

Report No. 96524-GE

Georgia Public Expenditure Review

Selected Fiscal Issues

June, 2015

Macroeconomics and Fiscal Management
Europe and Central Asia Region



Document of the World Bank

GEORGIA –GOVERNMENT FISCAL YEAR

January 1 – December 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective as May 11, 2015)

Currency Unit = Georgian Lari (GEL)

US\$1.00 = 2.3338 GEL

ABBREVIATIONS AND ACRONYMS

AA	Association Agreement	MDF	Municipal Development Fund
APMA	Agriculture Projects Management Agency	MIP	Medical Insurance Program
CEQ	Commitment to Equity	MOF	Ministry of Finance
CIPR	Center for Inter-American Policy and Research	MRDI	Ministry of Regional Development and Infrastructure
CIS	Commonwealth of Independent States	NQF	National Qualification Framework
CIT	Corporate Income Tax	OECD	Organization for Economic Cooperation and Development
DCFTA	Deep and Comprehensive Free Trade Area	PER	Public Expenditure Review
ECA	Europe and Central Asia	PIT	Personal Income Tax
EU	European Union	PP	Percentage Points
FDI	Foreign Direct Investment	PPP	Public Private Partnership
GDP	Gross Domestic Product	RPIF	Regional Projects Implementation Fund
GEL	Georgian Lari	SSA	Social Services Agency
Geostat	State Department of Statistics of Georgia	TSA	Targeted Social Assistance
IMF	International Monetary Fund	VAT	Value Added Tax
LEPLs	Legal Entities of Public Law	VSP	Village Support Program
M&E	Monitoring and Evaluation	UHC	Universal Healthcare System
MIGA	Multi-Lateral Guarantee Agency		

Vice President:	Laura Tuck
Country Director:	Henry G. Kerali
Senior Director:	Marcelo Giugale
Director:	Satu K. Kahkonen
Sector Manager:	Miria A. Pigato
Program Leader:	Rashmi Shankar
Task Team Leader:	Congyan Tan, Mariam Dolidze

Acknowledgements

This Public Expenditure Review was prepared by a team led by Congyan Tan and Mariam Dolidze, and consisting of Anton Dobronogov, Peter Goodman, Cesar A. Cancho, Elena Bondarenko, Tigran Kostanyan, Irina Capita, Hirut Wolde, Rachel L. Jiang, Lidia Ceriani, and Xavier Jaravel, with a much appreciated support from Zakia Nekaïen-Nowrouz and Sarah Nankya Babirye. The team is grateful for comments and advice from Mona Prasad, Gabriela Inchauste, Nora Lustig, Nistha Sinha, Lili Liu, William Dillinger, and Julian A. Lampietti. The team is grateful for overall guidance provided by Henry G. Kerali, Satu K. Kahkonen, Miria A. Pigato and Rashmi Shankar. The team gratefully acknowledges the excellent collaboration of the Georgian authorities, development partners, as well as the support and guidance of peer reviewers Sebastian Eckardt, David M. Gould, and Blanca Moreno-Dodson.

The Georgia BOOST database was constructed with financial support from the BOOST Public Expenditure Trust Fund under the ECA Public Financial Management Multi Donor Trust Fund and the Gates Trust Fund which is gratefully acknowledged.

Table of Contents

Acknowledgements	iii
Executive Summary	vii
A. Overview.....	vii
B. Key Findings.....	viii
1. Macroeconomic and Fiscal Challenges.....	1
A. Overview.....	1
B. Recent Macroeconomic Developments and Vulnerabilities.....	1
C. Fiscal Developments.....	3
D. Spending Benchmarked	7
E. The Way Forward	9
2. Enhancing Equity with Fiscal Policies	10
A. Overview.....	10
B. Revenue and Expenditure	11
C. Explaining the Redistributive Effect	13
D. Redistributive Effect: Taxes.....	15
E. Redistributive Effect: Expenditures	18
F. Impact of Fiscal Activities on Inequality and Poverty	21
G. The Way Forward	24
3. Evaluating Agriculture Programs	26
A. Overview.....	26
B. Agriculture in Georgia.....	27
C. The Agriculture Card Program	28
D. The Agro Credit Program.....	29
E. Evaluation of Programs and Areas for Improvements.....	31
F. The Way Forward	35
4. Subnational Expenditure Review	38
A. Overview.....	38
B. Institutional Framework.....	39
C. Subnational Expenditure Trends and Composition.....	41
D. Subnational Capital Expenditures.....	43
E. Preschool Expenditures	46
F. The Way Forward	49
References.....	52

Figures

Figure 1.1. Drivers of Growth, 2008–14.....	2
Figure 1.2. Growth Projections for ECA Countries.....	2
Figure 1.3. Revenues, Expenditures And Fiscal Deficits, 2008-15	3
Figure 1.4. Economic Classification Of Consolidated Government Expenditures, 2009-14.....	4
Figure 1.5. Functional Classification Of Central Government Expenditures, 2009-14.....	4
Figure 1.6. Budget Execution, 2009-14	5
Figure 1.7. Realignment from Capital to Social Spending.....	6
Figure 1.8. Social Spending.....	6
Figure 1.9. Government Expenditures and GDP Per Capita, 2013	8
Figure 1.10. Social spending across countries.....	8
Figure 1.11. Efficiency Scores for Social Protection Spending.....	9
Figure 1.12. Efficiency Scores for Health Spending.....	9
Figure 2.1. Composition of Taxes.....	11
Figure 2.2. Social Spending and Subsidies	12
Figure 2.3. Concentration Curves for Progressive and Regressive Transfers and Taxes	14
Figure 2.4. Definitions of Income Underpinning the CEQ Fiscal Incidence Analysis.....	14
Figure 2.5. Kakwani Progressivity Coefficients for Direct Taxes.....	15
Figure 2.6. Labor Income Tax and Exemptions, as Share of Disposable Income by Decile	15
Figure 2.7. Labor Income Tax, Exemptions, and Direct Taxes	15
Figure 2.8. Indirect Taxes as Share of Disposable Income by Decile	16
Figure 2.9. VAT and Exemptions, as Share of Disposable Income by Decile	17
Figure 2.10. Indirect Taxes	17
Figure 2.11. Tax Collection by Deciles	17
Figure 2.12. Tax System.....	17
Figure 2.13. Social Spending, as Share of Disposable Income by Decile.....	18
Figure 2.14. Social Spending, Concentration Curves	19
Figure 2.15. Direct Transfers Progressivity, International Comparison	19
Figure 2.16. In-Kind Transfers: Education.....	19
Figure 2.17. In-Kind Transfers: Health.....	19
Figure 2.18. Social Spending, Concentration Coefficients.....	20
Figure 2.19. Distribution of TSA Spending by Deciles.....	20
Figure 2.20. Concentration Curves for MIP, UHC, and Consolidated UHC	20
Figure 2.21. Efficiency of Direct Transfers, Change in Poverty Headcount.....	23
Figure 2.22. Efficiency of Direct Transfers, by Poverty Reduction per Billion GEL Spent	24
Figure 2.23. Efficiency of Direct Transfers, by Gini Reduction per Billion GEL Spent	24
Figure 2.24. Simulated Property Tax.....	24
Figure 3.1. Agriculture Sector Output, 2006-14	31
Figure 3.2. Sown Areas by Region, 2010–13	32
Figure 3.3. Agriculture Sector GDP and Land Plowed, 2013	32
Figure 3.4. Imports of Inputs to Agriculture, 2009–14.....	32
Figure 3.5. Total Loans Outstanding to the Agriculture Sector	33
Figure 3.6. New Agricultural Loans as Percentage of Total New Commercial Loans.....	34
Figure 3.7. Average Monthly Interest Rates and Spreads.....	34
Figure 3.8. Food-Processing Agribusiness Output.....	34
Figure 4.1. Local and Central Spending by Function, 2012.....	41
Figure 4.2. Local and Central Spending by Function, 2014.....	41
Figure 4.3. Local Government Capital Expenditures, 2012-15.....	42
Figure 4.4. Revenue Sources Of Local Governments, 2012-15	42

Figure 4.5. Share of Wages In Total Expenditures By Local Governments.....	43
Figure 4.6. Share of Wages In Total Expenditures By Local Governments.....	43
Figure 4.7. Local Government Capital Spending Variances, 2013.....	43
Figure 4.8. Population and Capital Spending per Capita, 2013.....	43
Figure 4.9. Local Government Populations, Socially Vulnerable Populations and Spending, 2013....	45
Figure 4.10. RPIF Spending, 2013 and 2014.....	46
Figure 4.11. MDF Spending by Recipient Population, 2013.....	46
Figure 4.12. Preschool Education Spending, Shares and Population, 2013.....	47
Figure 4.13. Education Spending, Million GEL, and Share of LSG Spending, 2013.....	47
Figure 4.14. Fiscal Impact of Parental Fee Elimination by Region.....	49

Tables

Table 1. Distributional Impact of Fiscal Policies in GEL.....	viii
Table 2. Policy Options for Consideration.....	ix
Table 1.1. Macroeconomic Trends and Projections, 2010-18.....	3
Table 1.2. Medium Term Consolidated Fiscal Framework, 2010-18.....	5
Table 1.3. Selected Social Programs Introduced or Scaled-Up in 2013-15.....	6
Table 1.4. Debt Sustainability Analysis.....	7
Table 2.1. General Government Revenues in Georgia, 2013.....	11
Table 2.2. General Government Expenditures in Georgia, 2013.....	13
Table 2.3. Explaining Tax Progressivity.....	15
Table 2.4. Regressivity of Indirect Taxes, 2013.....	16
Table 2.5. Explaining Spending Progressivity.....	18
Table 2.6 Distributional Impact of Fiscal Policies in GEL.....	21
Table 2.7 Poverty and Inequality Indicators at Each Income Concept.....	21
Table 2.8. Gini Coefficient for Each Income Concept Compared Across CEQ Countries.....	22
Table 2.9. US\$2.5/day Poverty for Each Income Concept, CEQ Countries.....	22
Table 3.1. Card Program Benefits 2013-15.....	28
Table 3.2. Summary of Card Program Expenses and Beneficiaries 2013-14.....	29
Table 3.3. Components of the Credit Program, 2013-15.....	30
Table 3.4. Products Purchased with Agro Cards, 2013.....	32
Table 3.5. Lending Activities under the Credit Program, 2013-14.....	33
Table 4.1. Local Government Characteristics and Spending (in GEL), 2013.....	44
Table 4.2. The Composition of Preschool Education Expenditures.....	48
Table 4.3. Additional Fiscal Cost of Eliminating Preschool Fees, Million GEL.....	49

Boxes

Box 2.1. How Progressive Will the new TSA and UHC Become?.....	20
Box 2.2. How Georgia's Tax System Could Do More for the Poor?.....	24
Box 2.3. The Use of the BOOST Tool for Fiscal Incidence Analysis.....	25
Box 4.1. Temporary Norms under the New Self-Governance Code:.....	40
Box 4.2. Guidelines for Public Investment.....	50
Box 4.3. Accountability Mechanisms.....	51

Executive Summary

A. OVERVIEW

1. **Georgia has an impressive growth record but social vulnerabilities persist.** Georgia is a lower middle income country with a per capita GDP of US\$3,681 (2014). Following intense pro-market reforms, the economy registered fast growth averaging nearly 6 percent during the past decade. Poverty developments have been encouraging. The poverty rate at US\$2.5/day fell from 47 percent in 2010 to 36 percent in 2013 and 35 percent (projected) in 2014. The reduction in poverty is mainly attributable to government transfers, food disinflation and increased earnings. Despite the reduction in poverty, large urban-rural disparities persist with rural poverty being nearly double that of the urban areas. The current government has therefore made spending on social sectors and agriculture a high priority and has launched a decentralization reform to support regional inclusive growth.

2. **It remains a challenge to tackle social vulnerabilities within a sustained macroeconomic framework.** The government has intensified its efforts to reduce social vulnerability, as evidenced by the increase in social spending from 7.1 percent of GDP in 2012, to 9.6 percent in 2014. As a result, the fiscal deficit widened from 2.8 percent of GDP in 2012 to 3.0 percent in 2014. The increase in the deficit in 2014 was also driven by a larger wage bill and election related local government spending. GDP growth recovered to 4.8 percent in 2014 largely supported by policy certainty and the signing of the Association Agreement (AA) with the European Union (EU) which led to an increase in private investment and public consumption. The spillover effects from the slowdown in Russia and anemic growth in the EU adversely impacted Georgia in the fourth quarter of 2014 and this trend is likely to continue in 2015. In response to the widening fiscal deficit and slowing growth, the government needs to consolidate spending on less productive programs while increasing the effectiveness of spending. In this respect the Government of Georgia has requested the Bank to inform and provide recommendations on public spending, in particular on selected government programs.

3. **This programmatic Public Expenditure Review (PER) assesses the alignment of selected fiscal programs with the government's social objectives.** Building on the analysis and recommendations of the 2014 PER, this PER analyzes the impact of recent reforms including the social programs that were either introduced or scaled up in 2013. It gives an overview of the recent macroeconomic and fiscal developments, including the fiscal implications of the social programs (Chapter 1). As requested by the government, it addresses three questions in the rest of the report: (1) has the realignment of spending toward social sectors resulted in better distributional outcomes; (2) have the agriculture support programs been targeted at productivity growth to support real incomes in poor rural regions; and (3) what is the fiscal and equity impact of the ongoing decentralization process? The first question is addressed by combining micro household survey data with administrative fiscal data to analyze the distributional impact of both taxes and government spending on poverty and inequality in Georgia (Chapter 2). The second question is addressed by comparing the cost of new agriculture programs with their estimated impact on agricultural productivity (Chapter 3). Finally, the issue of regional inequalities is partially addressed in this report by discussing three different aspects of the current decentralization process: the expected fiscal impact of decentralization, the need to rationalize current capital grant programs to make public investment more effective, and the implications of introducing free preschool education administered at the local government level (Chapter 4).

B. KEY FINDINGS

4. **The fiscal incidence analysis shows that overall fiscal policy in Georgia contributes to reducing poverty and improving equity.** The burden of taxes falls on the richest and social spending has resulted in a sizable increase in the incomes of the poor (Table 1). In other words, taxation, especially the personal income tax (PIT), and social spending are overall progressive. Furthermore, fiscal policy in Georgia has commendably reduced income inequality and poverty—reductions that in fact are the largest ever achieved in the developing countries so far included in the CEQ project.¹ The main driver of this success is the system of direct transfers, led by the Targeted Social Assistance (TSA) program. Yet even though overall fiscal policy in general has been equalizing, the burden of Georgia's indirect tax system (VAT and excise taxes) falls more on the poorest than it does to other CEQ countries. Current VAT exemptions also do not make the tax more equalizing. Furthermore, not all social benefits reached the poorest. Social benefits, such as Tbilisi city benefits, are not well-targeted to the poor. From an equity perspective, it would be preferable to consider reforms to make indirect taxes more equalizing. Moreover, since the TSA targets the poor very well and has significantly reduced poverty and inequality, it would also be advisable for other pro-poor programs to incorporate TSA's targeting mechanism. In-kind transfers such as healthcare and preschool services are also less equalizing than other programs. In this case inducing the rich to use private healthcare and preschool services could make these programs more equalizing.

Table 1. Distributional Impact of Fiscal Policies in GEL

	Quintiles					All
	Poorest	II	III	IV	Richest	
Number of People	734,948	735,013	735,050	734,317	735,748	3,675,077
Market Income Per Capita	425	1,055	1,822	2,926	6,924	2,631
All Taxes (-)	159	193	299	512	1,234	480
Indirect Taxes	157	177	230	297	495	272
Direct Taxes	2	16	69	215	738	208
All Transfers (+)	693	630	533	488	378	545
Direct Transfers	546	492	400	363	270	414
In-kind Transfers	147	138	133	125	108	130
Indirect Subsidies (+)	1	3	5	10	24	9
Final Income Per Capita	965	1,495	2,061	2,913	6,092	2,706

Source: Staff calculations based on IHS (2013).

Note: This table illustrates how the fiscal interventions in Georgia impact different quintiles of the income distribution in terms of GELs. The market income is the income before fiscal interventions and the final income is the income after. Fiscal interventions in general are equalizing in Georgia: the per capita income of the bottom 60 percent increased moving from market to final income, in particular the income per capita of the poorest 20 percent more than doubled, while the income of the top 40 percent was reduced.

5. **The agriculture programs have generated benefits as expected.** The Agriculture Card Program for farmers introduced in 2013 has contributed to an expansion of cultivated land, an increase in yields, and growth in agricultural GDP. Other benefits have included more investment in inputs and machinery and a closer relationship of farmers with input suppliers. While this program will be completed at the end of 2015, the experience has generated valuable lessons, including a recognition of the need for better targeting, a clearer timeline and a monitoring and evaluation system. The large number of loans supported by the Credit Program contributed to a substantial increase in agricultural loans. The key benefit has been a better access to finance due to a reduction

¹Led by Nora Lustig since 2008, the Commitment to Equity (CEQ) project is an initiative of the Center for Inter-American Policy and Research (CIPR) and the Department of Economics at Tulane University, the Center for Global Development and the Inter-American Dialogue. For more details visit www.commitmentoequity.org.

in banks' risks and lower interest rate charges. Additional benefits have included the opportunity for farmers to establish a credit history with a bank and the opportunity for banks to build their own agricultural lending experience. Although the government used this tool to stimulate commercial bank lending to support growth in the agriculture sector, subsidizing interests has the unintended consequence of distorting the agricultural lending market; in the future, policies could move from lowering financing costs to addressing the fundamental risks that agriculture is exposed to. Finally, these agriculture programs led to a surge in agriculture spending, which so far accounted for a small part of the budget.

