometer in a more rural region like Kakheti (World Bank 2012b).

The concentration of economic activity in urban areas is not unique to Georgia (Figure 1.9). In fact, economic concentration characterizes the world economy; just 1.5 percent of land comprises half the GDP (World Bank 2013c: 24; World Bank 2008: 96). With nearly 50 percent of GDP concentrated in Tbilisi, the concentration of economic activity in Georgia is comparable to Japan or France where 30 to 40 percent of GDP is concentrated in their capital cities (World Bank 2013c). Despite regional economic concentration in Japan and France, these countries have seen a convergence in living standards. Still, many former Soviet republics appear to suffer from the legacy of prioritizing spatial equity through the

dispersion of economic activity rather than focusing on how to channel economic concentration into market based tools for growth and the efficient distribution of public services (World Bank 2012a).

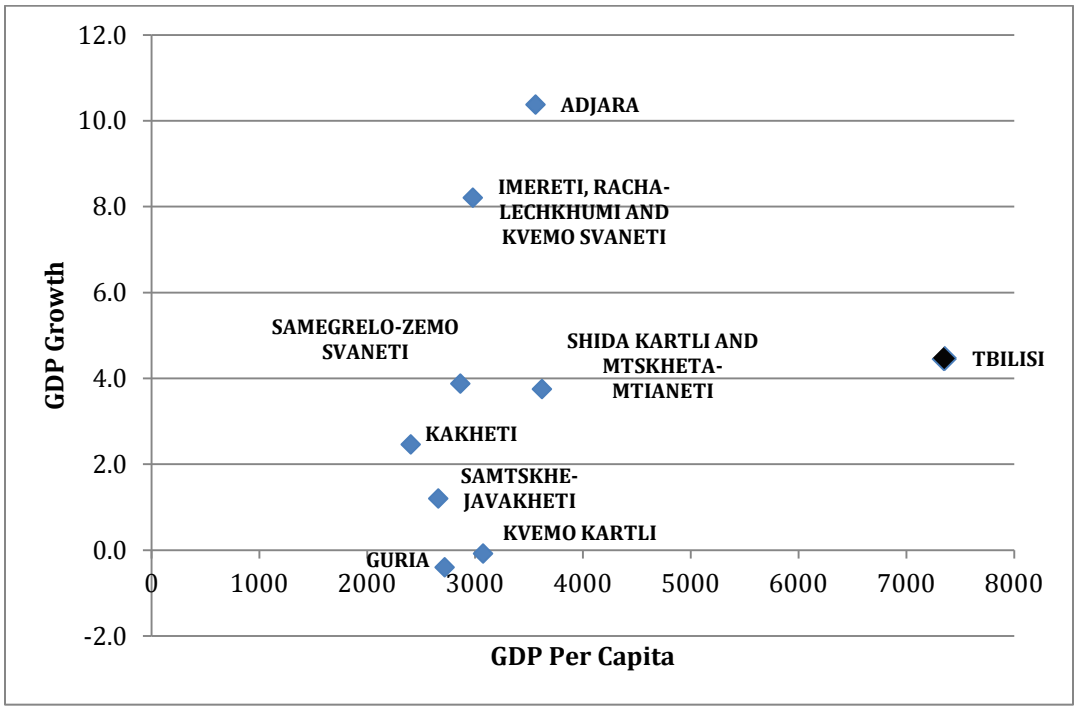
Figure 1.9: Share in GDP by regions in 2010 (constant 2006 prices)



Source: The World Bank, 2012c

The level and pace of economic development shows stark regional differences, with Tbilisi again standing out in terms of GDP per capita. Tbilisi stands out with per capita GDP of almost USD 8,000, more than two times higher than the level in other regions as well as a healthy 4 percent annual growth between 2006 and 2010 (Figure 1.10). Only five of the Georgia's nine regions have been growing faster than the national average (Tbilisi, Adjara, Imereti, Racha-Lechkhumi, and Kvemo Svaneti). In terms of GDP growth, Adjara and Imereti are growing considerably faster than all other regions with an annual growth between 8 and 11 percent in 2006 to 2010, yet GDP per capita in these regions is low. Economically, they top the noncapital regions and have a relatively diverse economic structure. Again, Adjara and Imeriti have significantly higher GDP growth than regions such as Kakheti and Mtskheta-Mtianeti, despite the latter's favorable location with respect to the main transport routes and big cities of Tbilisi and Rustavi. This suggests that connectivity through transport routes alone do not confer high GDP growth. All the others are either economically mixed or agriculture-based "lagging" regions. Regions like Guria, Samtskhe-Javakheti, Mtskheta-Mtianeti and Kakheti with low GDP and low GDP growth provide examples of the perpetuating regional disparities within the country.

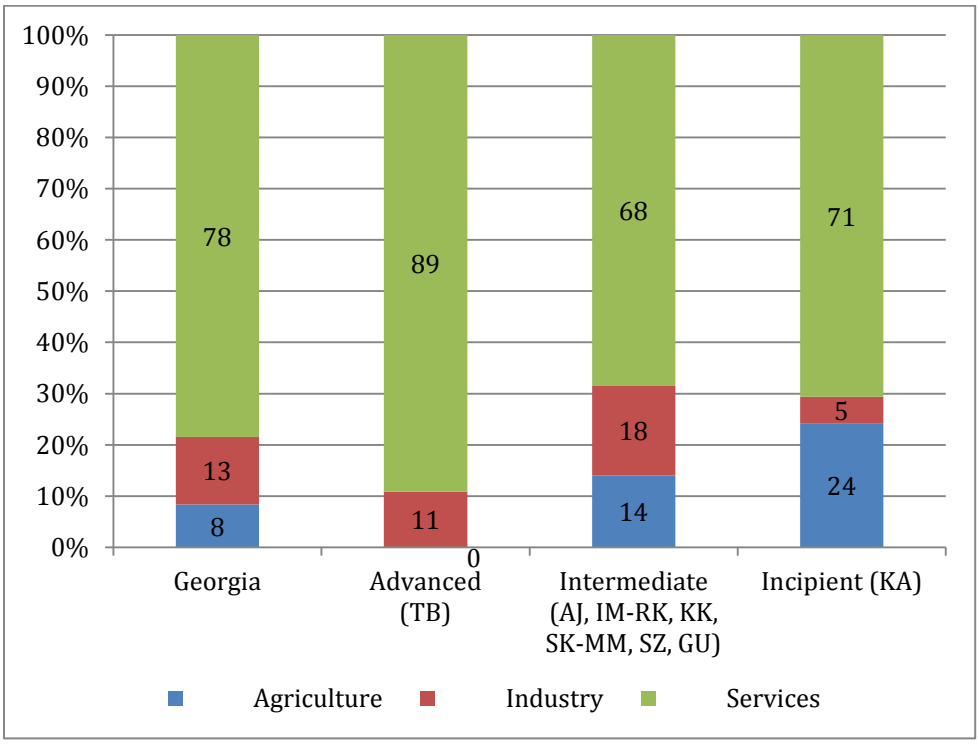
Figure 1.10: Annual GDP growth and GDP per capita by region, 2006-2010



Source: The World Bank, 2012b

Urbanization levels also determine the sectoral mix of economic growth. In Georgia's most urbanized region, Tbilisi's economy is dominated by services; the service sector contributes to 89 percent of local GDP (Figure 1.11). Meanwhile, intermediate urbanization regions are also service-oriented, with services contributing to 68 percent of GDP for these areas, but industry and agriculture still contribute to economic growth. Incipient urbanization regions are also very active in services, but this is balanced by a large portion of GDP arising from agriculture (24 percent) and less so from industry. Local industrial activities are virtually non-existent in remote small towns and rural areas (only 5 percent of local GDP).

Figure 1.11: Share in regional GDP by Urbanization Stage, percentage, 2010[22]



Note: Although MM and RK regions are in its incipient stages of urbanization, their regional GDP data was integrated into other neighboring regions. Therefore, GDP share for the incipient stage only represents the KA region.
Source: Authors' own calculation, input data from the World Bank, 2012b

The economic performance of cities in Georgia is closely linked to market access indicators.

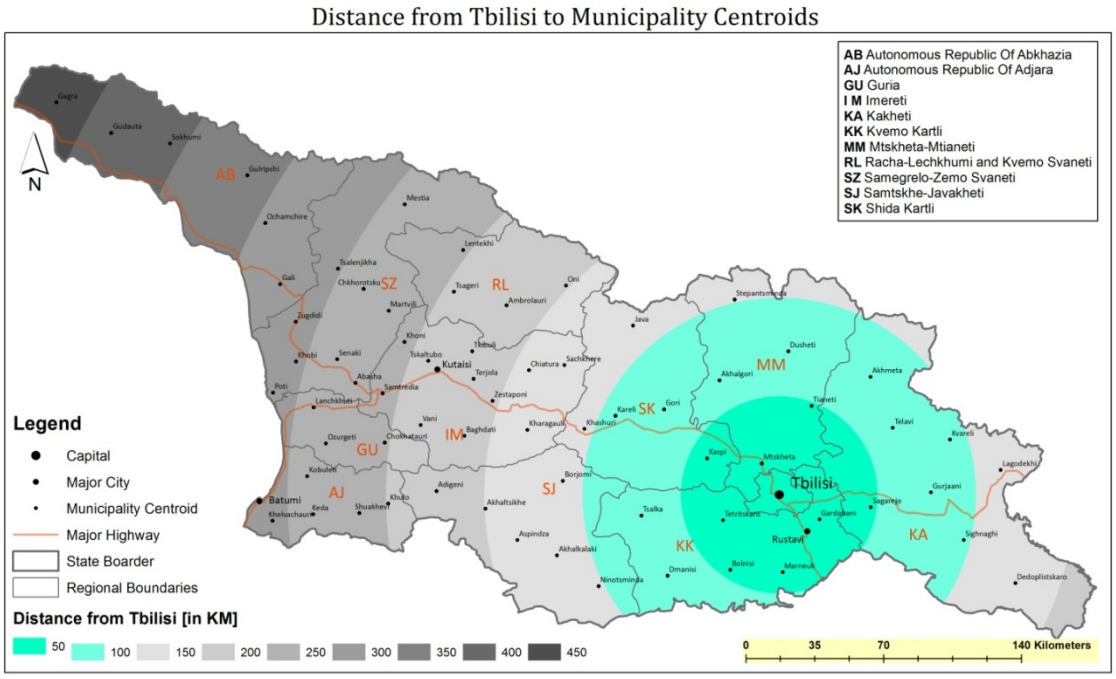
As expected, the economic performance of cities in Georgia is closely linked to market access indicators thus allowing greater opportunities for producers, extending the market for their products and opens new job opportunities for workers. An exploratory analysis of the connectivity status of Georgia portfolio of cities suggests four main factors closely related to accessibility measures, which appear to be critical for the economic performance of urban areas. The first two factors relate to access to the main markets (Tbilisi, and the four big cities). These two factors reflect the links to major transport networks (the East-West highway) and nodes[23] (the Black Sea ports) as well as proximity to international borders.

[22] The figures are inferred from Regional GDP data.
[23] The review did not include the main international airport in Tbilisi among these nodes, since it is already presented in the analysis of the capital.

Box 2 – The Market Access Index
The market access index is created by counting the number of 50 kilometer buffer zones (for access to cities and ports) or 20 kilometer buffer zones (for access to the East-West highway) that lie between the city of interest's centroid and any one of the four accessibility factors. The larger the number, the less accessible the region or city is to one of the four factors. For example, Tbilisi's accessibility index to itself is 0. However, Batumi lies six zones away from Tbilisi and is assigned an accessibility index score of 6 (Annex 1, Table 1). However, since Batumi is both a port and a big four city, the city received an index score of 0 for both those accessibility factors. The final index is a sum of accessibility measures of all four factors. The index works similarly with the three other market access factors. Regionally, however, accessibility is measured by taking an average of the accessibility indices of all municipalities in the region (Annex 1, Table 2).

Tbilisi, as the heart of the Georgian economic, political and socio-cultural life, is the locus of the country's largest market (see Figure 1.12: Distribution of Georgia's municipalities and regions with respect to Tbilisi, represented in zones of 50 kilometer intervals.)

Figure 1.12: Map of distance zones to Tbilisi



Source: Tbilisi State University and Jumpstart Georgia 2012 (compiled for this review)

The cities of Kutaisi, Batumi, and Rustavi also represent large markets in Georgia since together with Tbilisi they are the only cities with more than 100,000 residents. These cities play an important role in the urban strata and access to them is an advantage for municipalities and smaller cities/towns. They cover the territory more or less evenly, thus making distances to each other quite short. Most municipalities (91.2 percent) are located inside a 100 km radius from one of big four. Thus, only the two regions of Kakheti and Samtskhe-Javakheti are located more than 2 zones away from one of the four big cities.