6. The decentralization reform has significant implications for subnational fiscal policies. As most of the poor live in rural areas and regional disparities are high, regional development and fiscal decentralization have come to be viewed as useful mechanisms for supporting inclusive growth. Capital grants allocated from the center have traditionally had a prominent role in regional development. However, with more fiscal resources and responsibilities delegated to local governments, there is a need to gradually build local government capacities, helping them to choose and execute public investments, within a phased time frame. The rules on capital expenditures in the new Self Governance Code is expected to stimulate a budgeted increase of capital spending in the largest cities. This may exacerbate regional spending inequality, since the largest cities have more own-source revenues. In addition, under the new Budget Code that became effective in late 2014, the envisioned sharing of income taxes between local and center is estimated to add to local government own-source revenues an amount equivalent to 13 percent of the current income tax revenues. The introduction of free preschool education has brought more equity in access to education but has generated additional costs for local governments. More importantly, given the differences in capacity across municipalities and cities, fee removal could possibly exacerbate preschool inequalities. The temporary norms for the number of local government employees and spending on wages and salaries are expected to bridge some of the gaps in hiring and spending on wages, but they are likely to introduce uneven fiscal adjustments across local governments.

7. The attached table summarizes the key recommendations of the three chapters of the report.

Table 2. Policy Options for Consideration

Policy Area	Option for Consideration		Likely Impact
Enhancing equity with fiscal policies	-	Revisit and reduce the list of VAT exemptions to focus more on equity.	- More equalizing tax system
	-	Utilize the targeting mechanism from the Targeted Social Assistance (TSA) program to enhance targeting and poverty reduction.	- Improved targeting and effectiveness of pro-poor programs.
	-	Introduce incentives for wider use of private services rather than public services for more affluent population, such as healthcare.	- More pro-poor in-kind services.

Policy Area	Option for Consideration		Likely Impact
Improving agriculture programs	-	Institutionalize a monitoring and evaluation (M&E) component.	- Improved evaluation mechanism.
	-	Develop information management system via the Agency of Public Registry (NAPR) cadaster.	- Improved targeting of the programs.
	-	Design future agriculture support programs with improved targeting, high quality input, clear timeline, complementary advisory services, and M&E components.	- Improved overall targeting and performance of agricultural programs.
	-	Develop agricultural insurance to address agricultural risks.	- Reduced agricultural risks.
Strengthening subnational expenditures	-	Develop guidelines for the selection and implementation of investment projects, gradually decentralizing decision-making on project selection and funding allocation, develop accountability mechanisms, and capacity building in relevant skills for local officials.	- More responsibility and higher capacity of the local governments in selection and implementation of projects.
	-	Develop national standards for quality and spending per child for preschool and put in place mechanisms to secure equitable preschool funding using conditional grants, mandating specific budget provision, or both.	- More equitable preschool education across local governments.

1. Macroeconomic and Fiscal Challenges

A. OVERVIEW

1.1. **Georgia is now facing the challenge to sustain its good performance in growth and poverty reduction after it made significant progress in 2010-13.** In 2013 the economic growth slowed due to policy uncertainty that followed the transition of government. In the first three quarters of 2014 growth picked up, but it came under pressure in the fourth quarter as the regional economic environment severely deteriorated. Since Russia's slowdown affected Georgia's remittance inflows, and the terms of trade worsened against its trading partners, both Georgia's exports and remittances started to fall, leading to a much lower growth projection in 2015. As a result, the pace of poverty reduction is also likely to slow. Georgia's economy is still vulnerable to future shocks, which underscores the need for fiscal buffers.

1.2. **Fiscal pressures are emerging as spending on social programs increases and needs for capital investment continue.** The government prioritized social programs and introduced a range of new programs and policies, such as universal health care and agriculture programs. It also raised pension and social assistance benefits, abolished parental preschool fees, and partially exempted low-income workers from income taxes. All of these programs came into full operation in 2014, generating a significant fiscal impact. Meanwhile there seems to have been a realignment from capital to social spending. It is vital to sustain the progress of continued spending in capital, health and education to enhance long-run growth and address Georgia's pending infrastructure needs while ensuring job creation for poverty reduction.

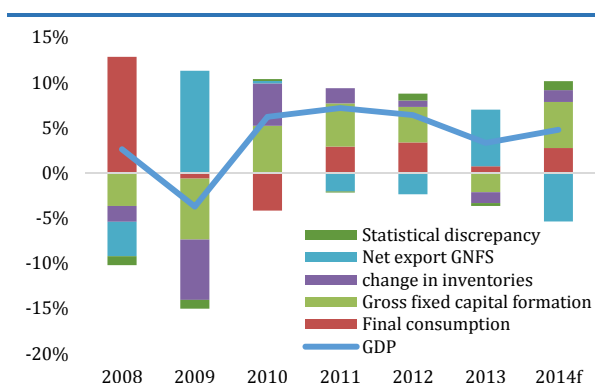
1.3. **This chapter is structured as follows:** The next section sets out the macroeconomic challenges. Section C discusses fiscal development and the fiscal impact of the new programs and policies, and Section D presents spending benchmarks to assess their cost and efficiency. Section E outlines policy recommendations.

B. RECENT MACROECONOMIC DEVELOPMENTS AND VULNERABILITIES

1.4. **Georgia enjoyed a period of stellar growth in 2010-12 after a fiscal stimulus was put in place to counter the global financial crisis in 2009.** After FDI inflow slowed down and the economy contracted by 3.8 percent in 2009, the authorities responded with countercyclical fiscal measures, financed by a large international crisis assistance package. Aided by high public investment bolstering the recovery, GDP growth averaged 6.6 percent a year for 2010-12 (Table 1.1). Total investment more than doubled in 2009-12, during which high public spending bolstered the recovery, and private investment, exports, tourism, and bank lending picked up (Figure 1.1).

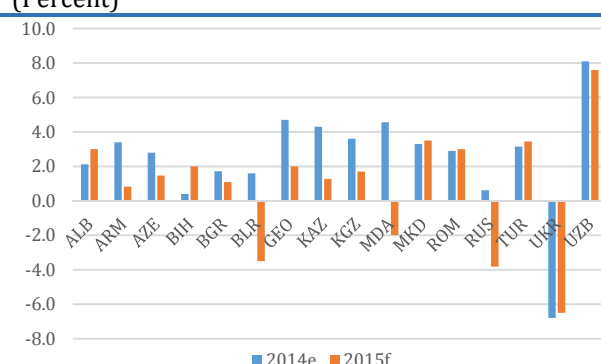
1.5. **In 2013, economic growth moderated to 3.3 percent due to government transition.** The transition of government was associated with considerable uncertainty, which translated into subdued economic growth. In late 2012 the new government was elected but election of the president did not take place till October 2013. The new prime minister resigned at that time, just one year after he was elected, and the current prime minister was appointed in November. In 2013 investment contracted by 14.5 percent, and the fall was more acute for government financed investment. Meanwhile, private consumption was noticeably resilient, thanks to falling inflation, growing wages, and expanding consumer lending.

Figure 1.1. Drivers of Growth, 2008–14
(Percent)



Source: Estimates based on Geostat statistics.

Figure 1.2. Growth Projections for ECA Countries
(Percent)



Source: Bank staff calculations.

1.6. In 2014, as private investment and government spending recovered, output expanded by 4.8 percent. Greater policy certainty and Georgia's signing of the Association Agreement (AA) with the European Union (EU) supported this recovery. Gross investment recovered from 24.8 percent of GDP in 2013 to 29.8 percent in 2014, driven by significant growth in private investment, particularly in construction. Capital spending by the government also improved slightly from 5.0 percent of GDP in 2013 to 5.5 percent. Meanwhile government spending expanded by 4.7 percent, as the government started to scale up social programs.

1.7. However, a steep deterioration in the external environment poses significant downside risks to growth. Growth of the region's largest economy, Russia, stagnated in 2014 and in the fourth quarter of 2014 the ruble depreciated sharply as a result of lower oil prices and sanctions. This exposed Georgia to both demand and terms-of-trade shocks, since Georgia traditionally received about half of its remittances from Russia, and exports to Russia had become a major driver of export growth since the Russian market reopened in 2013. Between November 2014 and February 2015, the Georgian lari appreciated against the currencies of its main trading partners: namely the Russian ruble, the Ukrainian hryvnia, the Azerbaijan manat, and the Turkish lira. Remittances from and exports to Russia dropped in the fourth quarter of 2014, lowering quarterly growth to 1.8 percent, year-on-year.

1.8. With projected growth below trend and high macro risks, fiscal policy needs to remain prudent while supporting growth. Georgia's economy is expected to grow by 2 percent in 2015 and 3 percent in 2016. Pressures on the external sector are likely to continue for the next year or so. Political uncertainty could re-emerge as the 2016 parliamentary elections are approaching. Over the medium-term, improved economic ties with the EU and the reforms outlined in the government's development strategy are expected to support economic growth. In such an environment of political and external uncertainties, fiscal policy must remain tight while supporting growth and maintaining macroeconomic stability.

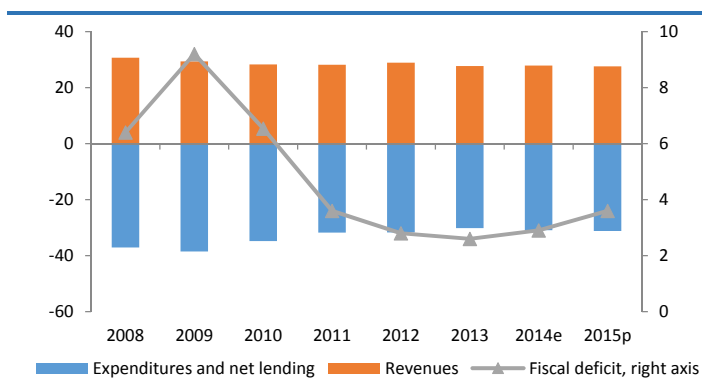
Table 1.1. Macroeconomic Trends and Projections, 2010-18

	2010	2011	2012	2013	2014e	2015p	2016p	2017p	2018p
	Actuals				Projections				
	(Percent change, unless otherwise indicated)								
National Accounts									
GDP nominal (in billion GEL)	20.7	24.3	26.2	26.8	29.1	31.2	33.8	37.1	40.8
Real GDP growth	6.2	7.2	6.4	3.3	4.8	2.0	3.0	4.5	5.0
Consumer price index	7.1	8.5	-0.9	-0.5	3.1	5.0	4.5	4.0	4.0
GDP per capita (in U.S. dollars)	2,623	3,231	3,523	3,600	3,681	3,073	3,223	3,434	3,711
Gross investment (in percent of GDP)	21.6	26.2	28.9	24.8	25.9	20.6	22.0	23.7	24.8
Gross national saving (in percent of GDP)	11.3	13.9	17.3	19.0	16.2	12.2	12.7	15.1	17.2
	(In percent of GDP, unless otherwise indicated)								
General Government Operations									
Revenues and grants	28.3	28.2	28.9	27.7	27.9	27.6	27.8	27.9	27.9
Tax revenues	23.5	25.2	25.5	24.8	25.1	24.8	25.0	25.1	25.3
Expenditure and net lending	34.8	31.8	31.7	30.2	30.9	31.2	31.1	30.8	30.6
Current expenditure	26.4	22.9	24.9	24.1	25.4	25.3	25.1	24.7	24.4
Capital expenditure and net lending	8.4	8.8	6.8	6.1	5.5	5.9	6.0	6.1	6.3
Overall fiscal balance	-6.5	-3.6	-2.8	-2.6	-3.0	-3.6	-3.3	-3.0	-2.8
Total public debt	38.7	33.6	32.3	32.2	33.4	37.3	37.4	36.7	36.0
	(In percent of GDP, unless otherwise indicated)								
External Sector									
Current account balance	-10.3	-12.3	-11.7	-5.8	-9.7	-8.5	-9.3	-8.6	-7.5
Exports of goods and services	34.9	36.4	38.2	44.7	42.9	46.0	47.2	49.4	51.7
Imports of goods and services	52.7	55.5	57.8	57.6	60.4	63.0	64.7	65.7	66.8
FDI (net)	5.8	6.2	3.9	5.1	6.5	7.2	7.3	7.3	7.4
Foreign exchange reserves									
(Months imports of goods and services)	4.4	4.3	3.8	3.6	3.7	3.2	3.3	3.4	3.5
(In millions of dollars)	2,264	2,818	2,873	2,823	2,694	2,492	2,760	3,173	3,449

Source: Georgian authorities; and Bank staff estimates and projections.

C. FISCAL DEVELOPMENTS

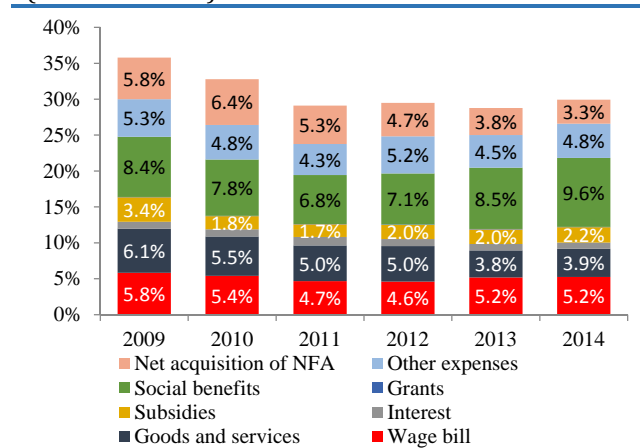
1.9. Since 2011 VAT, income tax, profit tax and excises have accounted for about 24-25 percent of GDP. VAT was the largest single source of revenues in 2014 at 46 percent of the total; income tax contributed to 27 percent, profit tax to 12 percent and excises 11 percent. The shares of these taxes in total revenues have largely been stable over time. A new amendment of the tax code allowed a certain amount of income tax

Figure 1.3. Revenues, Expenditures And Fiscal Deficits, 2008-15

Source: MOF and staff calculations.

to be exempt for low-income workers.² In 2014, the Liberty Act came into effect which bans any new state tax or rate increase without a referendum, exception for excises. In addition, the government also allowed tax exemptions for low-income earners. In 2015 the government has budgeted a higher rate for excise taxes on cigarettes and alcohol, and added a new excise on international calls. As a result, a 5 percent increase in tax revenues is budgeted for 2015 and in the first quarter, collections outperformed the target.

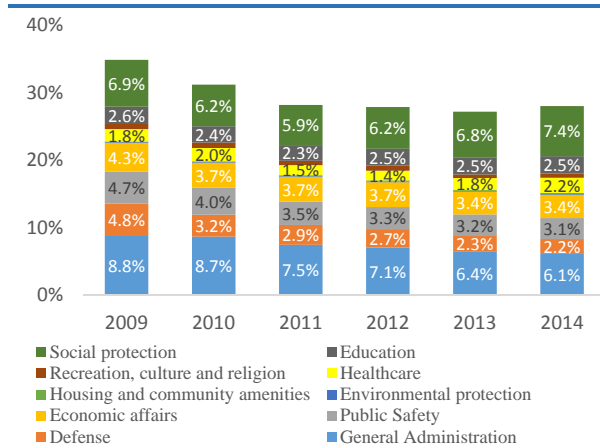
Figure 1.4. Economic Classification Of Consolidated Government Expenditures, 2009-14
(Percent of GDP)



Source: Ministry of Finance.

Note: net acquisition of NFA=purchase of NFA-sale of NFA

Figure 1.5. Functional Classification Of Central Government Expenditures, 2009-14



Source: Ministry of Finance.

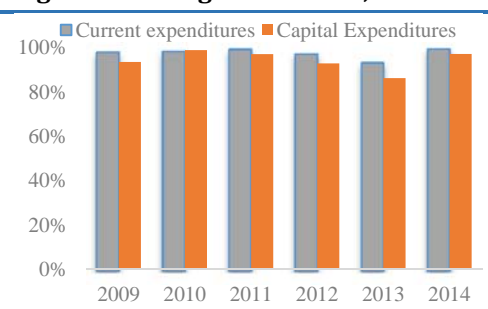
1.10. On the spending side, after a large stimulus in 2009, the government successfully consolidated recurrent spending in 2010–12 which reduced the fiscal deficit from 9.2 percent of GDP in 2009 to 2.8 percent in 2012. The fiscal stimulus in response to the 2008-09 crises led to a fiscal deficit of 9.2 percent of GDP in 2009. During 2010–12, growth rebounded, revenues grew, and the government undertook fiscal consolidation to restore fiscal buffers. By 2012, the deficit was reduced to 2.8 percent of GDP. As shares of GDP, the general government consolidated spending on wages by 0.8 percentage points (pp), goods and services by 0.5 pp, and social benefits by 0.7 pp respectively from 2010–12 (Figure 1.4). In the central government, spending on general administration fell most by 1.6 percent of GDP, mainly because of lower transfers from the central government to subnational governments (Figure 1.5).

1.11. With the government transition in 2012 came a shift in fiscal policy to scale up social assistance. The government elected in 2012 made spending on social programs a major priority. In February 2013, a noncontributory Universal Health Care (UHC) program was introduced and gradually rolled out through the year. TSA benefits went up in mid-2013, and in September pension benefits were raised by 20 percent. That year the Agriculture Card program also went into operation, distributing grants to small farmers to fund agricultural inputs and machinery services (see Chapter 3). The personal income tax (PIT) exemption to refund tax to low-income taxpayers was announced. Although most new programs began in the middle of the year and did not make full impact in 2013, the increase in social spending was already visible as it rose from 7.1 percent

² Employees pay a flat income tax rate of 20 percent in Georgia. Individuals not earning more than GEL6,000 in taxable income in salary within a year are entitled to make a GEL1,800 deduction from employment income and claim a tax refund by means of filing a tax return to the Georgian tax authorities.

of GDP to 8.5 percent. However, in 2013, since the cost of the new programs budgeted for the first time were not well-known before execution, both recurrent and capital spending were largely under-executed, the former by 7 percent and the latter by 14 percent (Figure 1.6). This was in effect a spending consolidation equivalent to 2.2 percent of GDP, reducing the fiscal deficit to 2.6 percent of GDP.

Figure 1.6. Budget Execution, 2009-14



Source: MOF and BOOST.³

1.12. The policy changes introduced in 2013 came into full effect in 2014, contributing to an increase in recurrent spending and widening in fiscal deficit.