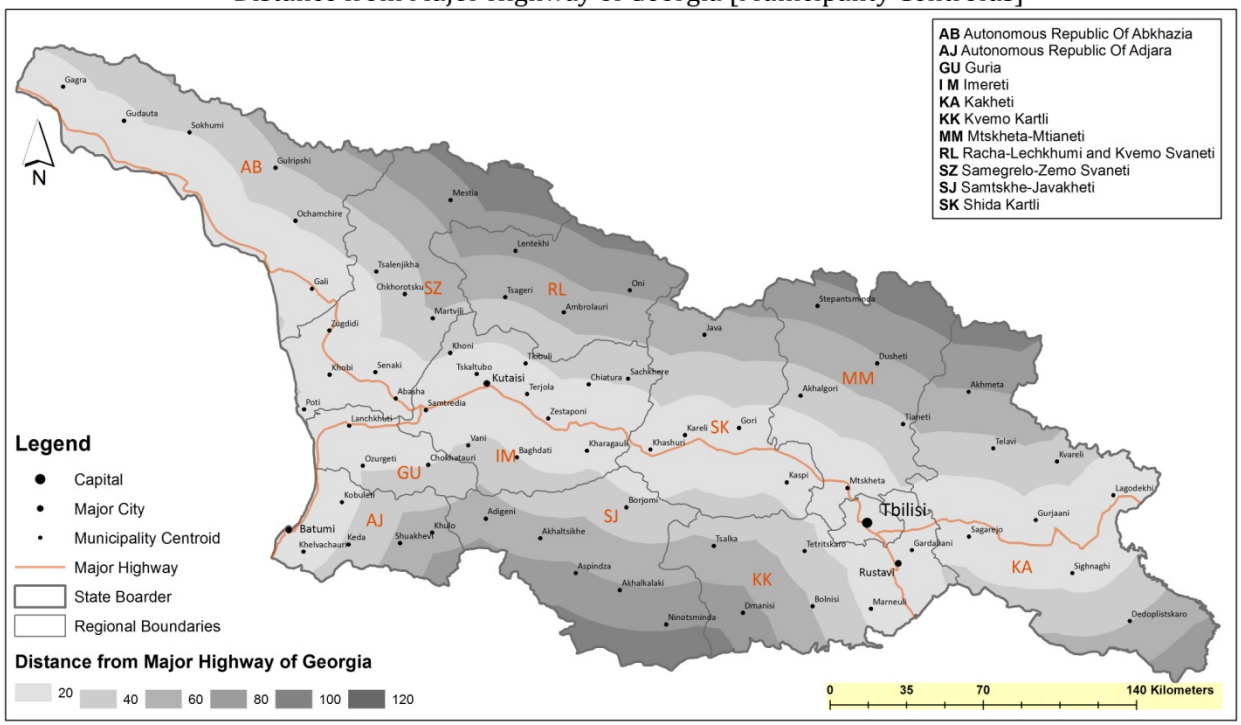
The Black Sea ports of Batumi and Poti are critical to Georgia's economy as they are gateways for international trade and external communications. Although they are not easily connected to other Georgian cities, their location and accessibility to these ports can be an advantage for extending their economic activities and building cross-border trade and partnerships. This geographic factor positively affects the municipalities in Western Georgia, which are closer to the coast. Thus, the regions in Eastern and Southern Georgia all have average distance zone indices as high as 5 and over, with Kakheti showing the highest among all four factors, equaling to 7.4 (Annex 1, Table 2).

Proximity to major highways is also highly correlated with urbanization. Using buffers around the main highways, all municipalities can be classified into distance bands or 20 km. each (see Figure 1.13). As the map suggest, very few areas in the country are more than 80 km from the national highway. In fact, 50 percent of Georgia's municipalities are within 20 km of the main highways and 75 percent are within 40 km. Grouping the farther distance bands into one single zone (i.e. more than 80 km from the national highways) gives a grouping of municipalities into four zones. As described in Table 1.1municipalities in zones closest to the highway system (Zone 1 – Z1) appear to be more urbanized and growing at a faster pace than other regions in the country. Interestingly, population density in these areas is higher, even after excluding the main urban area. Adjara (because of its mountainous part), Racha-Lechkhumi and Kvemo Svaneti, and Samtskhe-Javakheti, have average distance indices of more than 3.0, while Guria, Shida Kartli and Tbilisi have the lowest index of 1.0, and Imereti – just 1.3 (Annex 1, Table 2).

Finally, it should be noted that besides the four geographic factors, some cities – Gardabani, Marneuli, Bolnisi, Lagodekhi, and Vale – that are located close to the state borders also experienced population growth. This is likely attributed to the proximity and accessibility to external markets through cross-border trade and contacts, operating much like the Black Sea ports Thus, proximity to the border, mainly to Azerbaijan, and, to a lesser extent Turkey, could influence population growth; however, proximity to Armenia has not played a similar role to date. One explanation of the uneven impact of proximity to borders could be degree and intensity of cross-border cooperation and contacts, which are stronger and progressing with Azerbaijan and Turkey, and much less so with Armenia and the Russian Federation.

Figure 1.13 Distance zones to the major highways

Distance from Major Highway of Georgia [Municipality Centroids]



Source: Tbilisi State University and Jumpstart Georgia 2012 (compiled for this review)

Table 1.1: Population and urban indicators regarding the distance from/to major highways

Distance zone from major highways	Z1	Z2	Z3	Z4+5
Pop (‘000) / Percent of total pop (%)	3,062.7/ 68.1	820.9/ 18.3	319.8/ 7.1	294.2/ 6.5
Urban pop (‘000) / Rural pop (‘000)	2,013.7/1,049.0	242.0/ 578.9	80.0/ 239.8	56.0/ 238.2
Urbanization rate (%)	65.7	29.5	25	19
Percent out of total urban pop (%) / Percent out of total rural pop (%)	84.2/ 49.8	10.1/ 27.5	3.3/ 11.4	2.3/ 11.3
Pop change between 2002 and 2012, (‘000) / Annual increase rate (%)	89.5/ 2.7	9.5/ 1.4	3.8/ 1.6	4.5/ 2.7
Area (sq.km)	20,551.8	14,357.9	11,982.7	10,083.5
Pop density excluding city-municipalities (person/ sq.km)	73.9	48.8	26.7	29.2
Pop density with city-municipalities (person/ sq.km)	149.0	57.2	26.7	29.2

Source: Calculated based on Geostat 2012 data

Box 3 – The decline of Soviet-era factory towns (mono-cities)

Mono-cities, or mono-industrial factory towns played important roles in the economic development and settlement patterns during the Soviet era. Following extensive Soviet industrialization, the growth of natural resource extraction and manufacturing in the late 19th and early 20th centuries produced several industrial mono (functional) cities and towns. A few cities, towns and townships were described as purely industrial[24] because of their employment and economic production profiles.

In the Soviet era, industrial cities and towns were divided into (a) extraction/mining and energy industry centers, and (b) industrial processing centers (Jaoshvili 1978) These settlements played an important role as industrial nodes of federal, regional or local importance in the USSR, specializing in mineral extraction, the production of hydro-power, and metallurgical, electro-technical, wood and pulp, building, textiles and food industries. The Georgian cities of Rustavi (founded during WWII), Zestafoni and Chiatura, were some of the most important production centers for the entire Soviet economy, as a major part of their output was used outside the republic in other parts of the USSR and other so-called "socialist countries."

The collapse of the USSR and the opening of the economy to market forces led to an immediate and dramatic decline of many mono-cities, in terms of population (Figure 1.14), economic production, income and welfare. But locational advantages and endowments appear to determine the impact, and subsequent recovery of mono-cities post-independence. The mining cities of Chiatura and Tkibuli seem to have been hit the hardest. They lost their economic potential, sales markets, and significant parts of the population. The quality of coal and volumes of manganese are no longer attractive to investors, and their mountainous locations prevent pose a constraint to market access.

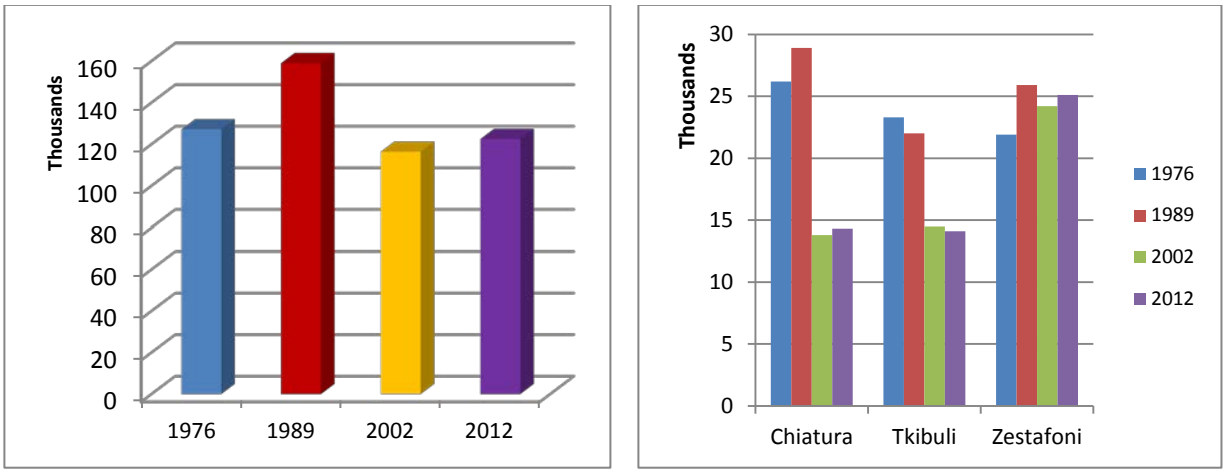
Other cities, like Zestafoni, have managed to maintain their population and a large proportion of their economic/industrial capacity. This is likely due to their relatively advantageous geographic location with respect to market access. Zestafoni is in the heart of the large Imereti region and close to the second largest Georgian city of Kutaisi.

Like Zestafoni, Rustavi, the largest of Georgia's mono-cities, has tried –with some success, to maintain its place as a leading city in Georgia. Rustavi also benefits from locational advantage. Not only it is located in the near vicinity of Tbilisi, so much so that it can be considered part of the Tbilisi metropolitan region, but it is also conveniently located near Azerbaijan and Armenia. Other cities that do not have advantageous locations, and were mainly the result of spatial policies from the Soviet era, are rapidly declining.

[24] See Jaoshvili 1978: 248-249

Figure 1.14: Decline of Georgian mono-cities: population shrinkage

A) Big mono city: Rustavi **B) Small mono-cities**



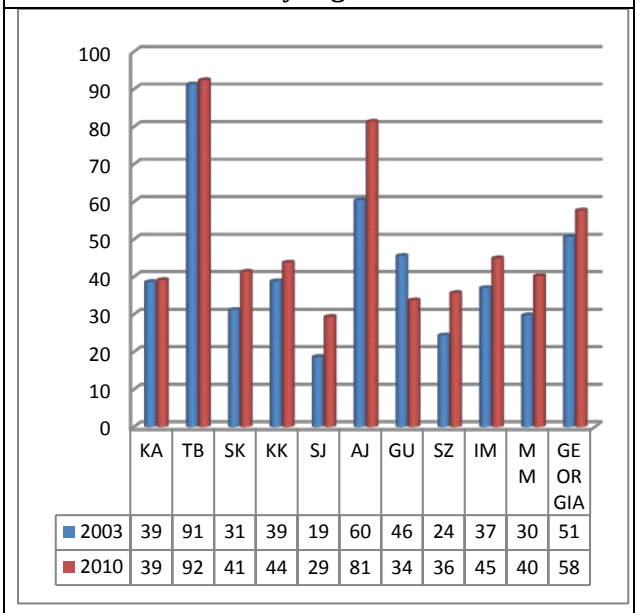
Source: Geostat 2012, Jaoshvili 1978.

Considerable gaps in access to basic services across Georgia's regions remain.