Fiscal deficit rebounded to 3.0 percent of GDP in 2014. Total state spending grew by 12 percent. The UHC program represented 2 percent of GDP and the new agriculture card and credit programs amounted to nearly 0.4 percent of GDP (Table 1.3). The income tax rebate for low-income workers was estimated to reduce 2014 revenues by 0.4 percent of GDP. Spending on existing programs also went up significantly: pension spending registered a GEL186 million increase, reflecting the full-year impact of the September 2013 benefit increase, equivalent to 0.7 percent of 2013 GDP. Higher TSA benefits contributed to a 30 percent increase in spending on social programs other than pensions (0.5 percent of 2013 GDP). Moreover, after parental fees were removed, local governments faced a 19 percent increase in preschool spending.⁴ All these changes led to a spending increase equivalent to 2.9 percent of 2013 GDP.

Table 1.2. Medium Term Consolidated Fiscal Framework, 2010-18

	2006	2007	2008	2009	2010	2011	2012 % of GDP	2013	2014e	2015p	2016p	2017p	2018p
Revenues and Grants	26.7	29.2	30.7	29.3	28.3	28.2	28.9	27.5	27.9	27.6	27.8	27.9	27.9
Tax revenues	22.9	25.8	24.9	24.4	23.5	25.2	25.5	24.8	25.1	24.8	25.0	25.1	25.3
grants	1.2	0.6	3.2	2.2	2.3	0.9	1.0	0.8	1.0	1.1	1.0	0.9	2.6
Other revenues	2.6	2.8	2.5	2.7	2.5	2.1	2.4	2.1	1.8	1.7	1.9	1.8	2.6
Total Expenditure	29.7	33.9	37.1	38.5	34.8	31.7	31.7	30.1	30.9	31.2	31.1	30.8	30.6
Current Expenditure	20.7	25.0	28.3	30.1	26.4	23.0	23.2	24.3	25.4	25.3	25.1	24.7	24.4
Compensation of employees	4.1	4.0	5.3	5.8	5.4	4.7	4.6	4.7	5.2	4.8	5.0	5.0	5.0
Purchases of goods and services	5.6	9.3	8.5	6.1	5.5	5.0	5.0	3.8	3.9	5.9	6.1	6.1	6.1
Interests	0.8	0.6	0.6	1.0	1.0	1.2	1.0	0.9	0.9	1.0	0.9	0.7	0.6
Subsidies	2.8	2.3	2.7	2.3	1.8	1.8	2.0	2.1	2.1	1.7	1.6	1.5	1.4
Grants	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Social benefits	5.1	5.0	7.2	8.4	7.8	6.8	7.1	8.4	9.6	9.6	9.3	9.3	9.2
Other expense	2.3	3.7	3.9	5.2	4.8	3.5	3.6	4.3	3.6	2.2	2.0	2.0	2.0
Capital Expenditure	9.0	8.9	8.8	8.4	8.4	8.8	8.4	6.0	5.5	5.9	6.0	6.1	6.3
Capital	7.8	8.6	8.0	8.0	7.4	7.7	7.3	5.1	5.1	5.7	5.9	5.9	6.1
Net Lending	1.2	0.3	0.8	0.4	1.0	1.1	1.1	0.9	0.4	0.2	0.1	0.2	0.2
Overall fiscal deficit	-3.0	-4.7	-6.4	-9.2	-6.5	-3.5	-2.8	-2.6	-3.0	-3.6	-3.3	-2.9	-2.8
real 2008 Lari, million													
Revenues and Grants	4,431	5,444	5,854	5,372	5,515	5,902	6,412	6,303	6,697	6,823	7,078	7,424	7,781
Tax revenues	3,800	4,810	4,753	4,479	4,576	5,267	5,658	5,684	6,025	6,131	6,366	6,679	7,068
grants	199	112	617	397	444	192	230	177	240	272	255	239	726
Other revenues	431	522	484	497	495	443	524	484	432	420	484	479	726
Total Expenditure	4,929	6,320	7,081	7,067	6,790	6,635	7,029	6,899	7,418	7,713	7,919	8,195	8,549
Current Expenditure	3,435	4,661	5,396	5,525	5,155	4,802	5,155	5,570	6,097	6,254	6,391	6,572	6,817
Compensation of employees	680	746	1,008	1,070	1,053	976	1,020	1,077	1,248	1,187	1,273	1,330	1,397
Purchases of goods and services	929	1,734	1,614	1,128	1,070	1,040	1,101	871	936	1,459	1,553	1,623	1,704
Interests	133	112	121	175	194	247	215	206	216	247	229	186	168
Subsidies	465	429	512	429	357	366	436	489	504	420	407	399	391
Grants	-	19	12	15	12	11	14	13	24	25	25	27	28
Social benefits	846	932	1,379	1,537	1,526	1,421	1,575	1,925	2,304	2,373	2,368	2,475	2,570
Other expense	382	690	750	963	941	741	794	986	864	544	509	532	559
Capital Expenditure	1,494	1,659	1,685	1,542	1,635	1,833	1,874	1,368	1,320	1,459	1,528	1,623	1,760
Capital	1,294	1,603	1,524	1,468	1,448	1,605	1,625	1,169	1,224	1,421	1,493	1,578	1,713
Net Lending	199	56	161	73	187	228	249	199	96	38	34	45	47
Overall fiscal deficit	-498	-876	-1,227	-1,694	-1,275	-733	-617	-596	-720	-890	-840	-772	-768

Source: MOF data and staff calculations.

³ The Georgia BOOST database is a micro fiscal public expenditure database developed by the World Bank.

⁴ The projected increase for 2015 also reflects the wage increase of kindergarten teachers in Tbilisi.

1.13. The high level of social spending will be sustained in 2015. Spending on a number of programs are expected to rise: a 12 percent increase is budgeted for healthcare expenditures in 2015, driven by higher drug coverage; pension benefits are expected to rise again, leading to a 4 percent increase, but that is smaller than a year ago; there will be a major revision to improve the targeting and coverage of the TSA program but the total cost will go up only slightly. For agriculture, the budgeted costs for the card and credit programs are not expected to rise, and a new insurance program was designed that has a smaller budget (GEL10 million). Spending on general education is also expected to rise by 14 percent because higher salaries are viewed as an integral component of the envisioned reform to improve teacher quality.

Table 1.3. Selected Social Programs Introduced or Scaled-Up in 2013-15

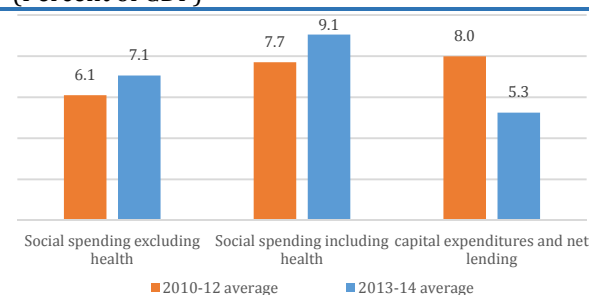
(In GEL million and percent of GDP)

	2012 million GEL	2013 million GEL	2014 million GEL	in percent of GDP	2015 (budgeted) million GEL	in percent of GDP
Total expenditure, state budget	7,668	7,313	8,178	28.0	8,302	26.1
Programs initiated and scaled up from 2013:	1,805	2,197	2,965	10.2	2,984	9.4
Health care programs	333	436	588	2.0	656	2.1
Tax subsidies to low-income population			127	0.4	N/A	N/A
Agro Credit Program (interest subsidies)		7	64	0.2	30	0.1
Agriculture Card Program			50	0.2	50	0.2
Agriculture Insurance			0	0.0	10	0.0
Pensions	1,068	1,149	1,335	4.6	1,390	4.4
Social programs other than pensions (incl. assistance)	330	490	636	2.2	651	2.0
Preschool (kindergartens)	74	115	165	0.6	197	0.6
note:						
General education	372	469	436	1.5	498	1.6

Source: MOF and staff calculations.

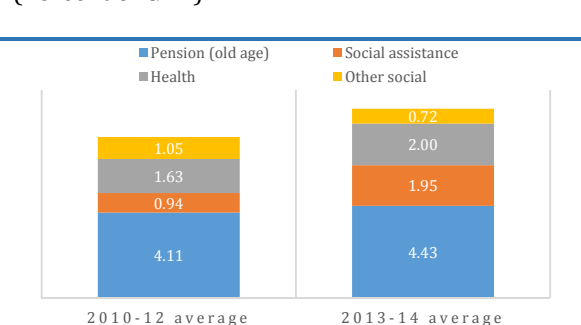
1.14. The major increase in social spending did not lead to a widening of fiscal deficit as capital spending moderated. In 2010–12 capital expenditures averaged 8 percent of GDP. In 2013–14 as social spending expanded, capital spending contracted by 2.7 pp of GDP (Figure 1.7). Not only were central government capital expenditures lower, but capital transfers to local governments also declined. In the 2015 budget, capital spending will stay below 6 percent of GDP and over the medium term the government envisions that it will be in the range of 5–6 percent.

Figure 1.7. Realignment from Capital to Social Spending
(Percent of GDP)



Source: Ministry of Finance.

Figure 1.8. Social Spending
(Percent of GDP)



Source: Ministry of Finance.

1.15. **Over the medium term the government is expected to expand revenue sources and cut back on recurrent spending.** The government is committed to fiscal consolidation. The Liberty Act limited the fiscal deficit on government operations (current spending) to 3 percent of GDP and total expenditures to below 30 percent. Under this act, the government also cannot easily increase tax rates, so spending needs to be curtailed in future. The government plan is to consolidate spending by making spending on social benefits more efficient, reforming management of public investment, and limiting administrative expenses, while keeping capital spending at 5–6 percent of GDP. The deficit is expected to come down to 2.8 percent of GDP by 2018 from 3.6 percent in 2015. Fiscal consolidation is central to the International Monetary Fund (IMF) Stand-By Arrangement and the continuing Development Policy Operation with Georgia. To achieve the desired outcomes, it will be crucial to make social spending more effective and support the government in building institutions and capacity to conduct the programs.

1.16. **Georgia’s public debt remains low and sustainable.** In 2014 about 80 percent of public debt was external. Given the steep depreciation of the lari against the U.S. dollar and the need to finance a larger deficit in 2015, total public debt is likely to go up from 33.4 percent of GDP in 2014 to 37.3 percent in 2015. However, spending on interest is likely to go up only slightly and repayment risk will remain low, since the country’s external debt is dominated by long-term multilateral (70 percent) and bilateral (20 percent) debt. Since public debt is highly concessional, interest payments average only about 1 percent of GDP a year. Interest rates on nearly 75 percent of external public debt are fixed, which reduces the interest rate risk. In addition, the government is increasing the share of domestic borrowing in total lending. The 2014 Debt Sustainability Analysis (DSA) confirmed that debt indicators are within prudent thresholds (Table 1.4).

Table 1.4. Debt Sustainability Analysis
(Percent of GDP)

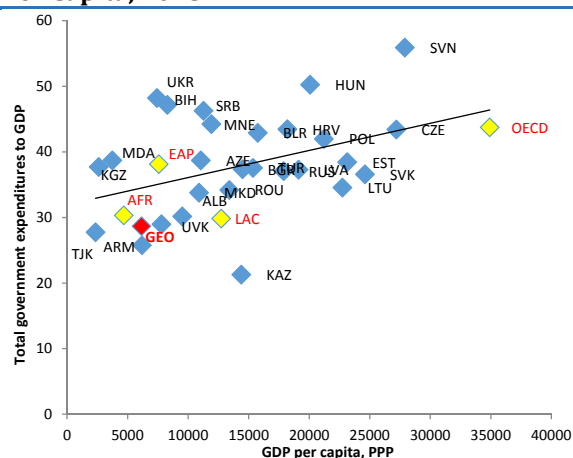
(Percent of GDP)	2011	2012	2013	2014p	2015p	2016p	2017p	2018p
	Actuals			Projections				
	(Percent of GDP)							
Total public sector debt	33.6	32.3	32.2	33.4	37.3	37.4	36.7	36.0
External public sector debt	29.1	27.5	29.5	26.9	30.9	31.5	31.2	30.4
Domestic public sector debt	4.5	4.8	2.7	6.5	6.4	5.9	5.5	5.6
Gross external debt (including inter-company loans)	77.8	82.2	81.8	83.3	95.0	91.6	87.3	81.7

Source: Georgian authorities; Bank staff estimates and projections.

D. SPENDING BENCHMARKED

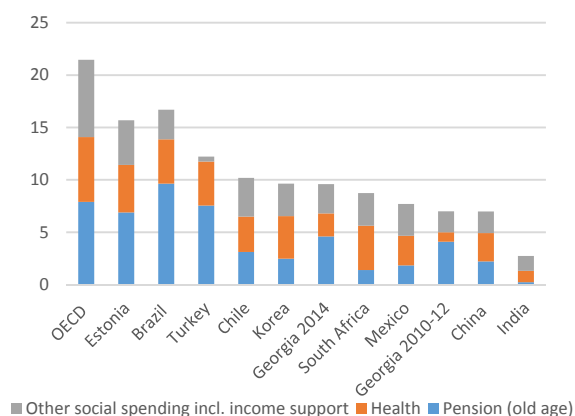
1.17. **Compared to other governments in ECA, the Government of Georgia has a relatively small budget envelope.** Its spending constitutes a smaller share of GDP than that of most other countries in the ECA region and, than the average for shares of countries in Africa (AFR), Latin America and the Caribbean (LAC), East Asia and the Pacific (EAP); it is less than two-thirds of the average shares of spending in GDP of the Organization for Economic Cooperation and Development (OECD) countries. With a small budget it is more important for the government to allocate resources efficiently to address Georgia’s priorities.

Figure 1.9. Government Expenditures and GDP Per Capita, 2013



Source: IMF WEO.

Figure 1.10. Social Spending Across Countries (Percent of GDP)



Source: OECD Social Expenditure Database and staff calculations.

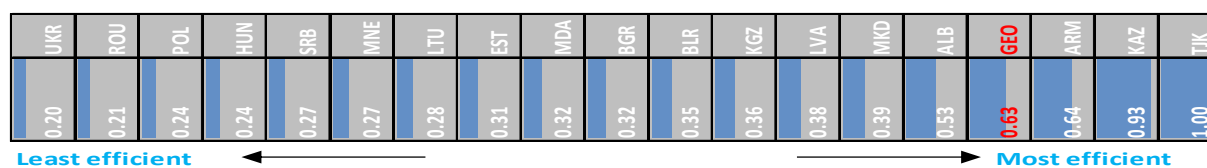
1.18. **But Georgia’s surging social spending equals that of richer countries.** Though still much lower than the OECD average, Georgia’s social spending in GDP, 9.6 percent in 2014, has reached the level of richer countries such as Korea (Figure 1.10). In general there is a positive association between social spending and the level of development—more developed countries contribute a larger proportion of spending on social objectives. Given its small spending envelope, Georgia allocated an even bigger part of its total spending compared to richer countries to reach the current level of social spending. In this case, taking into account GDP per capita, Georgia spent more on social than its developing country peers. And compared to the others with similar shares of social spending, Georgia spent relatively more on noncontributory pensions and less on health.

1.19. **Benchmarking shows that Georgia’s spending on social assistance is among the most efficient, however its health spending could improve.** Based on 2013 social spending and the poverty reduction results, Georgia’s social assistance stands out as the most efficient in the region in reducing poverty. This result is largely consistent with micro analysis (see Chapter 2 for TSA’s fiscal incidence analysis). However, with its efficiency more than 35 percent behind the best there is still room for improvement, based on the Data Envelope Analysis (DEA) (Figure 1.11).⁵ And Georgia lags behind EU countries on health spending outcome indicators in 2012. Countries that are most efficient in health spending would achieve the same level of health sector performance with only 55-66 percent of Georgia’s current spending (Figure 1.12). Georgia’s spending is primarily driven by high out-of-pocket private spending on health. However, with the government rolling out its UHC program, out-of-pocket spending is likely to drop in coming years, which is expected to improve health spending efficiency.

⁵ In the DEA analysis, government’s expenditures in a certain activity (e.g., TSA) are identified as “input” and performance measures of this activity (e.g., poverty) are identified as “output”. Efficiencies are measured comparing outputs with inputs: DEA picks “frontier” countries that are most efficient at producing outputs from given inputs, and measures the efficiency of other observed countries by comparing them to this frontier. The resulting efficiency scores give a gauge of how countries are performing relative to their peers.

Figure 1.11. Efficiency Scores for Social Protection Spending

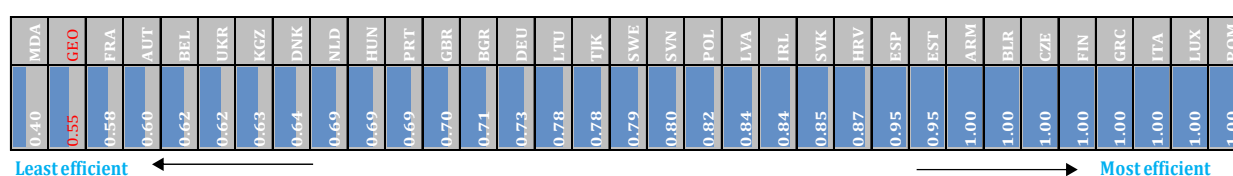
Single Input-multiple Output DEA: Input= Social Protection Spending; Output=poverty head count and Gini



Source: Bank staff estimates based on the World Bank's SPEED database

Figure 1.12. Efficiency Scores for Health Spending

Multiple Input-Output DEA: Input= Total Health Spending (2012); Output= "infant mortality rate", "health adjusted life expectancy (HALE)" and "incidence of tuberculosis"



Source: Bank staff estimates based on WDI and BOOST databases

E. THE WAY FORWARD

1.20. There are stiff headwinds to Georgia's growth and a challenging regional environment, making it particularly important to build up fiscal buffers against shocks. The recent surge in social spending and slower growth has limited Georgia's fiscal space, making the economy more vulnerable to future shocks. Although the current level of capital spending allows some flexibility to respond to shocks, it is desirable to further increase fiscal buffers.

1.21. The government needs to maintain the level of productive spending, in particular capital investment, even when more resources are being used to fund social programs. Georgia still has many serious infrastructure needs, especially after signing the Association Agreements including the Agreement on Deep and Comprehensive Free Trade Area (DCFTA). The government needs a clear rule that keeps capital investment higher than 5 percent of GDP, to sustain its good past progress in improving infrastructure.