Across Georgia access to basic services disparities between urban and rural areas are dramatic, particularly for sanitation and drinking water. Electricity, however, is a relative success story. Access to sanitation is limited throughout the country and the gap in service provision is marked not only by urban and rural differences, but also regional ones. Only slightly more than half of Georgian households have bathroom facilities. In Tbilisi, over 90 percent of households have bathrooms, while in economically weak rural regions, the number drops to only 3 to 4 households out of 10 (Figure 1.15). Only Batumi has wastewater treatment. Despite the low access levels, improvements have been observed between 2003 and 2010 throughout all regions. Increases in access have been as high as 20 percentage points in Adjara, followed by Shida Kartli and Samegrelo – with 10-plus point improvements each; on the other extreme is Guria, which faced a dramatic 12-point in access during the same period of time.

Regional disparities also persist in access to drinking water (Figure 1.16). Despite all cities and districts having a central water system accounting for 150 major water intakes and a total capacity of 3.1 million cubic meters a day, less than half of Georgian households have piped water. While water is reported to be safe for drinking, most Georgian settlements receive water intermittently and many water intakes are unprotected. It means the water supply often does not meet standards or sanitary/epidemiological requirements. Today, only Tbilisi provides piped water to almost all households and Adjara to about 75 percent of residents. However, in the remaining regions, piped water is available to no more than 30 percent of households, and most of those are in urban areas. In eastern and southern Georgia (Kakheti, Kvemo Kartli, Samtskhe-Javakheti regions), most yards/plots receive piped water, while in western Georgian provinces (Samegrelo, Guria and Imereti), most rely on wells for drinking water. In Shida Kartli households rely on a mix between piped water into the dwelling, piped water to yards or plots, and wells.

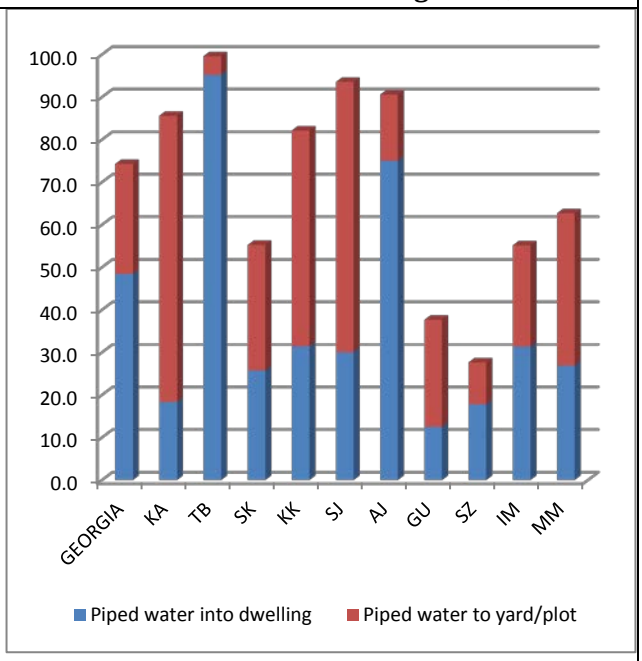
Figure 1.15: Percent of households with bathroom facilities by regions in 2003 and 2010



	KA	TB	SK	KK	SJ	AJ	GU	SZ	IM	MM	GEORGIA
2003	39	91	31	39	19	60	46	24	37	30	51
2010	39	92	41	44	29	81	34	36	45	40	58

Source: Nationwide annual household survey conducted by the National Statistics Office of Georgia, 2010

Figure 1.16: Distribution of households by type of the main source of drinking water, 2010



Source: Nationwide annual household survey conducted by the National Statistics Office of Georgia, 2010

Domestic hot water and heating systems are uncommon except in Tbilisi and Adjara. Only slightly more than 20 percent of Georgian households have hot water or heat. After the former district heating systems completely collapsed, gas became the general source of domestic heating. Tbilisi is the only region that has a central natural gas system almost fully installed. Elsewhere, the process is still underway or about to start: Tbilisi's neighbors—Kvemo Kartli and Kakheti—have a relatively high ratio of installed central gas systems (over 30 percent), while in the Black Sea regions of Adjara, Samegrelo and Guria, as well as in Samtske-Javakheti, such systems do not exist and propane gas is widely used for heating (National Statistics Office of Georgia 2010).

In terms of education, Tbilisi has the best qualified and well-educated population. The capital city has 84 universities and colleges, over twice as many as all other regions combined. It also has more crowded secondary schools, with twice as many pupils per school as other regions, and lags behind only the Imereti region in terms of the number of schools. Educational status also differs significantly throughout regions: there are far fewer (but larger) schools on average per 1,000 pupils in Tbilisi compared to other regions. Imereti has the second highest number of educational facilities in the country with 10 schools and 11 universities, and Adjara is third with 5 schools and 7 universities. Other regions lag behind the three, with fewer educational facilities. Some regions, such as Racha-Lechkhumi and Kvemo Svaneti do not even have a university (The National Bank 2012).

Georgia could learn from improvements in access to basic services from places like Vietnam where despite regional differences in economic development, there has been a convergence in access to basic services. While economic development in Vietnam is concentrated in core metropolitan cities and neighboring areas, welfare improvements have been more widespread. In Vietnam, the equalizing of welfare improvements was mainly driven by a strong commitment to inclusive social development. Concomitantly, the government's focus on strong growth in core metropolitan areas led to positive spillovers to neighboring regions and the hinterland (World Bank 2011b). This is reflected in the significant improvements in welfare and access to services in Vietnam's under-served regions and lower-tier cities. These lessons from Vietnam can help guide Georgia develop an inclusive urban development strategy as they both face continued political and economic transition. These patterns of convergence are also seen elsewhere such as Colombia, where lagging smaller cities caught up to larger ones in terms of water connections. Colombia was able to achieve this through the rational setting of tariffs that enabled the expansion of public infrastructure without additional large investments (Samad, et al. 2012).

A success story within Georgia is found in the electricity sector. The country overcame its chronic energy deficit in the 15 years prior to 2005, mainly due to sound public policies, especially those eliminating corruption in the sector. It has become energy self-sufficient and even exported 600 million kilowatt-hours of excess energy in 2011. Today, 80 percent of energy consumed comes from hydropower, the rest from heating plants. Thus, what was once a problem of availability was solved and nearly all households across the country have electricity: The national supply grew from 99.1 percent in 2003 to 99.6 percent in 2010.

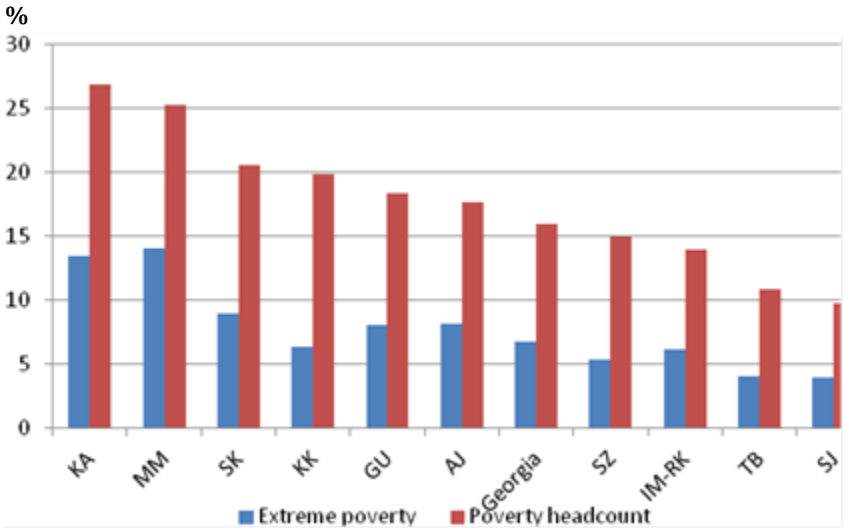
The poor are concentrated in rural areas.

The geography of poverty also varies across rural and urban areas. The gap between urban and rural areas, which existed even before Georgia's independence, widened over the 2000s. During the years of rapid growth, the incidence of urban poverty is estimated to have declined from 23.7 percent in 2003 to 18 percent in 2007. Meanwhile, rural poverty is estimated to have decreased from 33 percent to 29.4 percent during the same period, which was less than a 1 percentage point decline per year. About 64 percent of the poor now live in rural areas, despite the fact that rural areas comprise less than 50 percent of Georgia's total population. The regional incidence of poverty offers additional insight into this disparity (Figure 1.17). The rural areas of Mtsketa-Mtianeti and Kakheti have higher poverty headcounts and incidences of extreme poverty. However, other factors also contribute to the incidence of poverty. Shida Kartli also has high incidences of poverty despite its relatively high urban density. This can be attributed to a significant population of IDPs fleeing South Ossetia.

The regional incidence of poverty is complicated by the geographical dispersion of vulnerable social groups such as IDPs. The highest concentration of IDPs is found in the city of Tbilisi and the Samegrelo-Zemo Svaneti region, where 38 percent and 34 percent of IDPs are concentrated, respectively. Influxes of IDPs pose unique challenges for municipalities and cities; they often arrive without assets or employment. As a result, local governments struggle to provide adequate housing and employment opportunities. Many (over 45 percent) live in so-called 'collective centers' that are mostly illegally occupied non-residential public buildings, chaotically re-organized by IDPs in order to have a temporary shelter. A great majority (over 80 percent) found these accommodations in urban areas.

The geography of poverty is also reflected to a certain extent by the concentration of beneficiaries from subsistence allowances from the state. A recent household survey suggests a wide variation in the presence of beneficiaries of state subsistence allowances across regions, offers another proxy for the incidence of poverty. Tbilisi and the larger urban areas Kvemo Kartli and Adjara have the lowest share of beneficiaries, with less than 10 percent of their population benefiting from such allowances. In the mountainous regions, poorly connected and economically weak, of Mtsketa-Mtianeti and, especially, Racha-Lechkhumi and Kvemo Svaneti, the rates of registered poor families/people exceeded a striking 40 percent. More interestingly, regional gaps in poverty appeared to be widening. The survey also suggests that the number of households receiving subsistence allowances increased in municipalities that had less than 10 percent of households receiving these benefits in 2008. Instead, municipalities where more than 20 percent of families received these benefits in 2008 saw an increase in the number of beneficiaries in 2011.

Figure 1.17: Incidence of Poverty in 2010



Source: The World Bank, 2012b

Since independence Georgia's transition away from a planned economy to a market based one has been slow. The spatial dispersion of growth centers put into place during the Soviet era has made regional disparities harder to overcome. As Georgia continues to focus on economic growth, policymakers must consider the role of urban areas in marshaling resources to ensure such growth is sustained and equitable. The rest of this report adopts a framework to equip policymakers in Georgia to plan, connect, and finance its cities.

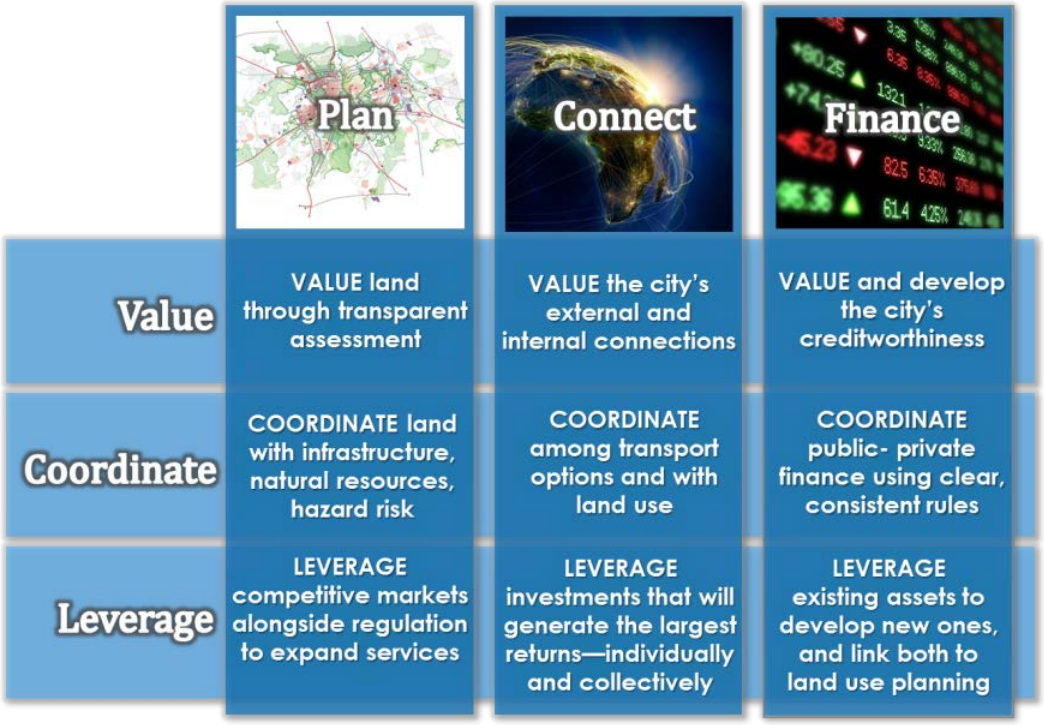
Completing the rural-urban transformation using the Planning, Connecting, and Financing framework.