1.22. There is room to make spending more efficient as government expenditures expand. This is particularly important given the government's limited fiscal space. The government can begin by continuing its reform of public investment management and setting limits on administrative spending.

2. Enhancing Equity with Fiscal Policies⁶

A. OVERVIEW

2.1 This chapter presents a fiscal incidence analysis to identify the beneficiaries of government expenditures when the government spends and the distribution of tax burden when the government imposes taxes. The aim is to obtain a comprehensive view of the redistributive effect of taxes and spending items. We used the response to Integrated Household Survey of 2013, and the 2013 budgetary data. The central questions are (1) How much redistribution and poverty reduction is accomplished through taxes, social transfers and subsidies? (2) How progressive are revenue collection and government spending? and (3) Within the limits of fiscal sustainability, what changes in taxation and spending could increase redistribution and poverty reduction?

2.2 A wide range of fiscal activities were analyzed. Among them are taxes (personal income, property, value-added, and excise taxes), direct transfers (pensions and social assistance programs), in-kind transfers (preschool, general, and tertiary education, UHC, and targeted medical insurance), the Agricultural Card program, and Tbilisi city benefits and subsidies. The impact of government programs on poverty and inequality varies. The TSA best targets the poorest Georgians; benefits of other pro-poor measures such as the low income tax exemption, and Tbilisi benefits and subsidies are more widely distributed across population.

2.3 In Georgia poverty and inequality have been considerably reduced by fiscal activities. Comparing poverty rates and Gini before and after the fiscal interventions of taxes, direct and in-kind transfers, and benefits, the Gini coefficient improved from 0.48 to 0.37. Direct taxes reduced Gini by only 0.015 points, and cash transfers pushed Gini further down by another 0.07 points. Poverty at the US\$2.5/day line⁷ fell from 20.3 to 7.7 percent after direct taxes slightly increased poverty, but direct transfers reduced it by more than 13 percentage points.

2.4 The best candidate for tackling the challenge of poverty reduction and inequality from the spending side of the budget would be the Targeted Social Assistance (TSA) program. Normalized by the amount of spending, Georgia's direct transfers led the rate of reduction in poverty and inequality in the group of countries for which fiscal incidence analysis was done. TSA is also one of the programs that best target the poorest. Simulations reveal that the expected revisions of TSA benefit rule assignment will make the program better targeted. Since TSA is very cost-effective, the government could consider utilize some of the existing TSA mechanism to improve the targeting of other programs, especially the less well-targeted benefit programs. It is also important to recognize, however, the important role that pensions have in reducing poverty, in spite of not being the most efficient one. Pensions are responsible for two thirds of the observed reduction due to direct transfers.

2.5 In what follows, the next section lays out the taxes and expenditure line items for the fiscal incidence analysis. Section C explains the methodologies and tools used. Section D assesses fiscal

⁶ Led by Nora Lustig since 2008, the Commitment to Equity (CEQ) project is an initiative of the Center for Inter-American Policy and Research (CIPR) and the Department of Economics at Tulane University, the Center for Global Development and the Inter-American Dialogue. For more details visit www.commitmenttoequity.org.

⁷ Estimates based on per-adult equivalent consumption. They differ from ECAPOV estimates based on consumption per capita (36 percent in 2013).

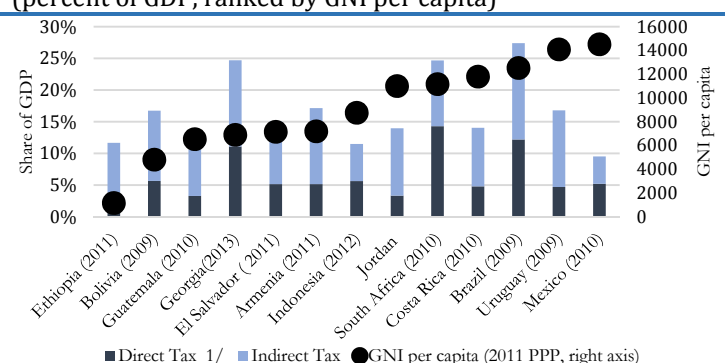
activities in terms of redistribution. Section E discusses the impact of fiscal activities on poverty and inequality. Section F links poverty reduction with program costs to assess efficiency, and Section G outlines policy recommendations.

B. REVENUE AND EXPENDITURE

2.6 Georgia's total revenues amount to 28 percent of GDP; 60 percent are from VAT and personal income tax revenues. Tax revenue represents about 25 percent of GDP. VAT accounts for 10.6 percent of GDP and personal income tax (PIT) for 7.2 percent. There are six taxes in Georgia, of which five (PIT, corporate income tax (CIT), VAT, excise tax, and import tax) are nationwide and one (property tax) is local. Georgia imposes no capital gains,⁸ inheritance, gift, wealth (except for property), property transfer, social, branch remittance, or other taxes. The Liberty Act of 2011 bans introduction of new state taxes or increases in existing taxes without a nationwide referendum, except for the excise tax. This institutional restriction along with smaller average revenue than its ECA peers limits the government's ability to affect the distribution of income.⁹

2.7 Based on available data in the household survey, the analysis looks primarily at four major taxes—PIT, property tax, VAT and excise duties on alcohol, tobacco and fuel. Together they make up about 86.2 percent of total general government tax revenues. The CIT, other non-classified taxes, and revenues from other sources that are not captured by the household survey are not part of the analysis. Nor are social contributions, because Georgia does not have a contributory pension system. Customs duty is omitted because it is not possible to identify

Figure 2.1. Composition of Taxes
(percent of GDP, ranked by GNI per capita)



Sources: Armenia (Younger et al, 2014), Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Ethiopia (Hill et al, 2014), Indonesia (Jellema et al 2014), Mexico (Scott, 2014), Peru (Jaramillo, 2014), Uruguay (Bucheli et al, 2014), and South Africa (Inchauste et al, 2014). Georgia (GNI: HDRO calculations based on data from World Bank (2014), IMF (2014) and United Nations Statistics Division (2014) and own estimations).

^{1/} Direct taxes include Corporate Income Tax collections in addition to PIT.

Table 2.1. General Government Revenues in Georgia, 2013
(Percent of GDP)

	2013	Included in Incidence Analysis
Total General Government Revenue	27.7	21.0
Tax Revenue	24.8	21.0
Direct taxes	11.1	7.9
Personal income tax	7.2	7.9
Corporate income tax	3.0	...
Other direct taxes:	0.9	0.03
Property taxes		
Indirect taxes	13.6	13.1
VAT	10.6	11.5
Specific excise duties	2.7	1.6
Custom duty	0.3	...
Other taxes	0.1	...
Non-tax revenue	2.9	...

Sources: Treasury, Ministry of Finance of Georgia, Geostat, and staff calculations.

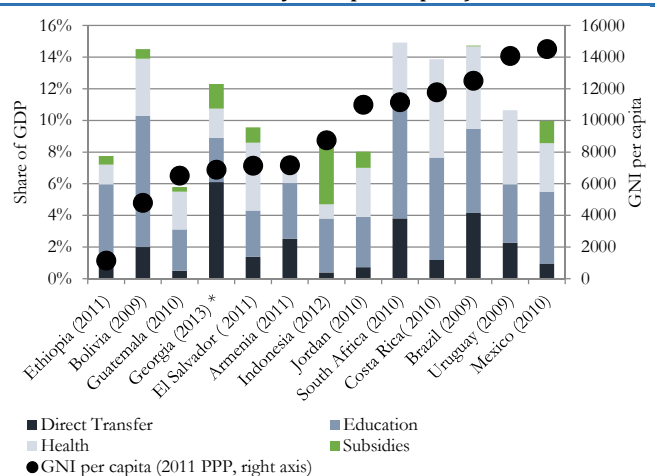
⁸ Capital gains used in the analysis are tax exempt, but some capital gains are subject to tax, please refer to the *Tax Code of Georgia* for more information.

⁹ Average general government revenue in middle-income ECA countries amounted to 34.9 percent of GDP in 2013, based on ECA Regional Tables (2014).

whether a purchase was an import; moreover, duties represent only a small share of government revenues.

2.8 General spending of the government is also small compared to the average for middle-income ECA countries, amounting to about 29 percent of GDP in 2013.¹⁰ However, spending on direct cash transfers (e.g., pensions) and on in-kind transfers tend to be uneven. Social spending in Georgia is among the highest in the region, accounting for 12 percent of GDP,¹¹ because in 2013 the government made social expenditures a priority and increased pension and TSA benefits. Georgia's social protection system is financed entirely out of general revenues and accounts for about 42 percent of total public spending; social benefits, especially spending on pensions, are the largest component. Compared to the largest "spenders"—Bolivia, South Africa, Costa Rica and Brazil—identified in the CEQ analysis, Georgia spends twice as much on direct transfers but only about half as much on education and health. Georgia's subsidy spending is also among the highest in the sample. Most of its poverty reduction in the past two years was attributable to its social assistance.

Figure 2.2. Social Spending and Subsidies
(Percent of GDP, ranked by GNI per capita)



Sources: Armenia (Younger et al, 2014), Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Ethiopia (Hill et al, 2014), Indonesia (Jellema et al 2014), Mexico (Scott, 2014), Peru (Jaramillo, 2014), Uruguay (Bucheli et al, 2014), and South Africa (Inchauste et al, 2014). Georgia (GNI: HDRO calculations based on data from World Bank (2014), IMF (2014) and United Nations Statistics Division (2014) and own estimations.

2.9 Most transfers are included in the analysis, based on data from the survey and administrative sources. Government social benefits are included and will be used to gauge the impact of direct transfer payments on poverty and inequality.¹² The analysis also covers all in-kind transfers associated with public provision of education. Major health programs, namely Targeted Medical Insurance (MIP) and the UHC, are also analyzed; the health care expenditure data in the survey will be complemented with the eligibility requirements for each health program outlined by Social Service Agency (SSA) of Georgia.¹³ These items together account for 11.5 percent of GDP and 40 percent of total government spending.

¹⁰ Average general government expenditure in middle-income ECA countries accounted for 36.6 percent of GDP in 2013. ECA Regional Tables (2014).

¹¹ The definition of social spending is based on CEQ methodology to ensure comparability across countries.

¹² The survey reports the following government transfers: old age pension, disability pension, loss of breadwinner pensions, temporary disability benefits (due to illness, childbirth), assistance for socially vulnerable families (TSA), pensions of disabled veterans, and participants in a war, or pensions with equal status and other special pensions, household assistance for single pensioners and disabled persons, and assistance for internally displaced people (IDPs).

¹³ The survey reports the following expenditures on health care: outpatient treatment for chronic or disabled patients, outpatient treatment for any disease (other than chronic), inpatient treatment, maternal and child health, dental services, preventive inspection, therapeutic appliances, and equipment.

Table 2.2. General Government Expenditures in Georgia, 2013
(Percent of GDP)

	2013	Included in Incidence Analysis
Total General Government Expenditure	28.80	11.2
Primary government spending	27.90	11.2
Social Spending	12.11	10.0
Total Cash Transfers	6.11	5.1
Old age pension (non-contributory)	4.28	4.3
Social security of sick and disabled individuals	0.01	0.01
Targeted Social Assistance	1.77	0.8
In-kind transfers	5.19	4.0
Education	2.80	2.5
Health	1.83	1.50
Targeted Medical Insurance (MIP)	0.9	0.9
Universal Health Care (UHC)	0.3	0.6
Housing and urban	0.56	...
Other social spending	0.82	1.0
Non-Social Spending (incl. public sector pensions)	15.80	1.08
Agricultural Cards	0.71	0.7
Program of Communal Subsidies	0.14	0.14
Subsidized Public Transportation	0.24	0.25

Sources: BOOST database based on Ministry of Finance data and staff calculations.

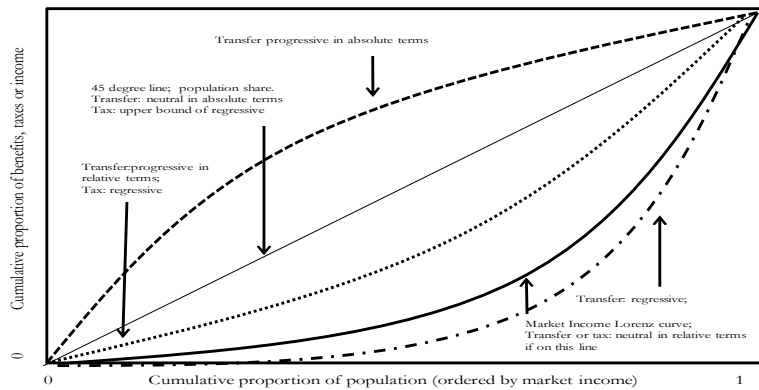
C. EXPLAINING THE REDISTRIBUTIVE EFFECT

2.10 Fiscal incidence analysis studies how fiscal measures (taxes, transfers, etc.) shape income distribution within an economy. In general, fiscal measures that improve equity are considered progressive and those that reduce equity are considered regressive. By definition, a transfer that gives poorer people higher benefits is progressive and one that gives lower benefits is regressive, in *absolute* terms. A transfer that gives poorer people a higher benefit as a share of their income is progressive and one that gives lower benefits as a share of income is regressive, in *relative* terms. Similarly, a tax that charges poorer people less as a share of their income is progressive and one that charges them more is regressive. The analysis also looks at two indicators—concentration coefficients and the Kakwani index—to measure the degree of progressivity,¹⁴ and uses concentration curves to present that graphically (Figure 2.3).

2.11 Income concepts are developed to estimate the incidence of every tax and benefit. The analysis follows the methodology described in Lustig and Higgins (2013) to estimate the income before fiscal intervention—market income and compare it with net market, disposable, post-fiscal and final incomes (Figure 2.4). These measures generate different income distributions, which makes it possible to estimate headcount poverty rates before and after each fiscal intervention. This in turn makes it possible to judge at each stage how equitably distributed household income is relative to situations where public interference is absent.

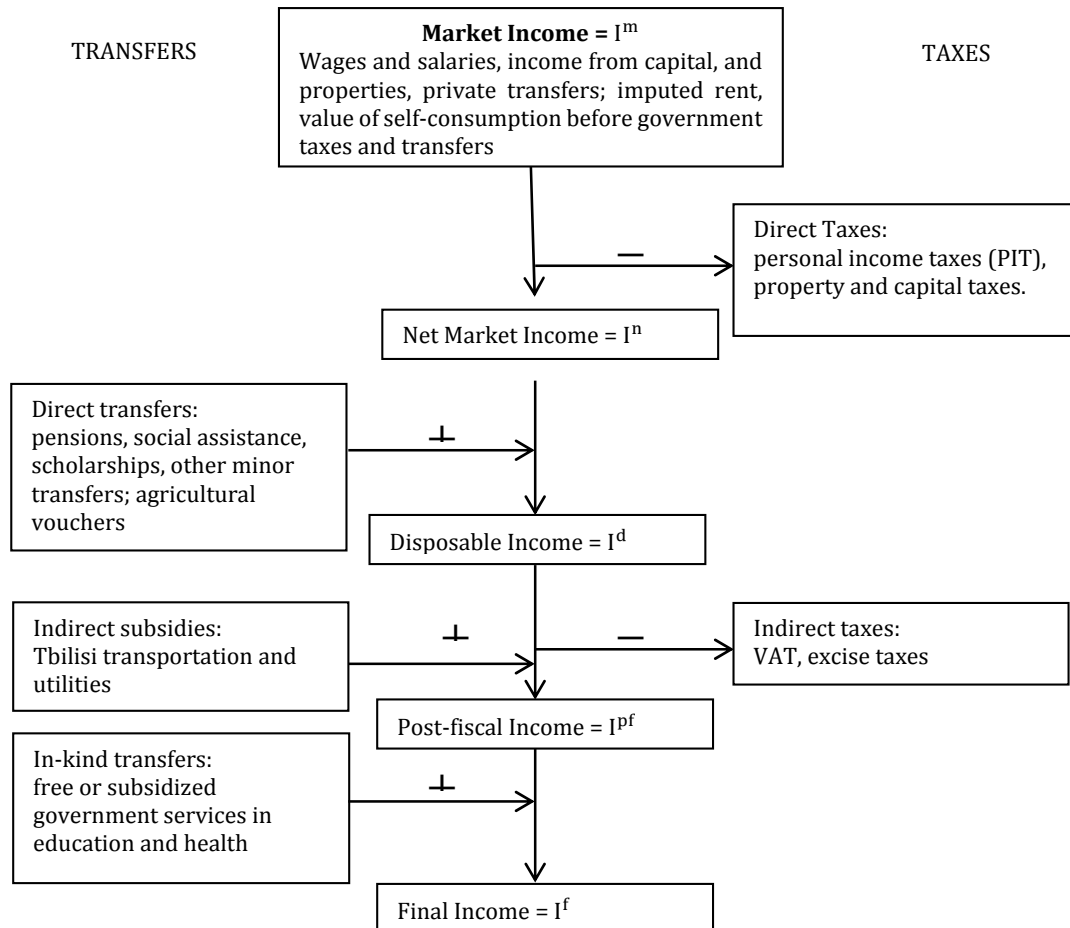
¹⁴ The concentration coefficient is positive when it is larger than the market income Gini. The Kakwani index, defined for taxes as the tax concentration coefficient minus the market income Gini, will be positive if a tax is progressive and negative if it is regressive.

Figure 2.3. Concentration Curves for Progressive and Regressive Transfers and Taxes



Source: Lustig and Higgins (2013).

Figure 2.4. Definitions of Income Underpinning the CEQ Fiscal Incidence Analysis



Source: World Bank staff elaboration based on Lustig and Higgins (2013).