To assist policymakers to think strategically about the opportunities presented by urbanization and identify politically, technically, and fiscally feasible policy options for removing the roadblocks to inclusive and sustainable growth, the World Bank has developed a common suite of diagnostics known as Urbanization Reviews (URs). The UR framework helps city leaders identify policy distortions and coordinate actions across the three main dimensions of urban development:

- *Planning*—charting a course for cities by setting the terms of urbanization, particularly policies for improving physical planning instruments and coordinating institutions to expand basic infrastructure and public services. For Georgia, this dimension provides a rational way forward to address the spatial inequities resulting from Soviet era industrial planning.
- *Connecting*— to reorienting transport networks along shifting trade routes in order to connect markets. Georgia can apply this dimension to enhance trade flows and create an efficient system of cities, recognizing the central role that Tbilisi plays in the urban system.
- *Financing*—finding the upfront capital to provide the equitable distribution of services across regions and ensure the investment in roads and other key state assets as urbanization accelerates. Georgia can use this dimension to think about alternative sources of investment to extend infrastructure coverage, aiding in the realization of the goals of planning and connecting.

Within each dimension the framework asks city leaders to take three common actions—value, coordinate, and leverage—to remove the impediments to sustainable and equitable urban development (Figure 1.18). By following this simple framework, Georgian leaders can translate global best practices into a local guide for successfully planning, connecting, and financing cities.

Figure 1.18: A policy framework for sustainable urbanization: planning, connecting, and financing



Note: This framework draws on World Bank (2013b) and the findings from various country pilots under the Urbanization Reviews.
Source: Urbanization Review team.

Chapter 2 : Planning – recalibrating urban planning and housing markets for vibrant cities

Planning during the Soviet era was centralized with a hierarchical structure based on legal-normative acts, financed by the central budget and operated at three levels through the whole USSR. These levels began at the macro-territorial level, which encompassed the entire Soviet Union, and was followed by regional planning at the meso-territorial level and settlement and city planning at the micro-territorial level. Consequently, plans were linked to each other through a spatial hierarchy and implemented according to five-year Social-Economic Development Plans of the USSR.

While this planning method appears to adopt principles of foresight and vision-setting, in reality Soviet city planning was prescriptive. Planning was a matter of the State, not of citizens, and could be seen as the State's effort to organize itself by creating rules and goals. Large Soviet cities were critical to the planned economy, and their planning was guided by master/general plans that did not take into account—and in many cases defied—the market principles. In the absence of a system for private property ownership or a free land market, these master plans established concepts of spatial development and growth of the city, without taking into account market forces such as demand and supply or the competing land use needs.

While Georgia has undertaken significant urban reforms in its transition from a centralized and planned system towards a localized market-oriented economy, and boasts high worldwide rankings in the World Bank's *Doing Business* assessments for indicators related to urban development, three key challenges remain:

- *Limited capacity or expertise on land management.* A weak history of property rights has translated into persistently poor land management systems and an aging housing stock, preventing the ability to adequately value land and property.
- *Inability to coordinate urban development and infrastructure provision across the decentralized levels of government (national, regional, municipal).* The lack of a coherent urban development strategy and unclear administrative roles and regulation for urban management has led to a lack of coordination in urban policies.
- *Inadequate housing and infrastructure conditions.* The process of planning deregulation after independence left a gap in creating a strong regulatory environment to insure the quality and safety of the building industry. As a result, the urban areas along with the private market have been unable to leverage heightened demand for housing—particularly rental housing—despite significant investments made by individual households to expand existing housing blocks. Much of the housing stock from the Soviet era is in need of urgent retrofit or reconstruction; building construction codes need to be upgraded and enforced; and mechanisms for the maintenance of buildings need to be strengthened.

Georgia has made significant progress in streamlining administrative procedures and ranks highly in the Doing Business indicators.

Among former Soviet states, Georgia stands out as one that has undertaken significant reforms to streamline urban planning processes. For example, Georgia's property registration procedure has been simplified down to one step (see Table 2.1) compared to an average of six in other ECA countries and five in OECD countries. The city of Tbilisi has implemented a "single window" mechanism for residents to submit planning applications, which allows applicants to submit applications to a single place, obviating potential delays or the hassle of having to interact with multiple agencies (World Bank 2012a: 35). Accordingly, the country boasts impressive rankings according to the World Bank's *Doing Business 2013:* it ranks number one across all 185 economies surveyed in terms of registering property, and number three in terms of getting a construction permit. Table 2.1 compares Georgia's processes among other countries in ECA as well as OECD.

Table 2.1: Georgia's *Doing Business* rankings

		Georgia	ECA	OECD
Property Registration	Procedures	1	6	5
	Time (days)	2	30	26
	Cost (% of income per capita)	0.1	2.7	4.5
Construction Permits	Procedures	9	19	14
	Time (days)	74	226	143
	Cost (% of property value)	17.7	486.7	78.7

Source: Doing Business 2013, World Bank

But… a national urban strategy is needed to exploit economic potential of urbanization and to strengthen coordination for urban development.

Georgia made several attempts over the past two decades that underline its efforts to advance urban development. Unfortunately, most of these were election promises that never become official policies. As a result, programs in the urban development sector have largely been a mix of isolated efforts and ad-hoc programs, lacking any linkages across spatial planning, housing, infrastructure, and urban service delivery.

The country is now developing regulatory institutions for urban development and establishing the foundations for a long-term strategic planning process. In 2005, the Ministry of Urbanization and Construction, responsible for planning and construction, was incorporated into the Ministry of Economy and Sustainable Development (MESD). At present, the Department of Spatial Planning and Construction Policy at MESD is responsible for the coordination and management of policies of urban and territorial development, architecture and urban planning, and housing and community infrastructure, including

specifically, (i) providing support to integrated land use development, (ii) planning and zoning for settlements and other territorial units, (iii) regulating the construction-engineering sector, and (iv) developing construction and design standards.[25] A law "On the Spatial Arrangement and Urban Development" (2005) is in place, and the Urban Planning Code is being developed.

In addition, the State has undertaken several programs for urban/regional development and spatial planning, highlighting its commitment to the sector for the first time since Independence. These include urban regeneration of the core historical centers of Tbilisi, Batumi, Kutaisi, Akhaltsikhe, Telavi, Signaghi and Mestia, and the recently adopted "Strategic '10-Point Plan' for Modernization and Employment: 2011 – 2015"[26]. Under the 10-Point Plan, the Government aims to create equal development opportunities and reduce disparities in urban and regional development, support the creation of development and employment hubs to improve accessibility to and within the regions, and improve rural infrastructure in order to create more jobs beyond primary agriculture and make the development and economic structure of Georgia more decentralized.[27]

At the local level, Georgia is moving towards a more localized framework for urban development within a broader national framework, but implementation has been problematic. So far, Tbilisi is the only city in Georgia to have formulated and adopted a City Plan: this was done in 2009, some 40 years after its previous master plan. Elsewhere, urban projects are ad-hoc, and usually implemented without adequate assessment of needs or outcomes. Furthermore, procedures for land conversion and zoning revisions are unclear and non-transparent. In Tbilisi, this has resulted in haphazard construction that is not in accordance with the City Plan.

In other words, Georgia has yet to implement a nationwide comprehensive urban development policy that considers the varied and complementary roles of its regions at advanced, intermediate, and incipient stages of urbanization. Georgia would benefit from developing a national urban plan based on the 'system of cities' approach that assists cities in maximizing their economic potential. A closer examination of the economy of each city reveals distinct differences and inherent advantages which, if exploited, could maximize its potential for development, contribute to the overall economy, and reduce inter-city and regional disparities. For example, Tbilisi specializes in services; Batumi and Kutaisi are oriented towards trade and markets; and Rustavi, Gori, Porti and Zugdidi have heavy industries (including construction, transport and communications).

Weak standards and lack of enforcement of regulations in the housing sector are exacerbating concerns on its safety, quality, and aesthetics.

The Soviet housing development model focused on delivering the minimum individual residential living space of 9m^2, rather than responding to demands for comfort and convenience. In the early years (1920s-1930s), in Georgia, as in all Soviet republics, meeting the needs of a rapidly growing urban population occurred through the 'communalization' of living space, which meant providing single rooms to families in multi-family apartments and houses, with common facilities (kitchens and lavatories). Throughout the

[25] The Ministry of Economy and Sustainable Development (http://www.economy.ge/?category=21&lang=eng)
[26] See http://www.mcla.gov.ge/cms/site_images/pdf/Strategic_10__point_plan.pdf
[27] Ibid: 7

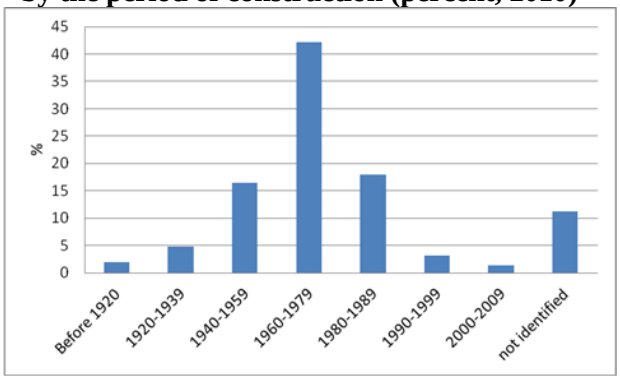
Stalin period (1930 to the early 1950s), a relatively small number of good quality units was built, mostly in Tbilisi and a few big cities, and supply still lagged far behind demand.

Soviet era housing constitutes over 80 percent of Georgia's current housing stock (Figure 2.1). Given this prevalence of old Soviet multi-unit urban apartment buildings, quality is an ongoing problem. Housing quality in Georgia during the Soviet-era was lower than that in the Slavic and Baltic States - the units were built cheaply and quickly to accommodate the mushrooming urban population, especially in Tbilisi. Also, quality was lower because contractors routinely stole construction materials to sell them illegally or to construct *dachas* (summer-houses). Also, from the late-1970s, mass housing in non-capital cities and in the capital's urban peripheries often received poorly operating or incomplete utilities and physical infrastructure.

In the years after independence, significant legal and structural changes in apartment ownership occurred. Land reform and property privatization were introduced in the 1990s, which significantly changed the legal status of housing. State-owned housing was legally privatized in 1993, with 95 percent of residences transferred to private ownership—free-of-charge—by 2000. Thus, in a relatively short time, a large number of people became homeowners.

In Soviet times, the housing stock was managed and maintained by special units called *ZhEK* (*Zhilishchno Ekspluatatsionnaja Kontora*); these no longer exist. Apartments are now managed by Homeownership Associations (HOAs) through the 'Law on Homeowner's Associations', which was adopted in 2007 to manage the privatized housing stock. In many cities and towns, HOA-managed buildings are eligible for municipal co-financing to repair common areas (roofs, staircases) and public spaces (open areas, courtyards), with municipalities covering 50-90 percent of the costs. There were 2,600 HOAs in Tbilisi in 2007 and their number continues to increase. However, more time is required to fully transfer the responsibility of maintenance to the HOAs, as the social and economic mix of residents in the former Soviet housing blocks often makes it difficult to come to agreement on the owners' contributions to cover the shared costs for maintenance.

Figure 2.1: Distribution of housing stock of Georgia by the period of construction (percent, 2010) [28]



Source: Urban Indicators 2010, World Bank

[28]Although housing construction reduced after independence, the figures (percentage) presented in Figure 2.1seem questionable and it could be that there were higher volumes built in the 2000s than in the 1990s. The 11% of residential buildings lacking the identifying year of construction could explain the questionable distribution.

Another reason for deteriorating building conditions in Georgia is the proliferation of apartment building extensions (ABEs) since the late-1980s, and especially after independence, when national economies and incomes declined. Such extensions were legal in Georgia[29] and, until 1991, carried out by state building companies which applied prescribed norms. However, once the state building companies were broken up and controls removed in the 1990s, extending apartments became an informal and chaotic phenomenon on a mass scale (Figure 2.2). The average amount of space added to apartments in Tbilisi was over 60 percent of the original living space and was quite an attractive option. Their poor quality and unfinished appearance—characteristic of 'vertical slums'—dramatically impacted the appearance of the cityscape.[30] But more importantly, these ABEs were done using non-skilled labor, without permits, and with little regard to safety standards. The safety risk of such buildings in Georgia was tragically highlighted when an earthquake struck Tbilisi in April 2002 and over 2,000 buildings were damaged.[31] Older Soviet-era buildings and the prevalent ABEs to houses suffered the bulk of the damage, highlighting concerns about the conditions and quality of the housing stock.

Figure 2.2: Apartment Building Extensions (ABEs) in Georgia

A) Extension process in Tbilisi B) ABEs in Batumi C) Unfinished ABE in Tbilisi

Source: Photos by J.Salukvadze

The large-scale construction of ABEs was driven by a chronic housing shortage and historically low residential mobility in the USSR. ABEs are directly linked to the lack of adequate space for growing families on one hand, and on the other, the inability of the market to absorb the demand for additional housing units by new households (resulting from new household formation and migration).[32] A significant percentage of the population in the growing cities and towns thus opted to forgo the safety and image of their housing in the interest of acquiring additional space. The ABE phenomenon is most prevalent in Tbilisi, but also widespread in Kutaisi, Batumi, Rustavi and almost all cities and towns. In addition to these types of building violations, new housing construction in city centers, especially in

[29]In 1989, the last Communist government of Georgia passed a law permitting residents to expand their domestic living area by enclosing balconies, loggias and verandas or adding extensions to their apartments, provided they submitted the plans for building permits. This act dramatically transformed many housing districts through the sheer number of ABEs.

[30] See Salukvadze, in Van Assche et al., 2009; Bouzarovski et al, 2011.

[31] United Nations Association of Georgia. "Georgia: Tbilisi earthquake kills six." 26 April 2002.

[32] Interviews with households suggest that the rise of the ABEs was also fuelled by cultural factors: families that had recently migrated from rural areas preferred larger houses to accommodate extended families.

Tbilisi, often is done by flouting existing building norms, which results, for example, in excess building densities, non-standard building height, and improper insulation. Both these underline the need for intervention in the sector through enforcement of building regulations and construction standards, together with policies that promote a more demand-responsive supply of housing.

In the current scenario, the inadequate licensing of building industry professionals together with the lack of standards or certification of materials or construction equipment is further exacerbating the housing problem. Much of the construction equipment being used dates back to the Soviet era, while the construction sector lacks accredited local professionals. Construction materials, imported or locally produced, are neither standard nor certified.

Georgia's cities also have extremely high ownership rates and underdeveloped rental markets.

Georgia's home ownership rate in 2005 was 95 percent, reflecting ownership rates typical of Eurasian countries, many of which face rates of 90 percent or higher (World Bank 2012a: 52). These high levels of home ownership resulted from mass privatization of Soviet housing stock after the fall of the Soviet Union. While many existing residents were able to remain in place and realize full ownership rights, the expectation that conferring ownership would automatically lead to a market economy fell short. Instead, high ownership introduced market rigidities that included reduced labor mobility, increased barriers to housing for new entrants including young people, and limited opportunities for housing redevelopment or maintenance (World Bank 2012a).

The under-development of the rental housing market exacerbates the availability—and hence affordability—of housing for low and medium-income groups, a situation common in less-developed European transitional countries.[33] As a result of under-supply, rental housing in several Georgian cities is unaffordable. A two or three bedroom apartment in an upscale new or renovated building in Tbilisi or Batumi, for example, may command the same rent as one in Washington, D.C.

Prices of newly constructed housing have escalated beyond the reach of the vast majority.

Despite the mass population emigration in the 1990s, by the early 2000s, Georgia faced a backlog in housing, both in volume and quality. The relatively improved economic situation generated increased demand for new and better quality housing. With the privatization of real estate, housing construction moved from the public to the private sector and commercial housing projects grew in scale, replacing the above-described '*Do-It-Yourself*' urban practices of the previous decade (with mass production of ABEs). Private developers provided more spacious and comfortable housing types that had not existed in the Soviet era and aimed to attract young families and higher-income urbanites. Moreover, construction boomed when banks showed increased willingness to finance housing development. The availability of moderate bank credit allowed regularly employed citizens to buy an apartment.

[33] UN Habitat. 2011. *Affordable Land and Housing in Europe and North America*: ix.

This triggered heavy competition for the best urban sites for multifamily housing, and led to significantly higher prices. During the 2004-2008 housing boom, central Tbilisi apartment prices tripled from USD 400 to USD 1,300/m^2 and from USD 250 to USD 850/m^2 in other parts of the city. Thus, commercially produced units satisfied the demand of the relatively well-off urban population. Also, many apartment units were purchased through remittances as speculative investments by expatriates, largely absentee-owners who mostly did not rent them out. As a result, vacancy rates rose greatly, and might account for at least 15 percent to 20 percent of new housing units.[34] The inflated house prices, excessive and unaffordable in relation to the low average incomes, made housing beyond the reach of many citizens. According to local real estate experts interviewed in 2011, only 10-15 percent of Georgia's population could afford a new apartment in a decent location in the city.[35]

Then, to expand their market portfolio, developers started to offer less costly *shell-and-core* projects. These projects provided only the main structure of the apartment, leaving the internal design and finishes to the new owners. This housing comprises almost 90 percent of all new housing in Georgia today.[36] Only recently did the share of fully completed apartments in new housing begin to grow again, including the development of gated communities in Tbilisi, Batumi, and a few other cities.

With private housing that is unaffordable, and a social housing stock that is trailing far behind demand, there is almost no formal sector housing for the poor and vulnerable populations groups, other than a few small-scale projects implemented by foreign donor agencies and partner countries. These segments of the population have thus resorted to informal housing solutions, including squatting in state and municipal-owned structures, or on land prone to disaster risk (flooding, landslides etc.), or in housing without legal documents (proof of ownership, building permits, cadastral references, etc.).

Regulating and leveraging market forces for urban development in Georgia will lay down the foundation for instituting improved planning instruments.

As Georgia continues to construct new housing, engage private developers in housing supply, and close the gap between supply and demand for affordable housing, it has also begun to implement standards to ensure the long-term safety and quality of its housing stock. The right incentives for house owners and developers to follow the standards should be provided along with strengthening the enforcement of such standards.

Building systematic mechanisms for tracking information on risk and making it publicly available can help. Making maps that identify sensitive areas easily accessible, e.g. flood risk areas or fault lines, would make property owners and developers more aware of risks and allow them to take preventive measures as they design, build and maintain the buildings.[37] (Box 4)

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[34] Informal interviews with real estate developers and agents including Mrs. Maka Khutsishvili, Mr. Zurab Bokuchava of Ardu building company, Dr. Nick Shavishvili of CID Architecture, Mr. Paul Dzindzibadze of Ani-Architects. January through June, 2013.
[35] Ibid
[36] Interviews (2009-2011) with developers and realtors in Tbilisi.
[37] World Bank (2010). Natural Hazards Unnatural Disasters: the economics of effective prevention".

Box 4 – Cities around the world take steps to collect and make publicly available data for better planning

Cities around the world continue to implement and reform systems of land valuation and publicly accessible data on land use to ease the coordination of development. Bogotá, Colombia is at the vanguard of developing country cities that have significantly and successfully reformed land valuation systems. Between 2008 and 2010, Bogotá updated its cadastral database which led to a revaluation of urban properties and a 30 percent increase in property tax revenue (Turkey Urbanization Review, 2013). This land management reform required significant stakeholder buy-in and system-wide improvements of assessment techniques. To mitigate the public's reaction to increasing property taxes, the process had to be transparent and involve affected constituents. Likewise, the implementation of clear and robust techniques to track and value land assisted in this effort. The city of Bogotá also enlisted the expertise of professional appraisers to collect price data, the first time such an effort was undertaken for the city. This baseline information, used in conjunction with geographical information systems (GIS) enabled the city to use econometric techniques for the estimation of property values. Finally, legislation was adopted to set a ceiling on increases, which were tied to a logarithmic function of property values so the increases were less onerous to those with lower incomes. The example of Bogotá provides a framework for cities aiming to introduce significant reforms to land and property tax systems.

In New York City, the focus on information systems introduces new and innovative technology to engage its residents. NYCityMap is the public facing application that displays locations of City services and parcel-level zoning and land use data though the Planning Department's ZoLa (Zoning and Land Use) application. NYCityMap is accessible to the public through an easy to use interface on any web browser. While New York City has been using computer mapping since the 1970s, the City officially created a GIS unit in 2000. This unit, known as Citywide GIS, integrates geo-referenced data from all City agencies enabling a range of public management processes from data analysis, efficiency in service provision, public safety, and inter-agency coordination. New York City's efforts showcase how geographical data on land and urban management programs can be used to streamline internal coordination and foster public engagement with City services.

Source: Turkey Note and NYCityMap (http://nycitymap.wordpress.com/about/)

Public access to reliable and accurate information on land and housing is critical to the fluidity of the market and enhancing transparency. Essential components of this information include clearly enforced property rights, uniformly enforced regulations, and low levels of corruption (World Bank 2012a). Publicly available information on land and property allows people to make informed decisions about purchasing and selling land and housing, and ensures that policymakers respond to prevailing trends in the market.

In fact, Georgia's ranking as the number one country in terms of ease of register property is further bolstered by its ease of accessing property information in Tbilisi. Parcel information in Tbilisi is easily accessed on the city's website. Parcel data is further linked to both a geographical information systems (GIS) database and ownership and price information. The city also maintains zoning and master plan information pertaining to specific plots (World Bank 2012a: 63). Low costs and minimal procedures in

property registration, coupled with readily available public information systems provide the basis for the healthy development of land markets in Tbilisi. This example could be replicated in other Georgian cities.

Box 5 – Key Challenges to Planning for Georgia
Regulating and leveraging market forces for urban development in Georgia will lay down the foundation for instituting improved planning instruments. These mechanisms will foster a coherent approach to foster vibrant and sustainable cities. While Georgia has undertaken significant urban reforms and boasts high worldwide rankings in the World Bank's *Doing Business* assessments for indicators related to urban development, three key challenges remain: • A weak history of property rights has translated into persistently poor land management systems and an aging housing stock, preventing the ability to adequately *value* land and property. • The lack of a coherent urban development strategy and unclear administrative roles and regulation for urban management has led to a lack of *coordination* in urban policies. • The process of planning deregulation after independence left a gap in creating a strong regulatory environment to insure the quality and safety of the building industry. As a result, the urban areas along with the private market have been unable to *leverage* heightened demand for housing—particularly rental housing—despite significant investments made by individual households to expand existing housing blocks.

Chapter 3 : Connecting - Reorienting the direction of trade among cities

The ease of connections between labor and product markets decreases input prices and increases productivity and lead to economic growth and development. But in Georgia, the dispersion of cities coupled with the legacy of a north-south orientation of trade in the Soviet era challenges policymakers to rewire the country's connective infrastructure. While the cost of distance was not fully considered during Soviet times because of the State's subsidization of railways and roads between dispersed cities, today Georgia grapples with adequately funding road maintenance and expansion.

Trade flows in Georgia are also shifting away from a sole dependence on Russia as the dominant import and export market, to an increasingly diverse set of trade partners. Within the country, the government of Georgia is rehabilitating secondary roads connecting lagging regions such as Kakheti, Samtskhe-Javahketi and Imereti to the capital. Meanwhile, the major rehabilitation of the East-West highway is underway to connect the ports of Poti and Batumi with Azerbaijan, Armenia and beyond. However, challenges remain as Georgia struggles to balance its capital budget with competing needs between basic services and roads. This chapter provides an overview of the shift in connective priorities in Georgia and the efforts and challenges to meet these.

With the aim of achieving equality in terms of economic activity, Soviet planning did not fully consider the cost of distance.

The creation of large industrial towns in remote areas, such as Georgia's mono-cities, demonstrates the fact that Soviet planners did not fully take the "cost of distance" in regional planning into consideration. But in fact, the cost of distance factors in the cost of transporting people and goods as well as the opportunity cost of foregoing the benefits of agglomerating industries and their markets. Instead of taking these costs into consideration, in Soviet times, location considerations were made according to central planning goals of equalizing the population and economic activity distribution across the Soviet Union. This was possible only because the Soviet Union subsidized transportation, particularly railways, while tolling highways to charging transit fees did not exist. As a result, little incentive existed to reduce transportation costs through efficient spatial planning. After the fall of the Soviet Union, this fragmentation of urban areas posed unique challenges to transportation of goods, and in particular, influenced the flow of trade through existing transportation corridors.