D. REDISTRIBUTIVE EFFECT: TAXES

Table 2.3. Explaining Tax Progressivity

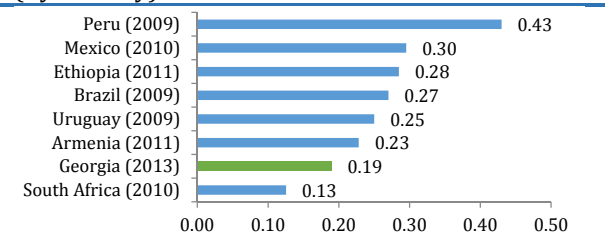
	Progressive	Regressive	Neutral
Taxes	$\frac{\text{payment}}{\text{income}}$ higher for richer people	$\frac{\text{payment}}{\text{income}}$ higher for poorer people	Same distribution as the income
Concentration coefficient (CC)	CC > 0 income Gini	CC > 0 CC < income Gini	CC = Income Gini
Kakwani Index (KI) = CC - Market Gini	KI > 0	KI < 0	KI = 0
Concentration Curve	Everywhere below the income curve	everywhere above the income curve	on the income line

Note: Income denotes market income.

2.12 Georgia's direct tax is progressive, but less so than most countries in the CEQ sample.

Direct taxes in the incidence analysis include taxes on labor income, profit and property. Among these taxes, labor income tax is the largest component. The Kakwani index covering progressivity shows that although Georgia's direct tax is progressive, it is less progressive than all the other countries in the CEQ group except South Africa (Figure 2.5). This is largely driven by the fact that the Georgia's labor income tax is design as a flat tax (with a rate of 20 percent). In addition, household surveys usually do not capture the top of the income distribution well, where property tax, capital tax, and property income tax payments are concentrated. Since taxes paid are concentrated in the top of the income distribution, labor income tax, and direct taxes as a group, are progressive.

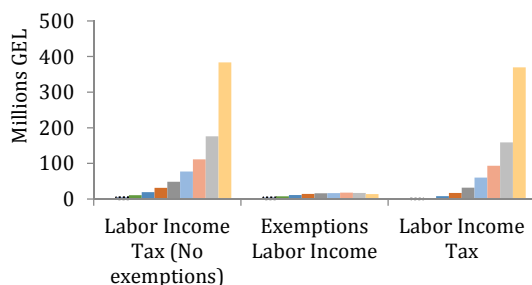
Figure 2.5. Kakwani Progressivity Coefficients for Direct Taxes (By country)



Sources: Armenia (Younger et al, 2014), Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Ethiopia (Hill et al, 2014), Indonesia (Jellema et al 2014), Mexico (Scott, 2014), Peru (Jaramillo, 2014), Uruguay (Bucheli et al, 2014), and South Africa (Inchauste et al, 2014). Georgia (GNI: HDRO calculations based on data from World Bank (2014), IMF (2014) and United Nations Statistics Division (2014) and own estimations).

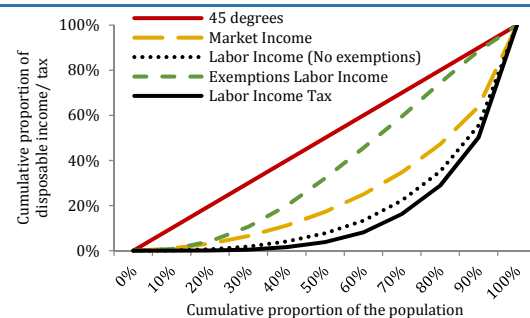
2.13 The income tax exemption for low-income earners enhanced progressivity of income tax. Exemptions are concentrated at the bottom rather than spread evenly (Figure 2.6). Wage earners with salaries less than GEL6,000 are entitled to deduct GEL1,800 from their taxable income and to receive a refund. Labor income taxes also contain exemptions for specific socio-demographic groups such as single mothers and persons with disability. Without the exemptions, labor income tax would still be progressive but less so.

Figure 2.6. Labor Income Tax and Exemptions, as Share of Disposable Income by Decile



Sources: Staff calculations based on IHS (2013).

Figure 2.7. Labor Income Tax, Exemptions, and Direct Taxes



Sources: Staff calculations based on IHS (2013).

2.14 Georgia's indirect tax system is more regressive than those of its CEQ peers. For both VAT and excises, effective rates were estimated using declared consumption.¹⁵ Although VAT, excise taxes, and indirect taxes overall are more concentrated in the highest deciles, their distribution is less disproportionate than disposable income (Table 2.4), so that the poor tend to spend more on indirect taxes as shares of income than the rich. Hence, these taxes are regressive. Compared to other CEQ countries, Georgia shows similar levels of indirect tax shares with respect to disposable income (Figure 2.8), but the distribution is considerably more regressive than in other countries with data available, with a much larger share in the lowest decile (26 percent). Only Bolivia shows a similar pattern of concentration across income deciles.

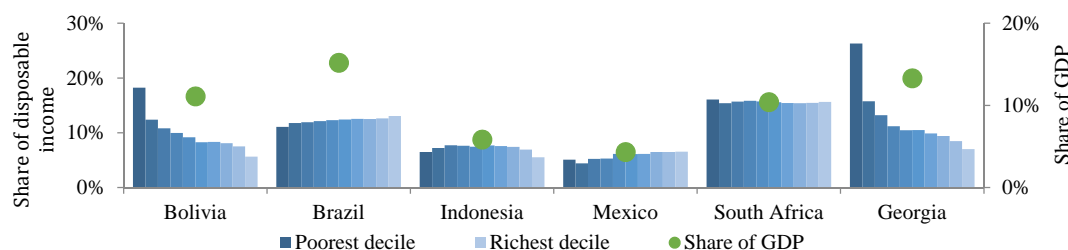
Table 2.4. Regressivity of Indirect Taxes, 2013

Disposable Income and Concentration Shares, Percent					Cumulative Disposable Income and Concentration Shares, Percent			
Decile	Disposable Income	VAT	Excise Tax	Indirect Taxes	Disposable Income	VAT	Excise Tax	Indirect Taxes
1	1.99	5.10	7.59	5.48	1.99	5.10	7.59	5.48
2	3.56	5.62	7.20	5.86	5.56	10.73	14.79	11.35
3	4.69	6.10	8.51	6.47	10.25	16.83	23.30	17.82
4	5.85	6.82	6.88	6.83	16.10	23.65	30.18	24.65
5	7.06	7.67	7.90	7.71	23.16	31.33	38.09	32.36
6	8.35	9.03	9.74	9.14	31.51	40.36	47.83	41.49
7	9.90	10.25	10.04	10.22	41.41	50.60	57.87	51.71
8	12.08	11.83	12.13	11.88	53.49	62.43	70.00	63.59
9	15.47	13.82	12.86	13.67	68.96	76.25	82.86	77.26
10	31.04	23.75	17.14	22.74	100.00	100.00	100.00	100.00

Source: Staff calculations based on 2013 IHS.

Note: The distribution of disposable income and tax concentration shares for the population are ordered by disposable income deciles.

Figure 2.8. Indirect Taxes as Share of Disposable Income by Decile



Sources: Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Indonesia (Jellema et al 2014), Mexico (Scott, 2014), South Africa (Inchauste, Lustig, Maboshe, Purfield and Woolard (2014) based on IES 2010/11, and own estimates for Georgia based on IHS (2013). Please note, deciles are ranked by disposable income.

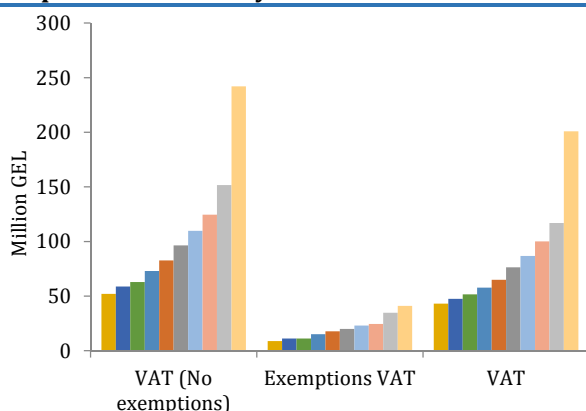
2.15 VAT exemptions are distributed across the income distribution in almost the same way as the VAT itself, with no impact on progressivity. Although the Liberty Act mandates no tax rate increase without a referendum, there is still room to impose or remove a tax exemption. Since currently a fairly wide range of goods and services are VAT-exempt, from agriculture produce to imported goods and financial services, the impact of VAT exemption is unlikely to be confined to a specific income category. The exemption in value terms benefits the upper side of the income

¹⁵ For VAT, the analysis considers the VAT exemptions defined in the Tax Code, including health and educational services, books, financial services, and agricultural produce. Excises are estimated for consumption of mobile phone services, fuel, alcohol, and tobacco.

distribution more (Figure 2.9), and relative to market income does not quite improve the progressivity of the VAT.

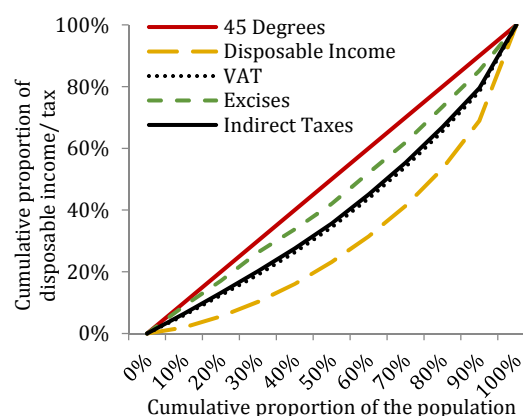
2.16 Excises are more regressive than VAT. They are distributed more evenly than the VAT (Figure 2.10). Since excise is the only tax government can levy under the Liberty Act without a referendum, it is of particular interest to our analysis. However due to its regressive nature, a universal increase of tax rates would make the poor bear a heavier burden, but not levying high excise taxes on specific items that are consumed heavily by the poor can make the excise tax less regressive.

Figure 2.9. VAT and Exemptions, as Share of Disposable Income by Decile



Source: Staff calculations based on IHS (2013).

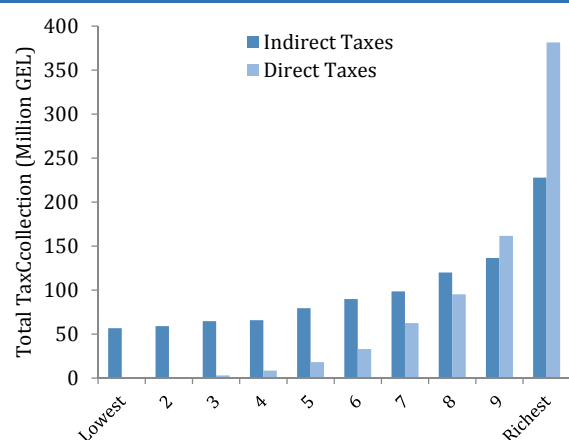
Figure 2.10. Indirect Taxes



Source: Staff calculations based on IHS (2013).

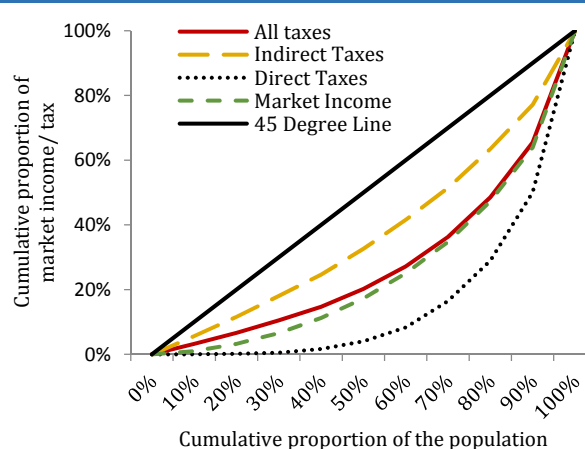
2.17 The Georgian tax system as a whole is regressive. There is a stark contrast between direct and indirect taxes in distributional effect: direct taxes concentrate more in the top deciles, indirect taxes are more evenly distributed (Figure 2.11). Together the result is a regressive tax system. It is regressive for the lowest deciles of the income distribution, but almost neutral for the top deciles based on market income (Figure 2.12).

Figure 2.11. Tax Collection by Deciles



Source: Staff calculations based on IHS (2013).

Figure 2.12. Tax System



Source: Staff calculations based on IHS (2013).

E. REDISTRIBUTIVE EFFECT: EXPENDITURES

Table 2.5. Explaining Spending Progressivity

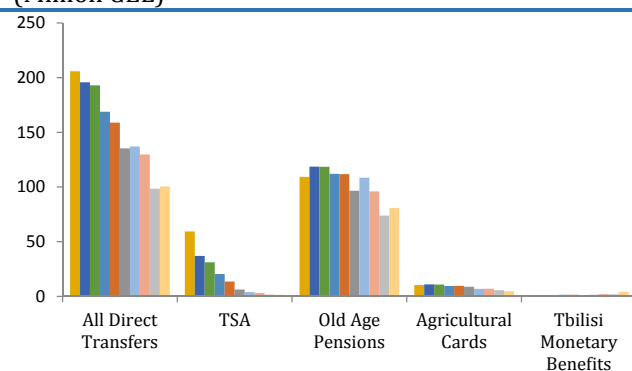
	Progressive		Regressive	Neutral
	Absolute	Relative		
Spending/Transfer	Benefit received in value higher for poorer people	$\frac{\text{benefit}}{\text{income}}$ higher for poorer people	$\frac{\text{benefit}}{\text{income}}$ higher for richer people	same distribution as the income
Concentration Coefficient (CC)	CC<0	CC>0, CC<income Gini	CC>0, CC>income Gini	CC=income Gini
Kakwani Index (KI)= Market Gini-CC	KI>0, KI>income Gini	KI>0	KI<0	KI=0
Concentration Curve	Everywhere above 45 degree line	Between the income curve and the 45 degree line	Everywhere below the income curve	On the income line

Note: income denotes as market income.

2.18 Direct transfers in Georgia are in general progressive. The major components are the TSA, the old-age pension, and the Agriculture Card Program.¹⁶ Other important components of direct transfers are the disability pensions reported in the household survey. Smaller transfers such as IDP and temporal disability were also analyzed, such as the Tbilisi monetary benefit distributed as a top-up to TSA household recipients during winter months. The TSA is clearly progressive, concentrating on the bottom deciles of the distribution. The Agriculture Card Program and the old-age pensions are progressive in absolute terms. Tbilisi monetary benefits are progressive in relative terms, but regressive in absolute terms, being distributed more at the top of the income distribution, but not as regressive as market income. This result is not surprising considering that Tbilisi is the region in the country with the highest living standards, and even the poorest in the city can be better off in relative terms than those in other regions. Overall, the direct transfers are progressive in absolute terms (Figure 2.13). Figure 2.15 shows how much incomes of the poor increased due to cash transfers. The left scale measures the share of transfers in the initial market income, therefore shares above 100 percent imply that disposable income is at least double the amount of market income. Transfers help to triple original market income of those in the bottom decile in Georgia. This is larger than in other countries, with the exception of South Africa.

Figure 2.13. Social Spending, as Share of Disposable Income by Decile

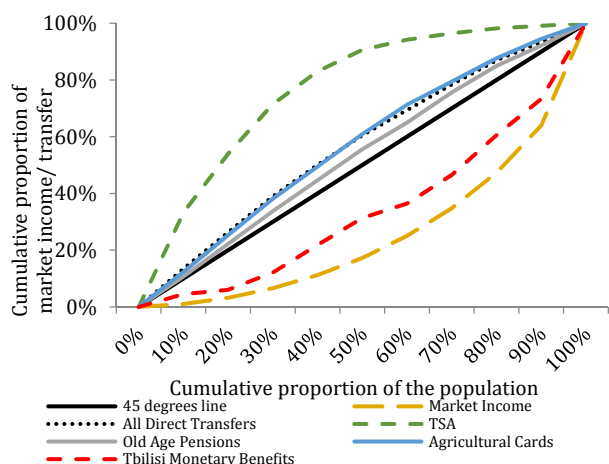
(Million GEL)



Source: Staff calculations based on IHS (2013).

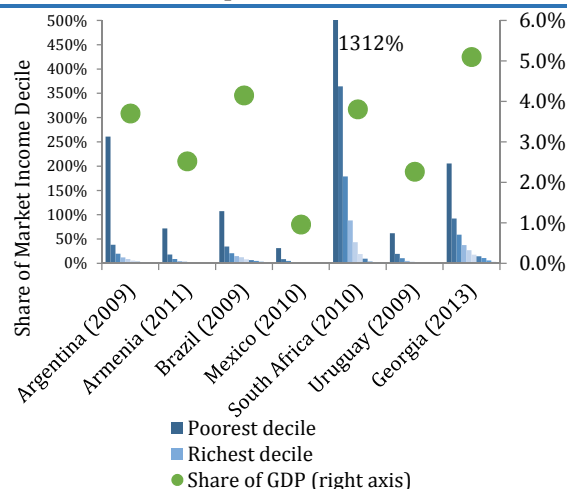
¹⁶ Agricultural cards are in a strict sense transfers for specific uses (inputs for agricultural production), but are included here because they better fit the definition of a direct transfer than an in-kind one.

Figure 2.14. Social Spending, Concentration Curves



Source: Staff calculations based on IHS (2013).

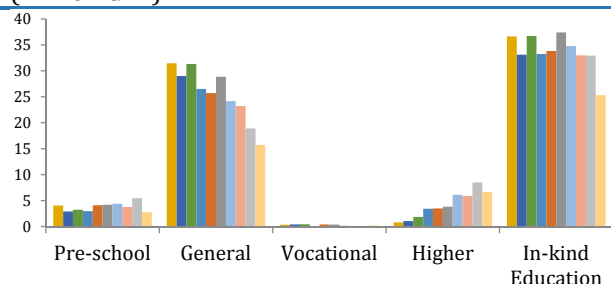
Figure 2.15. Direct Transfers Progressivity, International Comparison



Sources: Armenia (Younger et al, 2014), Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Mexico (Scott, 2014), Uruguay (Bucheli et al, 2014), and South Africa (Inchauste et al, 2014). Georgia: Staff calculations based on IHS (2013).

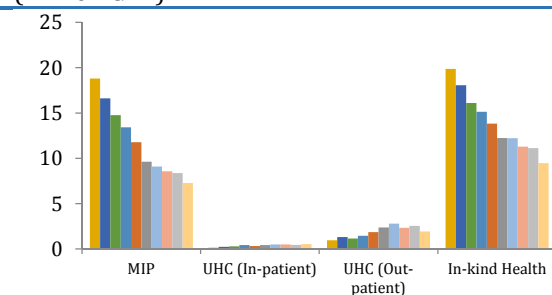
2.19 In-kind transfers—free public services valued at cost—are also progressive as a group but results for its components differ. General education, which comprises primary and secondary levels, is progressive in absolute terms. Preschool education is also progressive, although it is slightly more concentrated in the upper deciles of the income distribution (Figure 2.16). Finally, higher education is much closer to market income than the other levels but is still consistently above it. This last result is consistent with international evidence that higher education is accessible only for the middle and upper sections of the income distribution. The level of government transfers is concentrated more heavily in the upper sections but not as heavily as market income itself. Overall, education in-kind transfers are progressive in absolute terms.

Figure 2.16. In-Kind Transfers: Education (Million GEL)



Source: Staff calculations based on IHS (2013).

Figure 2.17. In-Kind Transfers: Health (Million GEL)



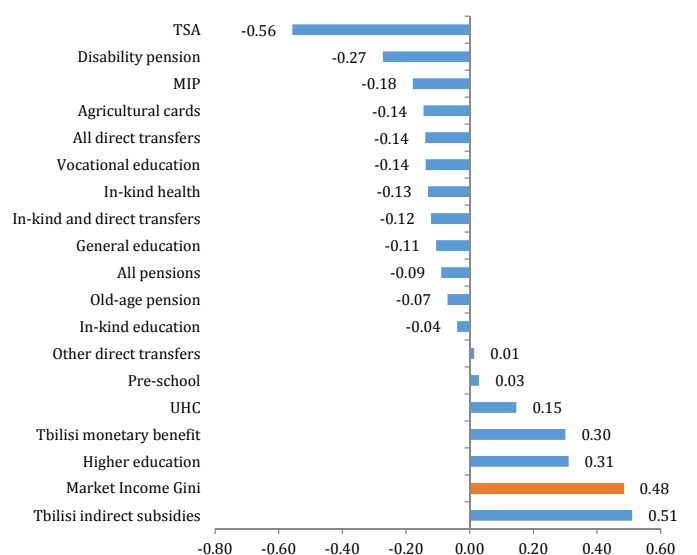
Source: Staff calculations based on IHS (2013).

2.20 Health in-kind transfers are also progressive in absolute terms, but different components show different degrees of progressivity. The Targeted Medical Insurance Program (MIP) is progressive in absolute terms—not surprising in that it covers mainly TSA beneficiaries (Figure 2.16). UHC, which was introduced in the middle of 2013, to provide medical coverage to large

segments of the population without any health insurance, is more concentrated in the upper deciles of the distribution but to a lesser degree than market income. Consolidating all these programs results in a progressive concentration curve, largely driven by the effect of the MIP (See Box 2.1).

2.21 Social spending in Georgia is progressive in absolute terms. This result is driven by the progressivity of direct and in-kind transfers. The analysis also covered indirect subsidies, which are utility and transportation subsidies provided in Tbilisi to TSA recipients and retirees. Indirect subsidies are the only regressive transfer; the beneficiaries are households that can afford to use transportation and utilities services and so are unlikely to be at the bottom of the income distribution. Moreover, the subsidies considered in this analysis are only given in Tbilisi, which does not represent the bottom of the national income distribution. In comparing the values of the concentration coefficients, TSA again is noticeable for the scope of its concentration coefficient, which is much more progressive than that of any other Georgian transfer (Figure 2.18). Pensions, however, play an important role at diminishing poverty, given its magnitude. Pensions are responsible for two thirds of the observed reductions assigned to direct transfers.

Figure 2.18. Social Spending, Concentration Coefficients

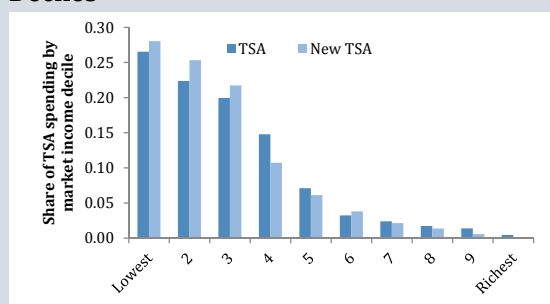


Source: Staff calculations based on IHS (2013).

Box 2.1. How Progressive Will the new TSA and UHC Become?

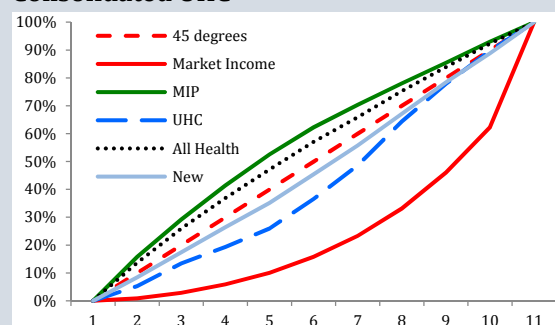
Important revisions of the rules for two government programs will soon materialize. First, rules for assigning TSA benefits are changing: benefits will be the same amount for every member of the household, the size of the transfer will depend on distance to the beneficiary threshold, and the score formula will be changed. The resulting distribution of the proposed TSA is slightly more progressive than the current one, as can be seen in Figures 2.19 and 2.20. The second change is the consolidation of MIP and UHC programs into a single UHC. Using the data on usage of health services by MIP beneficiaries, a consolidated program was simulated to analyze its progressivity. As expected, the consolidated program is located between the two original ones, gaining progressivity compared to the original UHC because it incorporates both TSA and MIP beneficiaries.

Figure 2.19. Distribution of TSA Spending by Deciles



Source: Staff calculations based on IHS (2013).

Figure 2.20. Concentration Curves for MIP, UHC, and Consolidated UHC



F. IMPACT OF FISCAL ACTIVITIES ON INEQUALITY AND POVERTY

2.22 The overall fiscal system in Georgia contributes to reducing poverty and improving equity. Table 2.6 illustrates how fiscal interventions in Georgia impact different quintiles of the income distribution in terms of GELs: the income of the bottom 60 increased moving from market to final income, in particular the income of the poorest 20 percent more than doubled, while the income of the top 40 was reduced. Georgia's Gini falls by more than 0.10 points moving from market to final income (0.483 to 0.374; Table 2.7). The effects of different taxes and transfers are different in sign and magnitude. Direct taxes reduce the Gini only by 0.015 points, but cash transfers push it down by another 0.07 points. Indirect taxes, which have been shown to be regressive, increase inequality by almost 0.02 points. Finally, in-kind transfers and subsidies reduce the Gini by 0.04 points.

2.23 Poverty rates are also considerably affected by taxes and transfers. Poverty at the US\$2.5/day poverty line falls from 20.3 to 7.7 percent when moving from market to post-fiscal income (Table 2.6). Direct taxes increase poverty slightly, but direct transfers reduce it considerably, by 13 pps. Indirect taxes partially counterbalance this effect, increasing poverty by more than 4 pps. The US\$5/day poverty estimations reported follow the same pattern, with direct taxes having minimal negative effect, direct transfers largely diminishing poverty, and indirect taxes partially offsetting this effect.

Table 2.6 Distributional Impact of Fiscal Policies in GEL

	Quintiles					All
	Poorest	II	III	IV	Richest	
Number of People	734,948	735,013	735,050	734,317	735,748	3,675,077
Market Income Per Capita	425	1,055	1,822	2,926	6,924	2,631
All Taxes (-)	159	193	299	512	1,234	480
Indirect Taxes	157	177	230	297	495	272
Direct Taxes	2	16	69	215	738	208
All Transfers (+)	693	630	533	488	378	545
Direct Transfers	546	492	400	363	270	414
In-kind Transfers	147	138	133	125	108	130
Indirect Subsidies (+)	1	3	5	10	24	9
Final Income Per Capita	965	1,495	2,061	2,913	6,092	2,706

Source: Staff calculations based on IHS (2013).

Table 2.7 Poverty and Inequality Indicators at Each Income Concept

	Market Income	Net Market Income	Disposable Income	Post-fiscal Income	Final Income
	(1)	(2)	(3)	(4)	(5)
		2= 1 - Direct Taxes	3=2 +Cash Transfers	4=3 - Indirect Taxes	5=4 +In-Kind Transfers
Inequality Indicator					
Gini Coefficient	0.483	0.467	0.394	0.413	0.374
Headcount Poverty Indicators					
US \$2.50 PPP per day	20.3%	20.5%	7.7%	11.7%	-
US \$5.0 PPP per day	42.3%	43.7%	29.1%	34.9%	-

Source: Staff calculations based on IHS (2013).

Note: Per adult equivalent measures reported.

2.24 In the CEQ sample, Georgia reduced poverty the most. For all the other countries, poverty reduction from market to disposable income is only a few percentage points, while Georgia's reduction was a solid 14 pps, similar to South Africa's. For most countries (Table 2.7). Indirect taxes counterbalance the reductions observed in poverty, except for Mexico and Indonesia. However, Georgia also ranks among the highest for increases in poverty rate between disposable and post-fiscal income due to indirect taxes.

Table 2.8. Gini Coefficient for Each Income Concept Compared Across CEQ Countries

	Market Income	Net Market Income	Disposable Income	Post-fiscal Income	Final Income
	(1)	(2) =	(3)	(4) =	(5) =
		(1)-Direct Taxes	= (2)+Cash Transfers	(3)-Indirect Taxes	(4)+In-Kind Transfers
Ethiopia (2011)	0.323	0.316	0.305	0.302	0.299
Indonesia (2012)	0.394	0.394	0.390	0.391	0.368
Armenia (2011)	0.403	0.393	0.373	0.374	0.357
El Salvador (2011)	0.440	0.436	0.430	0.429	0.404
Uruguay (2009)	0.492	0.478	0.457	0.459	0.393
Georgia (2013)	0.494	0.479	0.410	0.428	0.389
Bolivia (2009)	0.503	0.503	0.493	0.503	0.446
Peru (2009)	0.504	0.498	0.494	0.492	0.466
Costa Rica (2010)	0.508	0.500	0.489	0.486	0.393
Mexico (2010)	0.511	0.497	0.488	0.481	0.429
Guatemala (2010)	0.551	0.550	0.546	0.551	0.523
Brazil (2009)	0.579	0.565	0.544	0.546	0.439
South Africa (2010)	0.771	0.750	0.694	0.695	0.596

Note: Per capita measures reported. *Source:* Armenia (Younger et al, 2014), Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Mexico (Scott, 2014), Uruguay (Bucheli et al, 2014), and South Africa (Inchauste et al, 2014). Georgia: Staff calculations based on IHS (2013).

Table 2.9. US\$2.5/day Poverty for Each Income Concept, CEQ Countries

	Market Income	Net Market Income	Disposable Income	Post-fiscal Income
	(1)	(2) =	(3) =	(4) =
		(1) - Direct Taxes	(2) + Cash Transfers	(3) - Indirect Taxes
Uruguay (2009)	5.1	5.1	1.5	2.3
Costa Rica (2010)	5.4	5.7	3.9	4.2
Mexico (2010)	12.6	12.6	10.7	10.7
El Salvador (2011)	14.7	15.1	12.9	14.4
Brazil (2009)	15.1	15.7	11.2	16.3
Peru (2009)	15.2	15.2	14	14.5
Bolivia (2009)	19.6	19.6	17.6	20.2
Armenia (2011)	31.3	32	28.9	34.9
Georgia (2013)	31.8	32.5	18.0	23.0
Guatemala (2010)	35.9	36.2	34.6	36.5
South Africa (2010)	46.2	46.4	33.4	39
Indonesia (2012)	56.4	56.4	55.9	54.8

Note: Per capita measures reported. *Source:* Armenia (Younger et al, 2014), Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Mexico (Scott, 2014), Uruguay (Bucheli et al, 2014), and South Africa (Inchauste et al, 2014). Georgia: Staff calculations based on IHS (2013).

2.25 Social spending has raised the incomes of the poor considerably in Georgia. Comparing post-fiscal to market income, which accounts for direct and indirect taxes and transfers, the bottom decile saw its income rise to almost 2.5 times the initial market income. Moreover, the net cash position of the bottom 60 percent of the distribution is positive. Compared to other countries, Georgia is almost at the same level as the leader, South Africa, in terms of the share of the population that has seen its income rise. By incorporating in-kind transfers, the post-fiscal income of the bottom decile triples its market income, and the net cash position of the bottom 70 percent is also positive.

2.26 **Cost-effective analyses show that Georgia's direct transfers have the most effect on both poverty and Gini reduction.**¹⁷ While the reported changes in poverty and Gini are similar to South Africa's, and not far from Argentina's, when taking into account the cost of direct transfers, Georgia stands out clearly, because its effectiveness is more than twice that observed in other countries for poverty reductions and is still considerably more effective than the rest for Gini reduction (Figure 2.21). Figure 2.22 and 2.23 show adapted indicators of effectiveness created to measure effectiveness among the different programs. The numerator is the change in poverty or Gini from net market income (assuming labor tax does not have any exemptions), and the denominator is the total program cost in GEL. The indicator reports, then, how much poverty or Gini falls by billion GELs spent. As can be seen on the left, TSA is the most effective, followed by agricultural cards and pensions. Tbilisi subsidies and transfers are the least cost-effective. This ranking does not change for the Gini reduction efficiency, with TSA the most effective, and Tbilisi subsidies not improving equality.

Figure 2.21. Efficiency of Direct Transfers, Change in Poverty Headcount

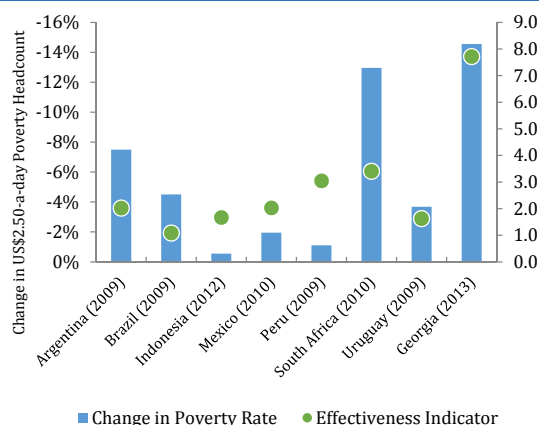
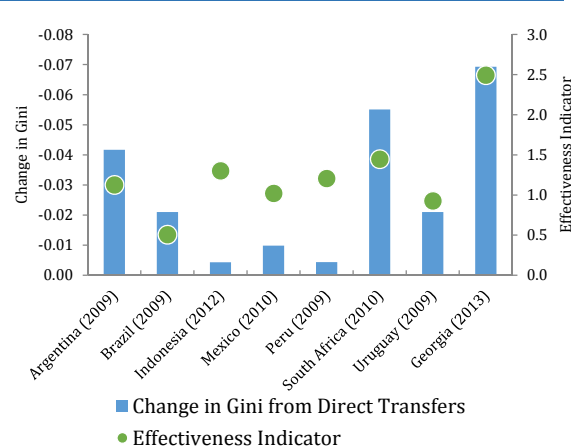


Figure 2.21. Efficiency of Direct Transfers, Change in Gini



Sources: Bolivia (Paz et al, 2014), Brazil (Higgins and Pereira, 2014), Indonesia (Jellema et al 2014), Mexico (Scott, 2014), South Africa (Inchauste, Lustig, Maboshe, Purfield and Woolard (2014) based on IES 2010/11, and own estimates for Georgia based on IHS (2013).

¹⁷ How effective are direct transfers in reducing poverty and inequality given the amount spent? Effectiveness is measured as the impact on poverty or inequality of the taxes or transfers being analyzed divided by their size relative to GDP (Lustig and Higgins, 2013). For example, for direct transfers, the effectiveness indicator (EI) for direct transfers is defined as: $EI = \frac{(X(I^n) - X(I^d)) / X(I^n)}{S^D / GDP}$, where $X(I^j)$ is the inequality or poverty measure of interest (e.g., the Gini coefficient or headcount index), which is defined at each income concept (market income, net market income, disposable income, post-fiscal income and final income). S^D is total public spending on the direct transfer programs analyzed. This formulation makes it possible to compare across different programs, as well as to compare Georgian programs to other developing countries.

Figure 2.22. Efficiency of Direct Transfers, by Poverty Reduction per Billion GELs Spent

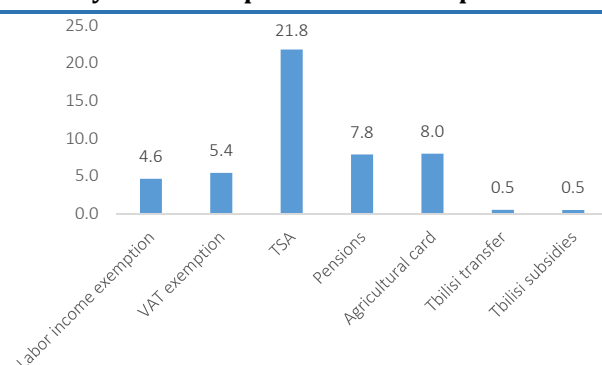
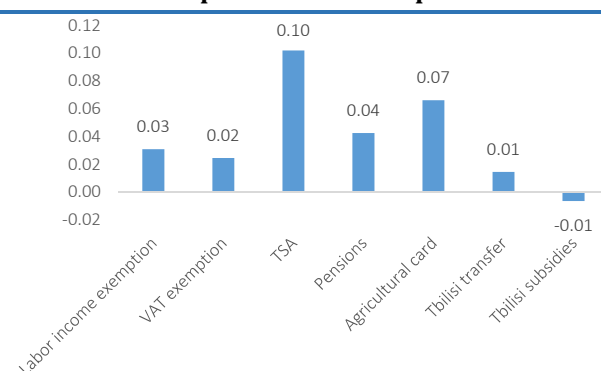


Figure 2.23. Efficiency of Direct Transfers, by Gini Reduction per Billion GELs Spent



Source: Own estimates based on IHS (2013).