The opening up of markets to Georgia led to reorienting trade patterns, supported by efforts from the government to strengthen connectivity.

The changing patterns of trade within Georgia and across borders as well as the opening up of markets show that the economy's decreased reliance on Russia is reorienting the geography of trade flows (see Table 3.1 and Table 3.2). In 1996, for example, Russian imports comprised 18.5 percent of Georgia's imports and 28.5 percent of Georgia's exports. By 2006, these percentages reduced to 15.2 and 7.6 percent, respectively.

Table 3.1: Georgian Imports from Major Partners, 1996 - 2006

	Georgian Imports—1996		Georgian Imports—2006	
	million $	% of total	million $	% of total
EU-27	263.1	38.3%	1060.9	28.9%
Russia	127.1	18.5%	558.8	15.2%
Turkey	76.6	11.2%	522.6	14.2%
Azerbaijan	78.7	11.5%	318.5	8.7%
Ukraine	38.8	5.7%	320.1	8.7%
United States	29.8	4.3%	129.7	3.5%
Turkmenistan	4.1	0.6%	101.1	2.8%
UAE	0.6	0.1%	109.1	3.0%
Armenia	17.2	2.5%	40.2	1.1%
Iran	2.7	0.4%	40.3	1.1%
Canada	0.08	0.0%	14.3	0.4%
Moldova	0.1	0.0%	3.5	0.1%
Rest of World	47.92	7.0%	455.4	12.4%
Total	**686.8**	**100%**	**3,674.5**	**100%**

Source: Adopted from Center for Social and Economic Research (2008)

Table 3.2: Georgian Exports to Major Partners, 1996 - 2006

	Georgian Exports—1996		Georgian Exports—2006	
	million $	% of total	million $	% of total
EU-27	32.2	16.2%	255.3	25.7%
Russia	56.7	28.5%	75.7	7.6%
Turkey	25.9	13.0%	124.9	12.6%
Azerbaijan	24.3	12.2%	92.2	9.3%
Ukraine	5.4	2.7%	57	5.7%
United States	1.3	0.7%	58.9	5.9%
Turkmenistan	13.4	6.7%	71.8	7.2%
UAE	0.0	0.0%	22.9	2.3%
Armenia	21.0	10.6%	73.6	7.4%
Iran	2.2	1.1%	2.7	0.3%
Canada	0.0	0.0%	48.9	4.9%
Moldova	0.1	0.1%	0.2	0.0%
Rest of World	16.3	8.2%	107.4	10.8%
Total	**198.8**	**100%**	**991.5**	**100%**

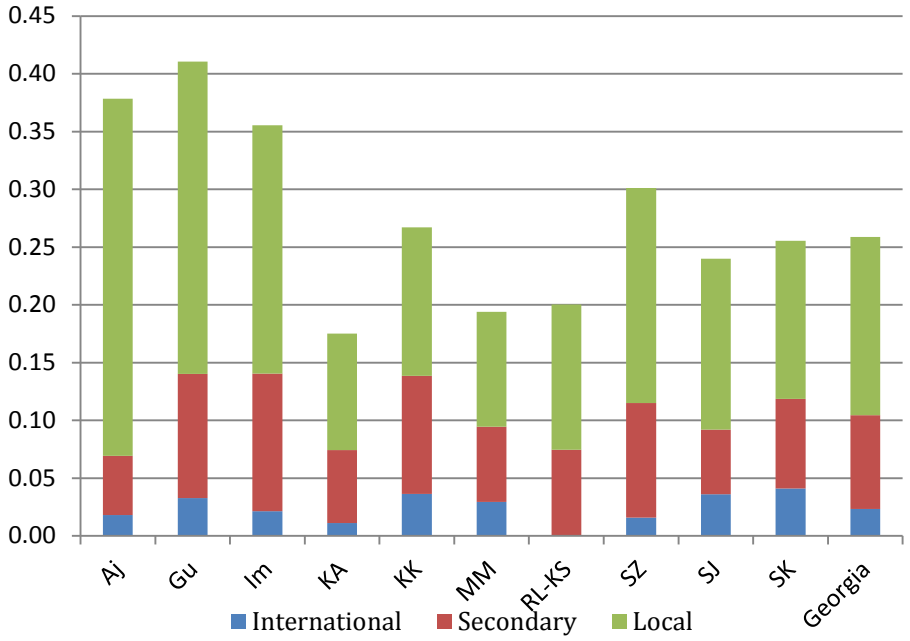
Source: Adopted from Center for Social and Economic Research (2008)

These changing patterns in trade have been supported by government efforts to reorient transport. After independence, Georgia recognized the importance of connectivity for the integration of local and regional markets to both enhance rural access to markets and allow the mobility of goods and people. However, the break-up of the Soviet Union suddenly burdened the new nations with funding aging transport infrastructure. Roads were underinvested in prior to the dissolution because of the heavy reliance on the complex and extensive Soviet railway, which linked urban and economic centers across the Soviet Union. The transition also required nations to reorient transportation connectivity away from a Soviet-wide scale

to a national one. Before independence, this transportation connectivity was oriented to major trade routes. Moscow's position as the hub of the Soviet Union's railway network as well as its main highways reflected the preeminence of Moscow as the Union's economic and political powerhouse. For Georgia this meant that its transportation was oriented north-south like those of the other South Caucasus countries (World Bank 2012a).

Georgian road investments have increased in recent years in an effort to improve logistics infrastructure and inter-region connectivity, with regional road density exceeding 0.15 km. sq.km. (see Figure 3.1). However, the majority of road improvements occurred on the international road network at the expense of the secondary and local road networks (World Bank 2012a). The focus on international roads was led by the government's prioritization of upgrading the arterial East-West highway, which connects the port of Poti on the Black Sea to Azerbaijan and others. By 2010 the international road network reported 76 percent of all roads to be in good or fair condition, up from 34 percent in 2004. But, only 30 percent of the secondary and 15 percent of the local roads were in good to fair condition in 2010 (World Bank 2012c: 83-4).

Figure 3.1: Road density by region (km. of roads per square km. of territory), 2010



Note: The abbreviations in the figure are AJ: Adjara; KK: Kvemo Kartli; SZ: Samegrelo-Zemo Svaneti; GU: Guria; SJ: Samtskhe Javakheti; KA: Kakheti; SK-MM: Shida Kartli and Mtsketa Mtianeti; IM-RK: Imereti, Racha-Lechkhumi and Kvemo Svaneti
Source: Road department and authors' calculations.

Given the objective of increasing connectivity and overcoming regional disparity, upgrading and expanding the local road network is also extremely crucial. Recent surveys suggest that improvements in maintenance and expanding local roads would improve social well-being for the poor. In addition to

concerns over trade connectivity and concerns for private road users, connectivity for rural areas has the potential to stimulate growth in underperforming rural areas. A number of socio-economic surveys conducted in five districts in Georgia suggest that improving and expanding local roads would improve conditions for the rural poor. Respondents to these surveys ranked road conditions as the second most pressing problem they faced after health services. Overall, 93 percent reported road conditions to be one of the most important problems they faced (World Bank 2012c). The rural poor perceived better roads as providing a number of connective opportunities such as better access to employment, social services, local markets as well as increasing the flow of tourism to rural areas.

Low investments in maintenance put the efforts to improve connectivity at risk.

Another medium-term challenge is the ongoing maintenance of basic international and secondary networks, which is also the responsibility of the central government. The maintenance of Georgian roads is viewed as one of the greatest public funding challenges in the coming years (World Bank 2012c). The estimated requirement for routine maintenance of the road network was GEL 42.7 million in 2010, yet the government allocated only GEL 28.56 million. Similarly, the estimated requirement for periodic maintenance was 123.12 million in 2010 compared to the allocation of just GEL 3.1 million (World Bank 2012c: 84). Deferred maintenance has a number of consequences for the government as well as for those who use the road. Restoration of poorly maintained roads is more costly in the long run compared to their ongoing maintenance. Meanwhile, private road users must bear increased vehicle operating costs incurred because of uneven road surfaces (World Bank 2012c: 85).

Box 6 – International donors and road expansion

In recent years international donors have provided the bulk of financing for road expansion and maintenance. In 2009, donor funding for new road construction was four times the government's budget for the same. This ratio is consistent for planned road construction expenditures until 2014. In terms of road rehabilitation and periodic maintenance, donors and the Millennium Challenge Georgia Fund (MCG) injected nearly GEL 185 million in 2009 and nearly GEL 340 million in 2010. These amounts are double and triple the government's budget for rehabilitation and maintenance, respectively. By 2012, donor and MCG funding dropped to zero while government expenditure did not increase substantially (World Bank 2012c: 93). These patterns indicate that the sustainability of road maintenance financing demands attention.

Donor funded road improvement can provide short term gains in connectivity, but the Georgian government must be able to extend those gains through consistent maintenance. A 2012 evaluation of the MCG's financing of the Samtskhe-Javakheti road rehabilitation by the United States Government Accountability Office (GAO) found that the road quality was compromised due to a compressed timeframe for completion and that the Government of Georgia lacked the capacity for maintaining the road after rehabilitation. The objectives of the road rehabilitation were to increase exports from the Samtskhe-Javahketi region as well as to enhance development by improving access to the main market of Tbilisi. Up until the rehabilitation, the road was rough asphalt making access to Tbilisi extremely challenging (GAO 2012). MCG funded 217 kilometers of road rehabilitation in a compact that extended from 2006 to 2012. Upon completion of the road, driving time along its length was reduced to 2.75 hours from 8.25. While a number of construction defects occurred due to a compressed time schedule for

completion, the GAO found that these were rectified beyond the term of the compact. The GAO also raised concerns that the long term sustainability of this road rehabilitation was in jeopardy due to an apparent lack of a resource commitment from the Government of Georgia.

A condition of MCG's funding of this road rehabilitation was that the Government of Georgia maintains funding for road upkeep. Inspections by the GAO and an independent contractor found maintenance to be lacking just after the completion of the road. Damaged guardrails and drainage systems had not been replaced, erosion blocked the drainage system, and poor snow removal efforts in the winter of 2011-2012 further compromised the road's surface (GAO 2012). These routine maintenance items, compounded by road defects from the original construction period signals significant may be too costly considering Georgia's budget for road maintenance. The GAO found that the total budget allocated to this road was USD 720,000 in 2012, however, USD 700,000 was allocated to snow removal contracts alone (GAO 2012: 43).

Source: United States General Accountability Office (GAO). 2012. "Millennium Challenge Corporation: Georgia and Benin Transportation Infrastructure Projects Varied in Quality and May Not Be Sustainable." Report to Congressional Committees.

Brazil provides an example of successful investments in connective infrastructure that allowed for a diverse portfolio of cities and promoted growth. These changes occurred in Brazil coincident with decentralization of industrial development in the 1970s, which began to channel investments and infrastructure into previously lagging regions such as the Northeastern Brazil. This led firms and people to locate to previously underserved areas. During the same period, these changes were augmented by expanding roadway networks that facilitated agricultural production and national growth as well as a reform of the transport sector later in the 1990s.

Despite the success Brazil has achieved in ensuring connectivity through its expansive expressways, much of the road network was constructed in the 1950s and 1970s. The paved roadways are deteriorating at an alarming pace due to lack of maintenance; between 2000 and 2007, the percentage of roads considered to be bad quality jumped 10 percent points, from 30 to 40 percent. As a result, freight transport costs have also increased considerably, particularly for short distances (see Table 3.3). These increasing costs have the potential to increase the price of domestic goods and damage competitive pricing in terms of trade. These increasing costs in the case of Brazil suggest that road maintenance is underinvested and that, like Brazil, Georgia must maintain its roads in order to take advantage of its well-functioning portfolio of cities.

Table 3.3: Annual Growth in Freight Cost/ton by Distance Bands in Brazil

	6,000km	**2,400km**	**800km**	**400km**	**50km**
2007	2.72%	2.94%	3.16%	3.24%	3.34%
2008	8.08%	7.44%	6.96%	6.81%	6.51%
2009	3.73%	4.20%	4.44%	4.56%	4.87%
2010	5.20%	5.36%	5.40%	5.42%	5.54%
2011	5.27%	6.09%	6.76%	7.02%	7.43%

Source: World Bank 2011a

Box 7 – Key Challenges to Connecting Georgia to National and International Markets
The spatial dispersion of Georgian cities combined with the legacy of the north-south orientation of trade in the Soviet era means that the connective infrastructure is no longer efficient. The focus now is on rewiring Georgia's connective infrastructure to provide links and respond to new trade routes. As a result, the key challenges to achieving connectivity include: • Identifying and *valuing* within country market access and external trade routes. • *Coordinating* road and freight transport to support these markets. • *Leveraging* own resources and external funding to ensure sustained returns and the ability to finance and maintain new infrastructure.