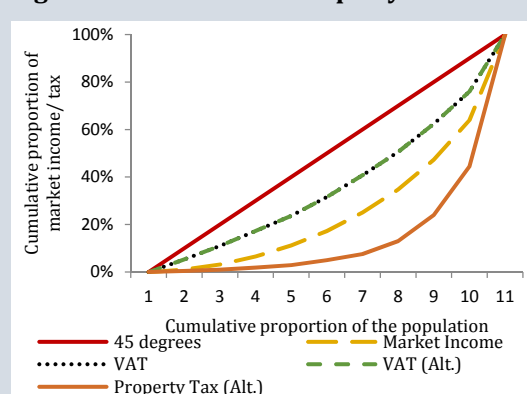
G. THE WAY FORWARD

2.27 Given how progressive direct taxes are, the government could consider enhancing the PIT and property tax. From an equity perspective, giving direct taxes a bigger role will make the tax system more progressive¹⁸. Although the Liberty Act rules out the possibility of raising PIT or property tax rates without referendum, there is still space to enhance both. The government could intensify tax collection efforts to broaden the PIT tax base, especially to collect taxes evaded by those better-off. The excise tax was the only flexible instrument left after the Liberty Act restricted raising rates on other taxes, but the analysis shows that it is quite regressive. The government has been using excises but in future it could consider using them only to levy taxes on items not heavily consumed by the poor. For the VAT, it is advised from an equity standpoint that exemptions that are not pro-poor could be eliminated to improve its progressivity (Box 2.2).

Box 2.2. How Georgia's Tax System Could Do More for the Poor?

The progressivity of direct and the regressivity of indirect taxes raise the question of the extent to which direct taxes might effectively replace indirect, thus making the tax collection system as a whole more progressive. A natural step in this direction would be to collect more labor income tax, which is quite progressive at the present. Another alternative, especially useful for Georgia, where tax rates cannot easily be raised, is to lower the threshold for paying property taxes, currently set at 40,000 GEL of annual income. Moving the threshold down to 12,000 GEL/year results in collections equivalent to 0.25 percent of the effective VAT rate. The resulting property tax is still progressive (Figure 2.24). However, decreasing the VAT rate across the board by just 0.25 percent does not make it much less regressive. Therefore, instead of reducing the VAT rate, the government could consider using additional resource levied from the property tax to compensate for eliminating specific VAT exemptions on goods that are not consumed heavily by the poorest, which could result in making the VAT less regressive.

Figure 2.24. Simulated Property Tax



Source: Staff calculations based on IHS (2013).

¹⁸ This chapter does not address tax efficiency, and measures introduced could lead to change in efficiency.

2.28 **Since Georgia's TSA program is very efficient, the other programs could improve their targeting on poverty and inequality by adopting the targeting mechanism of TSA.** Although the TSA has been very successful in reducing poverty recently, it already takes considerable resources from the budget. However many of the other programs are not as well-targeted. For instance, the current income tax exemption for low-income workers is at least partially intended to reduce poverty and the Tbilisi benefit program and other transfer programs (e.g., IDP) also have pro-poor components, but poverty reductions from these programs are less effective. The government could consider utilize some of the existing TSA mechanism to improve the targeting of other programs.

2.29 **Georgia also has a range of large in-kind transfers that could be redesigned to be more pro-poor.** To make the in-kind transfers more progressive, special attention could be given to the most disadvantaged population such as the poorest households. In addition, the government could take measures to encourage more affluent Georgians to use private services.

Box 2.3. The Use of the BOOST Tool for Fiscal Incidence Analysis

The BOOST (initiated by the World Bank in early 2010) is a tool to enhance the transparency and efficiency of public spending across the globe by structuring and improving access to government expenditure data and linking spending to relevant results. BOOST is also useful for carrying out fiscal incidence analysis. The analysis of public spending is based on both macro (fiscal accounts) and micro (household survey) data. Expenditure data is linked to household information to identify the recipients of cash and in-kind transfers and the amounts allocated to each household. BOOST data is used to (1) construct estimates of government expenditures that are transferred to households that are not readily available in the household survey (e.g., to calculate per student or per household transfers for public school expenses); and (2) cross-reference estimates obtained from the household survey to validate calculations and methodology (e.g., comparing the amount of government spending on the Agriculture Card Program from BOOST with total amounts of cards aggregated from the household survey data). In other words, BOOST provides a comprehensive picture of total government spending that is easy to use as a benchmark for construction of different spending categories and the resulting household income concepts.

3. Evaluating Agriculture Programs

A. OVERVIEW

3.1 A robust agriculture sector is central if Georgia is to achieve its growth and poverty reduction goals. More than half of Georgia's work force is employed in rural areas and about two-thirds of the country's poor live there. For most of them, agriculture provides the only source of income. However, while Georgia's economic growth has generally been stellar in the past decade, agricultural growth has been sluggish. So far there has not been a productive transformation of the agriculture sector: it is mainly characterized by family-based subsistence farming and agribusiness is minimal. The low welfare of a large share of the population and high rural poverty underscore the importance of promoting a more productive agricultural sector.

3.2 The government initiated the Agriculture Card and the Agro Credit programs in order to stimulate agricultural productivity. Though previously development of agriculture has not been a priority, the administration that took charge in 2012 has moved to boost agricultural growth. For instance, an Agriculture and Economic Development Fund (the Agriculture Fund) was established to stimulate investment and productivity. Under this fund, the government introduced the Assistance to Small Farmers during Spring Work program (the Card Program) and the Concessional Agro Credit Program (the Credit Program). The intent of these programs is to

- Provide direct financing to smallholder farmers to increase their use of agricultural inputs and machinery services.
- Provide principal guarantees, matching grants, and interest rate subsidies to promote new investment in capital expansion of active agricultural producers and processors and to attract new ventures.

3.3 The Card Program has generated significant benefits for farmers as expected. The primary benefits of the Card Program so far are increased land area cultivated and higher yields. Among the secondary benefits for farmers are more investment in inputs and machinery, and better understanding of them, and a closer relationship with the input vendors who may have been introduced to them through the program, which in the long run helps to heighten agricultural productivity. The program also increased sales for providers of inputs and machinery services. This program will terminate at the end of 2015, but it has offered valuable experiences and lessons to draw on for future programs.

3.4 The Credit program has also generated benefits. The large amounts of loans issued under this program contributed to a substantial increase in total agricultural loans in Georgia¹⁹. The primary benefits have mainly been more access of farmers to finance due to lower risks to banks and lower charges because of interest rate caps. Secondary benefits have been the opportunity for farmers to establish a credit history and the opportunity for banks to build their agricultural lending experience. However, subsidizing interest on loans may have had the unintended consequence of distorting the agricultural lending market; to get past this problem will require a shift in focus from lowering financing cost to addressing fundamental risks in the agriculture sector.

¹⁹ This includes the state program "Produce in Georgia", which supports the agro-processing via financial support, infrastructure, and technical assistance.

3.5 The new agriculture programs led to a surge in spending on agriculture, but that it is unlikely to pose any significant fiscal risks in future. In its first year, 2013, the Card Program recorded the highest spending of all programs, but at the time it was funded by private sources. In 2014, the Card Program incurred a total cost of about GEL70 million, which GEL50 million (0.17 percent of GDP) came from the government budget. As the Card Program phases out, total spending in 2015 is estimated to be GEL59 million. Spending on the Credit Program, after it became fully operative in 2014, amounted to about GEL43 million (0.15 percent of GDP) and in 2015 its cost is budgeted at about GEL47 million.

3.6 In what follows, the next section gives a broad overview of the country's agriculture sector. Section C discusses the program design and fiscal impacts of the Card Program. Section D reviews the Credit Program. Section E evaluates the performance of both programs and identifies some challenges. Section F offers some policy recommendations.

B. AGRICULTURE IN GEORGIA

3.7 In terms of employment and poverty reduction, agriculture remains Georgia's most important sector. For most of the 1990s, agriculture was the largest sector and contributed more than 30 percent to GDP. In the past 15 years, through pro-market reform Georgia has transitioned into a market economy, unleashing growth in the industry and service sectors. During this period, while Georgia's economy grew by 5.8 percent a year, agricultural growth stagnated. In 2006, agricultural growth affected by the Russian embargo; public investment was minimal, and public services such as extension and veterinary services were dismantled, leading to declines in both total sown area and crop yields from 2006 through 2014. Nonetheless, the importance of agriculture has not diminished: In 2013, 54 percent of Georgia's workers were employed in rural areas, and income from agriculture is an important lifeline for many of Georgia's poor—nearly 66 percent of whom lived in rural areas in 2012. In addition, agricultural production accounted for 45 percent of rural household incomes and subsistence agriculture for 73 percent of rural employment in 2012. Food products are also the country's main exports, accounting for 38 of total merchandise exports in 2013.

3.8 Agriculture growth has rebounded recently with the help of more government support and improved market conditions. After years of contraction, growth of agriculture recovered to 8.5 percent in 2011 and achieved 11.3 percent in 2013, the highest since 2005, partly because of a substantial increase in public spending on agriculture and the easing of trade relations with Russia in 2012. Growth in 2014 was sustained at 1.5 percent. Spending on agriculture accounted for 8.9 percent of total government spending in 2009, but after 2012 it surged, reaching 21.6 percent of total spending in 2014. Starting in 2013 the Agricultural Fund was set up to finance the Card Program and the Credit Program, both of which were designed to boost productivity. The 2013 Card Program transferred some GEL183 million to farmers for plowing and agricultural inputs, and the Credit Program leveraged GEL242 million in loans at subsidized interest rates. The Card Program was entirely financed by private funding in 2013, when it began. However, in 2014 the program was largely financed by GEL50 million from the state budget.

C. THE AGRICULTURE CARD PROGRAM

3.9 The Card Program was introduced in February 2013 to improve the livelihoods of the rural population by enhancing agricultural productivity. The program offers direct financing to smallholder farmers to promote use of agricultural crop inputs and machinery services. It gives the farmers two debit cards: a *Plow Card* to buy plowing and other mechanized services, and an *Agro Card* to buy fertilizers, agrochemicals, seeds, and other supplies. Plow Cards were distributed through the representatives of local municipalities. Farmers submitted the Plow Cards to pay for plowing services, which were provided by both private firms and the state-owned Mechanizatori. Plow Cards expire on August 1st of the year in which they are issued. Agro Cards were distributed to farmers by commercial banks through their branch offices. Based on the size of the farmer's acreage, cards accrue different GEL values to be exchanged for agricultural inputs from suppliers (Table 3.1).

Table 3.1. Card Program Benefits 2013-15

Plot size (ha)	2013		2014		2015	
	GEL		GEL		GEL	
	Plowing	Inputs	Plowing	Inputs	Plowing	Inputs
0-0.25		100		50		50
0.25-1.25 arable	210 per ha	300 per ha	140 per ha	50	140 per ha	
0.25-1.25 perennial		510 per ha		50 + 140 per ha		140 per ha
1.25-5	640					

Source: MOA and ISET.

3.10 The Card Program started as a GEL183 million program and is designed to be phased out by the end of 2015. The government envisioned that the program would stimulate increased utilization of major agricultural inputs over a brief time horizon of three years. The program was to be phased out over the three years to allow the private sector to move in and replace it. Thus total spending declined from GEL182.7 million in 2013 to GEL69.5 million in 2014 and is budgeted at GEL59.1 million in 2015 (Table 3.2). The Agro Card accounted for over 90 percent of total expenditures in the first year and over 70 percent in 2014. The initial target beneficiaries were smallholder farmers with land holdings of up to 5 hectares for 2013. In 2014 the program focus was then restricted to farmers with 1.5 hectares or less. In 2013, on average each beneficiary received GEL39 from the Plow Card program and GEL594 from the Agro Card program. In 2014, despite the stricter eligibility requirements and less funding, the total number of beneficiaries went up from 710,479 to 757,145, though average spending per family fell. Over 60 percent of beneficiary families benefited from the Plow Card and nearly 40 percent the Agro Card. It is planned that the total number of 2015 beneficiaries will be close to that of 2014. Currently there is no plan to extend the program beyond 2015.

Table 3.2. Summary of Card Program Expenses and Beneficiaries 2013-14

Year	Plow Card	Agro Card	Total
Cost in GEL			
2013	16,628,346	166,065,264	182,693,610
2014	18,059,387	51,895,536	69,954,923
Number of beneficiaries			
2013	430,978	279,501	710,479
2014	473,716	283,429	757,145

Source: APMA and World Bank staff calculation. Note: the number of beneficiaries presents a simple sum of beneficiaries from the two program, notwithstanding large overlap between the two cohorts of beneficiaries. These numbers exclude the financing of land disk harrowing (GEL7,432,386).

D. THE AGRO CREDIT PROGRAM

3.11 The Agro Credit Program is designed to provide subsidized credit for farmers and agribusiness, who have traditionally had little access to financing. To improve financial access and provide favorable interest rates in order to promote private investment in agriculture, the Ministry of Agriculture initiated the Credit Program, which was introduced by the Agriculture Projects Management Agency (APMA) in March 2013. Through the program, the government subsidized interest rates for qualified loans approved by banks on loans for financing eight components: (1) agricultural inputs, (2) working capital, (3) fixed capital, (4) agro-leasing, (5) grape inventories, (6) citrus, apple and peach inventories, (7) co-financing of agro-processing enterprises, (8) Produce in Georgia²⁰ (new ventures). In 2013, the program started with components 1-3 and 5-6, and in 2014 offered all eight components (Table 3.3). Component 7 has a 40 percent grant element for agro-processors in economically less active areas. Components 2 and 8 guarantee one-third of the principal for the first four years. The program will be revised in 2015 to focus its offerings on components 2-4 and 8. Although some components target individual sectors, such as Components 5 for grape processors and 6 for citrus exporters and processors, the program covers a broad range of market segments from smallholder farmers' needs for working capital to large corporate investments. Credit applicants must be individuals or private legal entities, satisfy commercial bank and leasing company requirements, and must have business plans, project budgets, and revenue forecasts that meet the standard credit analysis of financial institutions.

3.12 Spending on the Credit Program picked up in 2014 as it was scaled up. When it was initiated in 2013, the APMA spent only GEL4.1 million on loan subsidies. In 2014 as it covered more components spending surged to GEL29.3 million. Spending on the program is expected to reach GEL46.5 million in 2015. The Credit Program costs much less than the Card Program. Subsidies for loans for working capital and fixed assets constituted a substantial part of the total cost.

²⁰ "Produce in Georgia" was launched in 2014 to support new competitive companies in industrial production and agro processing as well as development in existing businesses. Other than providing financing support, it also provided infrastructural support such as state owned real estate with investment obligations, and advisory services for beneficiaries such as support in introducing new technologies.

Table 3.3. Components of the Credit Program, 2013–15²¹

Component	Credit Type	Market Segment	Credit	Interest Cap	Maturity Cap
1	Loan · Inputs credit/installments (excluding fertilizers) from vendors	Small farmers	Up to GEL5,000	0%	6 months
2	Loan, with a 1/3 principle guarantee for the first four years · Primarily Working Capital (including crops sowing and planting materials, pesticides, fertilizers, non-breeding and young livestock, poultry, fish and fish-food, beehives and bees, Vet Drugs purchase, labor resources, agricultural machinery and rental vehicles, different types of material) · Partially Fixed Assets (including the purchase of breeding and productive livestock, poultry, and fish, and the construction of greenhouses and irrigation systems)	Medium and large established farmers (with the majority of income deriving from agriculture activities)	GEL5,000 to 100,000	17% with 9% subsidized, plus provision of 33% second order collateral	18 months
3	Loan · Fixed assets and long-term technology financing, including post-harvest (storage, warehouse, packaging, cold storage and processing facilities) · Infrastructure (modern farms, greenhouse farms, irrigation systems)	Agricultural enterprises (at least 60 new ventures)	US\$30k to 600k	15% with 12% subsidized	84 months
4	Lease · Fixed Assets	Agricultural processors development of value-added infrastructure for agricultural products (equipment financing)	Up to US\$600,000	15% with 12% subsidized	84 months
5	Loan · Inventory	Grape processors (for grape purchases)	Up to GEL10 million	15% with 12% subsidized	15 months
6	Loan · Inventory	Citrus, apple and peach exporters and processors	Up to GEL10,000,000	15% with 9% subsidized	12 months
7	Loan – 50% Grant – 40%	Agricultural processor (only in “economically less active” districts)	US\$100k to US\$500k	14% with 2% subsidized	120 months
8	Loan, with a 1/3 principal guarantee for the first 4 years	“Produce in Georgia” (new ventures)	US\$600,000 to US\$2,000,000	12% cap for amount up to US\$1m or 11% cap for US\$1-2m after 10% subsidized (for 24 months)	Grace Period: working capital - 18 months; fixed capital - 24 months

Source: APMA and World Bank staff calculation.

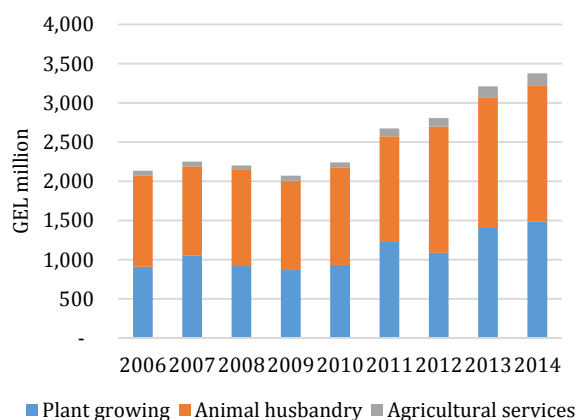
²¹ Starting from 2015 the number of components is limited to only 4: the fixed assets component, working capital component, concessional leasing component and “Produce in Georgia” component.

E. EVALUATION OF PROGRAMS AND AREAS FOR IMPROVEMENTS

3.13 Total output of agriculture products surged in 2013–14 after the agricultural programs came into operation. Total output grew by 5 percent a year from 2006 through 2012. In 2013 after the agriculture programs were launched, output accelerated by 10 percent a year in 2013 and 2014. In particular, yields of cereals, crops, fruits, nuts, beverages, and vegetables shot up from 3 percent a year in 2006–12 to 17 percent in 2013–14. Agriculture services also grew from an average of 11 percent in 2006–12 to 21 percent thereafter, driven by the use of mechanized plowing services. Additional evidence based on cross-regional data shows a robust correlation between lands plowed under the Card Program and agriculture sector GDP: the regions that benefited more from the Card Program by having more land plowed had higher agriculture GDP in 2013. Other than the immediate effect on outputs, these programs also introduced farmers to the benefits of modern agricultural technology and offered them learning-by-doing opportunities that should encourage future usage of machinery services and agricultural inputs and improve agricultural productivity over the long term.