Chapter 4 : Restructuring urban finance to increase local revenues and enhance public-private partnership

The previous chapters outline the importance of implementing improved planning tools and standards as Georgia continues its transition away from Soviet planning. Additionally, they also stress the imperative to develop connective infrastructure to respond to new and emerging trade flows within and outside Georgia's borders and encourage healthy levels of growth for Georgian markets. However, underpinning these efforts is the critical role of financing for both the basic services and infrastructure that make planning and connecting possible. The concerning dearth of expenditures allocated to road and municipal infrastructure maintenance, for example, highlight Georgia's need to close the gap between its own resources and investment needs. Policymakers can focus on a number of priorities to encourage the sustainability of financing (World Bank 2013d).

This chapter reviews Georgia's efforts to both reform its own budgeting practices as well as develop a foundation for private participation in investment. While Georgia boasts one of the strongest decentralization efforts of Eurasian cities (World Bank 2012a), it still struggles to meet its budget requirements for key state assets. To address these shortcomings, Georgia has begun to lay the groundwork for the 2nd stage of decentralization to establish a more effective LSG system and increase public-private participation in infrastructure. But it struggles with an incomplete legal framework and few precedents.

Georgia has a framework for intergovernmental fiscal transfers with spending rightly focusing on equalization of living standards.

In Georgia, the institutional transformation of the mid-2000s provided a new framework for inter-governmental fiscal relations with a clear focus on decentralization. Unlike many other former Soviet republics, Georgia substantially altered the structure of its subnational governments. This transformation paved the way for a smoother, more equal, and more transparent intergovernmental transfer processes.

Beginning in the 1990s, the government of Georgia began its decentralization process. At that time, the local government was divided into three levels of sub-national government consisting of 1) nine regions and two autonomous republics, 2) 65 districts including five large cities, and 3) roughly 1,000 municipalities. Until then, an unclear division of tasks between levels of government combined with limited political and financial independence of municipalities from the center led to a fragmentation of municipalities. According to experts, this system did not function nor comply with the European charter[38].

In 2005, the adoption of the 'Organic Law on Local Self-government,' which eliminated the second lowest tier of local government, consolidated roughly 1,000 municipalities into 65 according to their former administrative districts. Tbilisi, maintains dual status, both as a region and municipality. By

[38]Melua, 2011(Local Government: Georgia)

January 1, 2007, newly elected municipal councils were in place, effectively transferring power to local governments.

After local government reform, all social services, including social assistance, education, and health were centralized. The central government assumed essential functions, such as paying salaries as well as operating and maintenance costs of social service facilities. The responsibilities of local governments now consist mainly of providing some urban public service (e.g. solid waste collection, parks, kindergartens, and district heating) and public transport, and maintaining housing and intra-settlement roads.

During the processes of decentralization, there was a shift in the allocation of government revenues. The personal income tax was reassigned to the central government in the 2009 budget code, leaving local governments to rely on the property tax, fees, charges, and income from the rent, lease, or sale of their own real estate, along with a newly created "equalization transfer."[39] The latter was introduced to address fiscal disparities between rich and poor municipalities. The equalization formula was initially introduced to compensate local governments for 70 percent of the difference between what it expects to raise from local revenue and the equivalent national average. The national average excludes the city of Tbilisi from its calculation. After the centralization of income tax, this formula was modified and determined on a more tailored basis. Currently the calculation of these grants rely on a combination of municipal budgeting fundamentals such as projected revenue and expenditures plus a centrally determined "equalization coefficient" (World Bank 2012a).

Georgia has also introduced new mechanisms to facilitate capital investment in the regions. In 1998, an on-budget Municipal Development Fund was created to finance and implement small infrastructure, with a focus on water and sanitation but also local roads and infrastructure. Table 4.1summarizes the main instruments and policies for financing regional development.

Table 4.1: Instruments for Financing Regional Development

State Budget
Social • Pensions: The regional distribution of pensions is defined by the number of pensioners registered in the given region. • Targeted social assistance: The regional distribution of assistance is defined by the number of beneficiaries registered in the given region. • Health: The regional distribution of insurance packages is defined by the number of beneficiaries (poor households) registered in the given region. Primary health care is free and provided through a network of centers, while prevention and treatment for communicable and non-communicable disease are also financed directly. • Education: Per capita financing per student is defined by the number of pupils in the region, and by regional estimates of the cost per-pupil of delivering general education. Capital needs are financed from the state budget.
Infrastructure • Municipal Development Fund: The regional distribution of the project funds is defined at the

[39] Eurasian cities 2012: 197-198

central level and may include state and municipal projects in roads, water, sewerage, etc. • Regional Development Fund: The regional distribution is defined by a government decision or, if the project is under GEL100,000, by the Ministry of Finance. The annual allocation is approved in the state budget.
Other Instruments • Special Transfers: These are defined by the region's needs and provided by the State budget as assistance; this instrument has been used extensively in the Adjara region. • Direct Transfers: The regional distribution is defined by a government decision or, if the project is under GEL100,000 by the Ministry of Finance. The annual allocation is approved in the state budget.
Municipal Budget
• Own Funds: Collections from property tax, local fees, land transactions, rent operations, proceeds from sales of goods and services, and other non-tax collections. • Equalization Transfer: This is based on the equalization formula that considers economic prospects and the ability to mobilize local revenues.
Source: World Bank. 2012b. "Trends and Challenges in Regional Development Draft."

Such a framework appears transparent for the public financing of regional development. It also provides stability to regions since volatile revenues are kept by the central government which guarantees basic transfers. It is simple and transparent, to the extent that capitation formulas are relatively simple and public. Also, the framework provides flexibility to address specific needs, such as infrastructure, or to pursue specific policy priorities or regions.

World Bank estimates for 2010 suggest that the State spent roughly from 15 percent to 25 percent of a region's GDP through the various instruments described above.[40] The pattern of spending by regions is consistent with the equalizing principles embedded in the various spending policies. The State spends less in the city of Tbilisi (when measured as a proportion of its own GDP) and more in the other regions (Figure 4.1). In regions with low per capita income and/or high poverty, the State has focused on social issues or infrastructure bottlenecks. Social spending is the key for the low-income regions of Kakheti and Samtskhe-Javakheti, as well as for the high poverty regions of Shida Kartli and Mtsketa Mtianeti. But public investments, including in the national and international road network which account for the bulk of capital spending in the State budget, are the most important State contributions for regions such as Adjara, Tbilisi, Imereti, and Kvemo Kartli.[41] Subsidies to enterprises, including public utilities responsible for water and sewerage, play an important role in local government spending of its own funds.

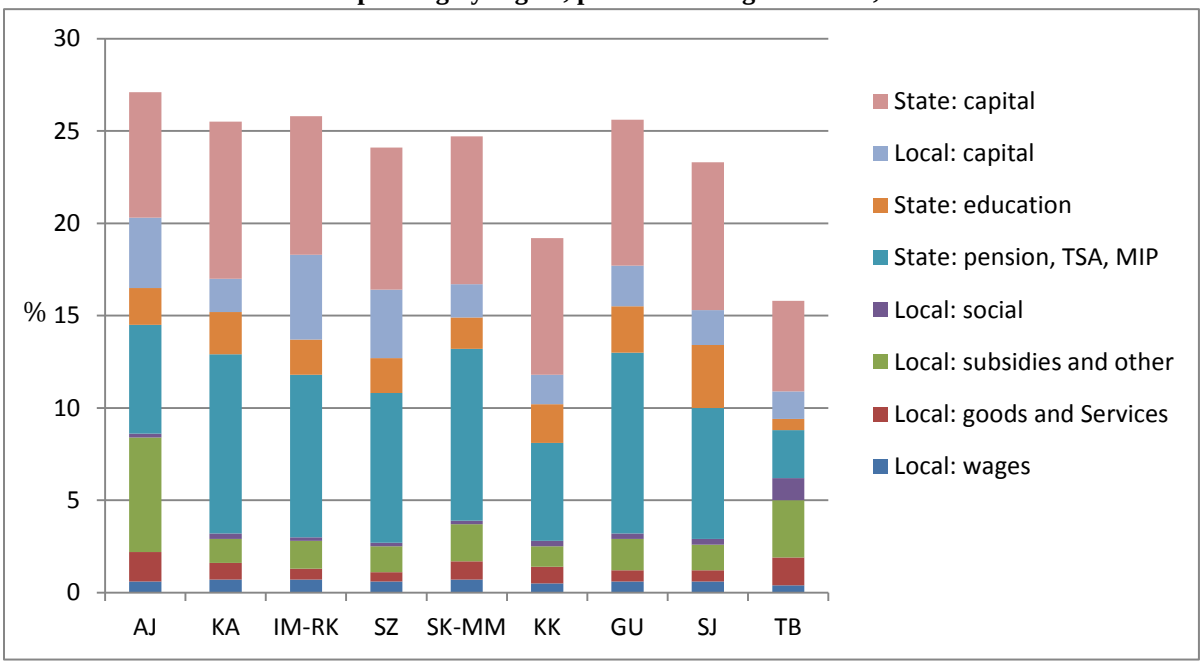
Spending levels and composition by region must be interpreted carefully. Leaving data considerations aside, it should be noted that 2010 was not a standard year. The implementation of the country's stimulus package was fully underway, focusing on public investments and safeguarding social sector allocations. Implementation of the state budget in 2011 suggests that the pattern of spending by region observed in 2010 was maintained, but this may change, particularly as investment programs are completed and are not

[40] Excludes spending on police, defense, public administration and debt service from the state budget that were not broken down by region. Thus, Georgia as a whole spent about 30% of its GDP in 2010.
[41] Estimates on capital spending by regions are to be interpreted carefully as they are the result of a combination of hard information and "soft" statistical estimates.

replaced by new ones to contribute to the ongoing fiscal consolidation. All in all, however, spending in the country's low and middle-income regions can be expected to increase given the plans to integrate Kakheti and Imereti (and other regions after these) into the local and international markets.

Figure 4.1: Public spending by region

Public spending by region, percent of a region's GDP, 2010



Source: From World Bank 2012b, pg. 12.

Stronger institutions are needed to implement and manage public investments.

Although a good framework for inter-governmental fiscal relations is in place, the full institutional agenda is by no means complete. For instance, while investment decisions at the national and regional levels have been sound – as the priority investment needs have been well-identified – the institutional set-up for public investment management at the national and local levels still requires significant improvement.

Privatization of the economy after independence heralded new challenges for the Georgian government as the state grappled with the loss of state enterprises that previously funded a host of local public services. The introduction of tax revenue also introduced new systems of budgeting. These changes required significant institutional development, which are still in the process of being strengthened. While Georgia has had an excellent track record in project implementation, processes like project appraisal, project selection and budgeting, and project evaluation will need greater institutional development (World Bank 2012c). Other institutional arrangements, such as lateral structures of coordination are lacking. For example, there exists no framework for regional planning, which aids in the coordination of infrastructure development and planning between regional and municipal units.

The rules for coordination across administrative units and between public and private investments are weak.

International experience suggests that the central government has a role in providing the right incentives for coordination around regional investment programs in decentralized settings. This can be done by the central government providing incentives to increase the capacity of metropolitan governance as well as to encourage inter-jurisdictional coordination for stronger regional capacity. Operating through intergovernmental transfers, these incentives can be structured in a number of ways. International experience demonstrates that financial incentives from the state can drive metropolitan coordination and regional development. In Germany, for example, fiscal incentives for regional cooperation were an effective strategy given the fragmentation of subnational entities (Samad et al. 2012). Despite territorial reform, which has attempted to reduce fragmentation of urban areas, Georgia could learn from Germany's example as it moves away from the legacy of Soviet planning, which over-relied on the state for planning and financing local efforts. Another form of incentives is dedicated funds for projects conceived and implemented through local cooperation. Switzerland implemented an "agglomeration policy" designed to support local urban projects that demonstrate regional impact. These examples provide working frameworks for developing the role of national government in regional planning in the Georgian context.

Private participation will also be essential to satisfy growing infrastructure needs (World Bank 2012c). As the appetite for private investment returns following the global financial crisis, capital expenditures are expected to decline from 8.9 percent of GDP in 2011 to 7.2 by 2015. The involvement of the private sector for infrastructure in Georgia has only started in recent years, however. Recognizing the need to improve aging infrastructure, particularly in the area of municipal water and wastewater, Georgia privatized water services in a number of cities in 2008. The exercise of understanding the financial operations of these utilities and the limitations of the existing regulatory framework helped the government to improve the public sector participation climate. In the case of the energy sector, the Georgian government developed a sector-wide regulatory structure and legislative norms to encourage private participation through deregulation. This included capacity building in tariff regulation, licensing, and legal analysis. From 1998 to 2011, USD 803 million in private investment flowed into the energy sector. Meanwhile, in one of the most critical sectors to the Georgian economy, the government worked to establish a framework for PPPs in the roads sector. Much of the funding for roads has come from donors and multilateral agencies, but the opportunities to engage the private sector through toll revenue concessions are apparent. Georgia attempted to issue a concession for the Rikoti Tunnel rehabilitation as part of the East-West highway development. While the first effort fell through because of the global financial crisis, a Chinese company signed a lease in 2010 (PPIAF 2011).

One of the key explanations for limited PPP projects in Georgia is the absence of a solid legal framework for private participation. The European Bank of Reconstruction and Development (EBRD) rated its countries of operations based on the quality of PPP legislation. Out of 33 transition countries, Georgia ranked second to last in the quality of PPP legislation, placing the country squarely in the "low compliance" and "very low effectiveness" categories (EBRD 2012b). The legal framework under which PPPs fall is the Georgian law "On the Procedure for Granting Concessions to Foreign Countries and Companies," a law which was adopted in 1994 and has not been revised since. Moreover, EBRD (2012a)

finds that there is scant mention in the law regarding the delineation of the role of government. Addressing the legal framework provides a fundamental first step in ensuring private sector confidence in partnership.

PPPs present a range of benefits for infrastructure investment, but also introduce risk. On the one hand, shared investment leads to cost sharing, attracting additional investment, and the potential to improve project quality. On the other, it introduces the need to better manage risk and accountability. A number of prerequisites must be in place to ensure the successful implementation of PPPs, including public sector capacity, systems for monitoring, a strong framework, and ways to assess risk. PPPs fail when they are erroneously used to substitute for good financial management practices and project evaluation methods. For example, in the early 1990s, the government of Colombia provided guarantees for revenues from toll roads, the airport, and payments to power companies to attract private investment. However, the risk of these guarantees was not properly assessed and the government ended up paying out roughly $2 million dollars due to revenues lower than initially projected. In Bolivia, the government awarded a concession to a private consortium in an effort to privatize Cochabamba's water supply. After the concession was in place, the consortium restructured rates, and in some instances the new water bills equaled 20 percent of households' incomes. This led to civil unrest in the form of violent protests and a withdrawal of the consortium from Bolivia (World Bank 2013d). International examples of these failures provide a cautionary tale as Georgia develops an attractive environment of PPPs.

Successful infrastructure financing through PPPs requires enabling regulation and a clear commitment from government. The experience of South Africa provides a best practice for developing countries. In 1997, just three years after the first democratic election in South Africa, the South African Cabinet appointment a team to develop a set of policies as well as legislative and institutional reforms to foster an enabling environment for PPPs. By 2000, a Strategic Framework for PPPs was in place and codified in the Public Finance Management Act (1999). Currently, the PPP Unit operates out of the National Treasury drawing on professional staff from a range of public and private sector backgrounds. The Unit enforces regulations that carry out everything from initiating PPPs, defining institutional responsibilities, delineating risk assessment criteria, and ensuring that the South African government's longer term priorities are considered.

Box 8 – Key Challenges to Financing Urban Development in Georgia

Financing for infrastructure and basic services is critical for making planning and connecting possible in Georgia. Georgia has a strong inter-governmental fiscal framework focused on equalization across regions. However, the dearth of budget allocations for infrastructure, such as road maintenance, point to Georgia's need to close the gap between its own resources and investment needs. The following represent key challenges in Georgia's efforts to generate sustained finance for urban development:

- Much of the funding for infrastructure development for Georgia originates from donors and multilateral development banks. But in order to attract private investors, Georgia must focus on *valuing* and developing the country's creditworthiness.
- The low quality of Georgia's PPP legislation also indicates the low effectiveness of attracting private capital. Enhanced *coordination* between the government and private investors using a clear set of rules and a strong legal framework can vastly improve the private investment climate in Georgia.

- Georgia must focus on *leveraging* existing assets such as its strong urban reforms and ease of doing business in terms of registering property and issuing construction permits. Georgia can learn from its own successful systems to ensure that public-private transactions are smooth and consistent.

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Annex 1

Table 1. Distribution of municipalities according to geographic factors

Region	*Municipality*	*F1: Distance to Tbilisi*	*F2: Distance to 'Big Four'*	*F3: Distance to Ports*	*F4: Distance to highway*	*Sum*	*Category*
TB	Tbilisi city	0	0	5	1	**6**	**Advanced [Total pop size 2012= 2,059,100; Average pop size: 187,191; Pop growth 2012v2002: 6.3 percent]**
AJ	Batumi city	6	0	0	1	**7**	
IM	Kutaisi city	4	0	2	1	**7**	
KK	Marneuli	1	1	4	1	**7**	
AJ	Kobuleti	5	1	1	1	**8**	
GU	Ozurgeti	5	1	1	1	**8**	
IM	Chiatura	3	1	3	1	**8**	
IM	Tskaltubo	4	1	2	1	**8**	
SK	Kaspi	1	1	5	1	**8**	
SZ	Abasha	5	1	1	1	**8**	
SZ	Senaki	5	1	1	1	**8**	
AJ	Keda	5	1	1	2	**9**	**Well located[Total pop size 2012= 1,616,600; Average pop size: 57,738; Pop growth 2012v2002: 0.3 percent]**
AJ	Khelvachauri	6	1	1	1	**9**	
GU	Chokhatauri	5	1	2	1	**9**	
GU	Lanchkhuti	5	2	1	1	**9**	
IM	Kharagauli	3	2	3	1	**9**	
IM	Samtredia	5	1	2	1	**9**	
IM	Terjola	4	1	3	1	**9**	
IM	Tkibuli	4	1	3	1	**9**	
IM	Vani	4	1	2	2	**9**	
IM	Zestaponi	4	1	3	1	**9**	
KK	Bolnisi	1	1	5	2	**9**	
KK	Gardabani	1	1	6	1	**9**	
KK	Rustavi city	1	0	6	2	**9**	
KK	Tetri Tskaro	1	1	5	2	**9**	
MM	Mtskheta	1	1	6	1	**9**	
SK	Kareli	2	2	4	1	**9**	
SZ	Poti city	6	2	0	1	**9**	
AJ	Shuakhevi	5	2	2	1	**10**	
IM	Baghdati	4	1	3	2	**10**	
IM	Khoni	5	1	2	2	**10**	
IM	Sachkhere	3	2	4	1	**10**	
KA	Sagarejo	1	1	7	1	**10**	
MM	Tianeti	1	1	6	2	**10**	
SK	Gori	2	2	5	1	**10**	

Region	*Municipality*	*F1: Distance to Tbilisi*	*F2: Distance to 'Big Four'*	*F3: Distance to Ports*	*F4: Distance to highway*	*Sum*	*Category*
SK	Khashuri	3	2	4	1	**10**	
SZ	Khobi	6	2	1	1	**10**	
SZ	Martvili	5	1	2	2	**10**	
SZ	Zugdidi	6	2	1	1	**10**	
AJ	Khulo	4	2	2	3	**11**	**Modestly located [Total pop size 2012= 524,700; Average pop size: 32,794; Pop growth 2012v2002: 0.6 percent]**
KK	Tsalka	2	2	4	3	**11**	
RL	Ambrolauri	4	1	3	3	**11**	
RL	Tsageri	4	1	3	3	**11**	
SJ	Adigeni	4	2	2	3	**11**	
SJ	Akhaltsikhe	3	2	3	3	**11**	
SJ	Borjomi	3	2	4	2	**11**	
SZ	Chkhorotsku	5	2	2	2	**11**	
KA	Gurjaani	2	2	7	1	**12**	
SJ	Aspindza	3	2	3	4	**12**	
SZ	Tsalenjikha	6	2	2	2	**12**	
KA	Kvareli	2	2	7	2	**13**	
KA	Telavi	2	2	7	2	**13**	
KK	Dmanisi	2	2	5	4	**13**	
MM	Dusheti	2	2	6	3	**13**	
RL	Oni	4	2	4	3	**13**	
KA	Akhmeta	2	2	7	3	**14**	**Poorly located[Total pop size 2012= 297,200; Av. pop size:33,022; Pop growth 2012v2002: 2.1 percent]**
KA	Sighnaghi	2	2	8	2	**14**	
RL	Lentekhi	5	2	3	4	**14**	
SJ	Akhalkalaki	3	3	4	4	**14**	
KA	Lagodekhi	3	3	8	1	**15**	
MM	Kazbegi	3	3	5	4	**15**	
SJ	Ninotsminda	3	3	4	5	**15**	
SZ	Mestia	6	2	3	4	**15**	
KA	Dedoplistskaro	3	3	8	2	**16**	

Source: Calculations based on Geostat 2012 data

Table 2: Distribution of municipalities according to economic-geographic factors

Part 1. Distribution of municipalities among distance zones (Z) by geographic factors and by regions								
Distance zone (Z)	Factor 1 (F1): Distance to Tbilisi		Factor 2 (F2): Distance to 'Big Four'		Factor 3 (F3): Distance to Ports		Factor 4 (F4): Distance to East-west highway*	
	# of municipalities	Distribution by regions	# of municipalities	Distribution by regions	# of municipalities	Distribution by regions	# of municipalities	Distribution by regions
Z 1	9	KA:1 KK:5 MM:2 SK:1	27	AJ:3 GU:2 IM:9 KA:1 KK:4 MM:2 RL:2 SK:1 SZ:3	9	AJ:3 GU:2 SZ:4	32	AJ:4 GU:3 IM:9 KA:3 KK:2 MM:1 SK:4 SZ:5 TB:1
Z 2	10	KA:5 KK:2 MM:1 SK:2	28	AJ:2 GU:1 IM:2 KA:5 KK:2 MM:1 RL:2 SJ:4 SK:3 SZ:6	12	AJ:2 GU:1 IM:5 SJ:1 SZ:3	16	AJ:1 IM:3 KA:4 KK:3 MM:1 SJ:1 SZ:3
Z 3	12	IM:3 KA:2 MM:1 SJ:5 SK:1	5	KA:2 MM:1 SJ:2	12	IM:6 RL:3 SJ:2 SZ:1	9	AJ:1 KA:1 KK:1 MM:1 RL:3 SJ:2
Z 4	12	AJ:1 IM:7 RL:3 SJ:1	0		9	IM:1 KK:2 RL:1 SJ:3 SK:2	6	KK:1 MM:1 RL:1 SJ:2 SZ:1
Z 5	13	AJ:3 GU:3 IM:2 RL:1 SZ:4	0		7	KK:3 MM:1 SK:2 TB:1	1	SJ:1
Z 6	7	AJ:2 SZ:5	0		5	KK:2 MM:3	0	
Z 7	0		0		5	KA:5	0	
Z 8	0		0		3	KA:3	0	
0 distance *	1	TB:1	4	TB:1 IM:1 AJ:1 KK:1	2	AJ:1 SZ:1	0	

Part 2. Average distance zone indices** by geographic factors by regions				
Region (Sum of average distance zone indices F1+F2+F3+F4)	Average distance zone indices**			
	Factor 1 (F1): Distance to Tbilisi	Factor 2 (F2): Distance to 'Big Four'	Factor 3 (F3): Distance to Ports	Factor 4 (F4): Distance to Eastwest highway*
AJ (10.8)	5.2	1.2	1.2	3.2
GU (8.6)	5	1.3	1.3	1
IM (9)	3.9	1.1	2.7	1.3
KA (13.4)	2.1	2.1	7.4	1.8
KK (9.5)	1.3	1.1	5	2.1
MM (11.9)	1.8	1.8	5.8	2.5
RL (12.4)	4.3	1.5	3.3	3.3
SJ (14.3)	3.2	2.3	5	3.8
SK (9.3)	2	1.8	4.5	1
SZ (10.4)	5.6	1.7	1.4	1.7
TB (6)	0	0	5	1

Source: Calculations based on Geostat 2012 data