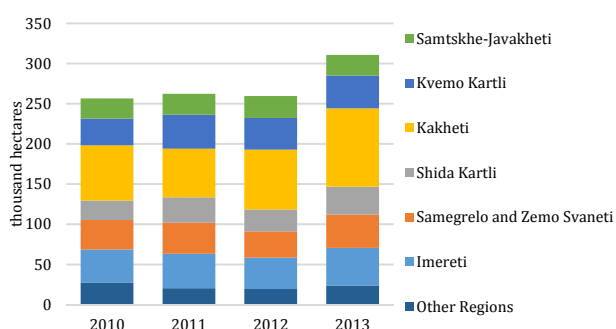
3.14 The Plow Card program substantially increased the area of crops sown in Georgia in 2013 and 2014. There was not much change in the total land area of crops sown between 2009 and 2012, but in 2013 land area sown expanded by 20 percent. The total area of agricultural land covered by the Plow Card Program amounted to 207,296 hectares in 2013 and 217,405 hectares in 2014—nearly two-thirds of Georgia’s total sown area. There are two categories of land area covered by the program: (1) land plowed and paid for with the Plow Cards, and (2) the land plowed but not paid for with the Plow Cards. With regard to the second category, the program’s rules allow farmers who can demonstrate that they have already plowed their land without using the Plow Card, to turn in the Plow Cards and transfer the outstanding balance to Agro Cards. In 2013–14 about 42 percent of Plow Card beneficiaries returned the cards (Figure 3.2). In terms of regions, Kakheti, Imereti, and Samegrelo benefited the most from the Plow Card Program, accounting for about 56 percent of total lands covered by the program in 2013 and 2014; the Racha-Lechkhumi, Adjara, and Mtskheta-Mtianeti regions gained the least. For 2013–14, about 70 percent of the lands were plowed by Mechanizatori and the rest by 105 independent machinery service providers.

Figure 3.1. Agriculture Sector Output, 2006-14



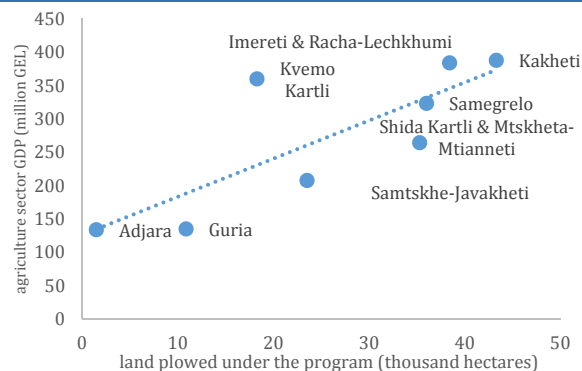
Source: Geostat and World Bank staff calculations.

Figure 3.2. Sown Areas by Region, 2010–13, thousand hectares



Source: Geostat and World Bank staff calculations.

Figure 3.3. Agriculture Sector GDP and Land Plowed, 2013



Source: Geostat, APMA and World Bank staff calculations.

Table 3.4. Products Purchased with Agro Cards, 2013

Products	GEL	Percent
Fertilizer	72,269,836	43.50
Agro-Chemicals	33,112,604	19.90
Seed Material	6,742,085	4.10
Agricultural Equipment	53,704,193	32.30
Veterinary Preparations	232,486	0.10
Total	166,061,204	100

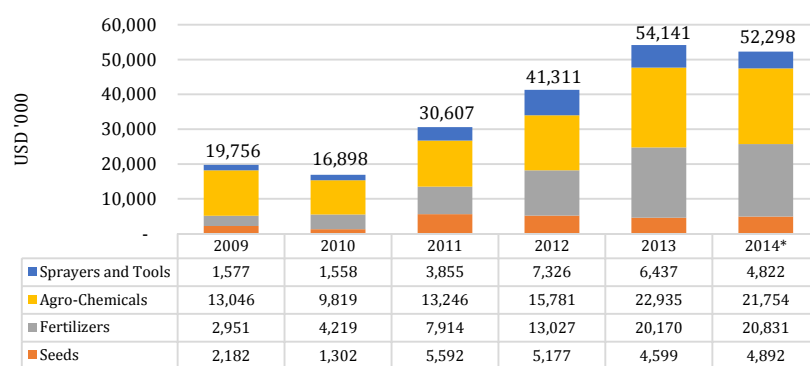
Source: APMA and World Bank staff calculations.

3.15 The Agro Card Program led to a significant increase in the use of agricultural inputs in 2013.

Through the program, Georgian farmers were able to purchase products such as fertilizers, agrochemicals (pesticides and herbicides), seeds, equipment and tools, and veterinary preparations. In 2013 most of the spending went to fertilizers and agricultural

equipment, which together accounted for 76 percent of total Agro Card spending (Table 3.4). Products on which the least was spent were veterinary preparations and seeds. Since most agricultural inputs are imported, there was also a 31 percent increase in imports of agricultural inputs in 2013 after a 35 percent increase in 2012, when most importers and wholesalers began building their inventories in anticipation of the program (Figure 3.4). This program was carried out by 536 suppliers with 780 sales outlets throughout the country. The Agro Card program did not have a large impact on input prices because the government set maximum prices on inputs sold through shops registered with the program.

Figure 3.4. Imports of Inputs to Agriculture, 2009–14



Source: Geostat.

3.16 **Some issues that emerged as the card programs got underway are related to targeting, quality, and transfers.** Reportedly the quality of inputs bought with Agro Cards varied, with some being of low quality. In addition, wholesalers and retailers reported that 20–30 percent of Agro Card beneficiaries transferred their card benefits to third parties. Though this does not imply that less agricultural inputs were used for production, it does suggest that a significant number of the beneficiaries do not need or are not able to use the card (e.g., urban households that do not engage in agricultural activities). This seems to be an issue of program design not being entirely tailored to farmer needs, as well as a lack of monitoring and evaluation and of internal controls. Lack of a complete land cadaster and ownership information also made it more difficult to identify precisely which families were in need. In 2013, based upon the program's product sales criteria, beneficiaries were able to purchase a significant number of nonagricultural electric tools, but that was quickly fixed through restrictions on eligible products, again highlighting the importance of monitoring and evaluation.

Table 3.5. Lending Activities under the Credit Program, 2013-14

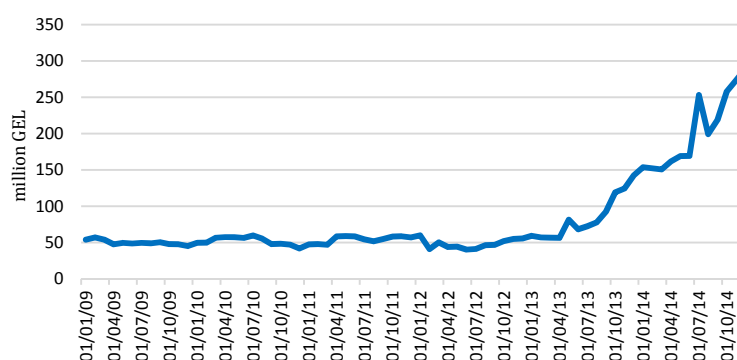
Component	2013				2014			
	No. of loans	Total loan value (GEL)	percent of total loans	Mean maturity (months)	No. of loans	Total loan value (GEL)	percent of total loans	Mean maturity (months)
1	2,685	1,106,478	0.50%	12	2,763	1,093,341	0.20%	12
2	5,755	113,384,623	46.80%	36	15,049	257,628,899	54.30%	36
3	382	78,324,115	32.30%	60	426	106,051,680	22.30%	60
4	n.a.	n.a.	n.a.	n.a.	2	167,497	0.04%	n.a.
5	43	49,085,349	20.30%	15	75	86,132,747	18.10%	15
6	2	450,000	0.20%	4	7	2,230,000	0.50%	6
7	n.a.	n.a.	n.a.	n.a.	2	836,160	0.20%	84
8	n.a.	n.a.	n.a.	n.a.	9	20,533,592	4.30%	84
Total	8,867	242,350,565	100%	127	18,333	474,673,916	100%	297

Source: APMA.

3.17 Large amounts of agricultural loans were issued under the Agro Credit Program.

In 2012 before the Credit Program began, total agricultural loans issued were less than GEL60 million. Once the Agro Credit Program came into effect, commercial banks loaned GEL242.4 million in 2013 and GEL474.7 million in 2014 (Table 3.5). Credit issued for Components 2 and 3 dominated, accounting for 79.1 percent of total loans in 2013 and 76.6 percent in 2014. The lowest volumes of new credits were for Components 1, 4, 6 and 7. As of March 30, 2015, credits issued within the Credit Program amounted to GEL816.6 million, with 96.5 percent of all loans being issued for working capital (38.3 percent) and financing fixed assets (58.3 percent).

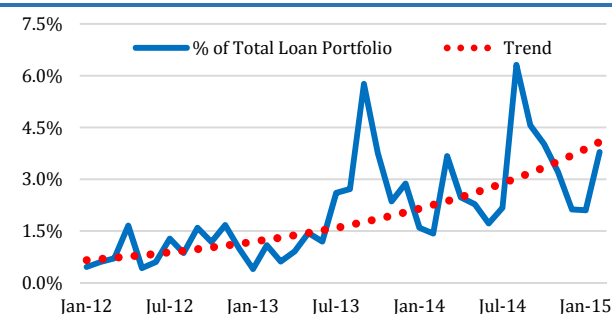
Figure 3.5. Total Bank Loans Outstanding to the Agriculture Sector



Source: NBG. Note: This does not include microfinance loans. By 2014 loans from the microfinance organizations amounted to GEL170 million.

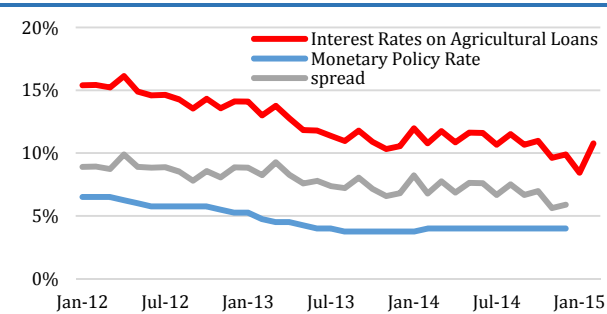
3.18 The Credit Program stimulated a great deal of new lending for the agriculture sector and a drop in interest rates in 2013–14. Although several agricultural development programs were operating contemporaneously, it seems reasonable to attribute a large percentage of this impact to the Credit Program, especially since the government and donor-funded grant programs leveraged this program's credit offerings to move their own programs forward. In 2009–12, before the Credit Program, loans to agriculture held steady at an average of GEL51.1 million a year²² (Figure 3.5). The launch of the program marked the start of an uptick in agriculture lending in the first half of 2013, followed by rapid growth that raised the stock of loans to the agricultural sector by 157 percent in 2013 and 103 percent in 2014. In absolute terms, this section of the loan portfolio grew from GEL55.5 million to GEL289.2 million between December 2012 and December 2014. In terms of total new issuance, the proportion of agriculture loans rose from just 1.2 percent to 3.8 percent from the beginning of 2012 to the end of 2014. Interest rates also started to fall in early 2013 when the Credit Program started. Although the policy rate has also been declining, the narrowing spread between the agricultural loan interest rate and the policy rate indicates that the Credit Program and its interest rate ceilings has been effective in lowering the financing cost of agricultural loans.

Figure 3.6. New Agricultural Loans as Percentage of Total New Commercial Loans



Source: NBG.

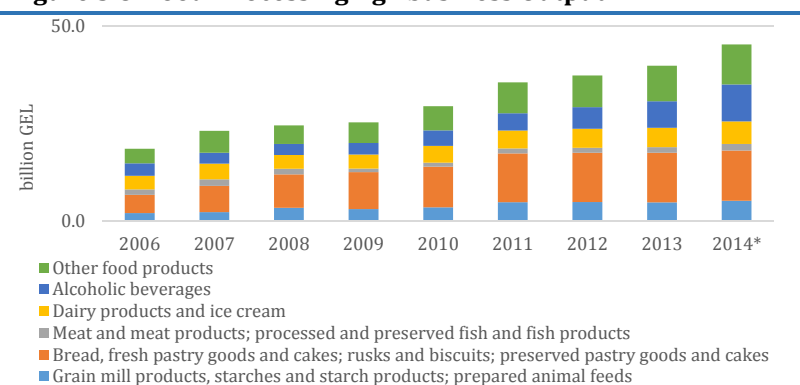
Figure 3.7. Average Monthly Interest Rates and Spreads, percent



Source: NBG.

3.19 However, the impact of the Credit Program on the food processing industry is still yet to be seen. Food processing is the largest agribusiness in Georgia. From 2006–12, it grew by an average of 9 percent; in 2013, the growth rate was 10 percent, close to the trend in previous years. Growth drivers for food processing have been agribusinesses that process meat and fish products, which managed to grow by 13 percent in 2013–14 after a gradual

Figure 3.8. Food-Processing Agribusiness Output



Source: Geostat.

²² The National Bank of Georgia's statistical grouping of economic activities combines forestry and fishery with agricultural activities. Given the comparatively small size of forestry and fishery, the vast majority of the loans can be assumed to be for agricultural activities, and the aggregate total is used as a proxy for agricultural loans only.

decline in 2006–12, plus the alcoholic beverage business, which grew by 31 percent in 2013, much above the 10 percent seen in 2006–12 (Figure 3.8). However, growth of the processing of grain mill and starch products and prepared animal feeds slowed from 16 percent in 2006–12 to 3 percent in 2013–14, and agribusinesses processing bread, pastry, biscuits, and preserved food also decelerated, from 16 percent in 2006–12 to 1 percent in 2013–14, which could partly be explained by the restrictions to finance grain mill and pastry within the Credit Program. At the same time, it is difficult to disentangle the impact of the lift of the Russian embargo on wine exports with the impact of the Credit Program, and currently there is little evidence that agribusiness has leveraged the lower financing cost for much more capital investment.

3.20 Moreover, in the longer term, subsidizing interest rates has several negative aspects:

(1) The program addresses a demand rather than a supply constraint in the credit market. That is, it assumes there is a lack of demand at commercial interest rates, when in many cases the constraint is on supply, because lenders are not willing to lend to high-risk investments that are not supported by good collateral. (2) There are investments in projects that would not be financially viable at commercial interest rates. While a project may be initiated with working capital borrowed at subsidized interest rates, it may not be viable after the subsidy is withdrawn. (3) The Agro Credit program is likely distorting the allocation of credit resources between agriculture and other sectors, which could impede the structural transformation of the economy. (4) It will be politically difficult to terminate the program, particularly when the subsidy covers a high percentage of the subsidy cost as is the case for Georgia where some components of the program cover 80 percent of interest costs.

F. THE WAY FORWARD

3.21 Although both programs have generated benefits, they provide only temporary assistance to the sector. This does not diminish the need for public investment in essential public services and infrastructure (such as roads and utilities, rehabilitation of irrigation infrastructure, veterinary and food safety services, research, education, and advisory services) which help to address the fundamental causes of limited access to credit, inputs, and machinery as a priority for public spending²³.

3.22 Since the Card Program will be completed at the end of 2015, there is little opportunity to improve it; however, it offers valuable lessons for future programs:

- (i) **Creating a Stable Policy Environment:** Defining a timetable for program phase-out, communicating it to farmers and service providers, and adhering to it are important so that beneficiaries have accurate information on which to base investment decisions. The Agriculture Card program was announced as a three-year program and it is important to stick to that. The change in target beneficiaries during the program, although justified to improve targeting, will have created uncertainty, which should be avoided in future.
- (ii) **Targeting of Beneficiaries:** Defining the right group of beneficiaries and achieving accurate targeting is difficult, and socioeconomic profiling beneficiaries could help to identify potential beneficiaries who are least likely to benefit from an agro-card program. Analysis of the profile of beneficiaries who traded their vouchers would be particularly informative in designing future farm support programs. They may, for example, include land-holders living in urban areas, who have kept their land as a long-term investment but have other sources of income and little interest in farming.

²³ Some advisory services are considered under the state program of “Produce in Georgia”.

- (iii) **Type and Quality of Inputs:** The program would be an opportunity to demonstrate the benefits of investing in good-quality inputs and to encourage the supply of a more diverse range of inputs, such as compound fertilizers,²⁴ which many farmers have had no experience in using. Suppliers are required to stock inputs that meet national standards²⁵ but the program would be an opportunity to monitor this and would provide an incentive for suppliers to adhere to the standards. Providing a sufficient diversity of inputs could be an additional requirement for participation in the program, as long as this was not too restrictive.
- (iv) **Timeliness of Delivery:** Timely provision of information to traders and farmers about the Agro Card programs and timely issuance of agro-card vouchers are critical to effectiveness. Many farm support programs suffer from poor timeliness even in well-developed economies. Focus group discussions conducted for this study indicate that this was a problem in some cases with the agro-card program. Having better information about beneficiaries' eligibility in advance would help to ensure timely program delivery.
- (v) **Complementary Advisory Services:** (a) Services to advise on basic crop husbandry, soil and water management (including use of seeds, fertilizers, and pesticides provided through the program) should be financed in parallel by the Ministry of Agriculture, preferably as a combined package of inputs, machinery services, and advisory services. Initially, given the limited outreach of the advisory services it would not be possible to cover all farmers. Experience from Bank projects in Central Asia demonstrates that providing provision in combination with advice on crop husbandry is more effective than providing inputs alone. (b) If the Card Program is terminated as planned in 2015, the benefits of the program could be maximized by publicly funding the provision of advisory services to as many as possible of the farmers that participated in the program (outreach to 20 percent of them would be an excellent achievement). Since the objective of introducing farmers to modern inputs and agricultural technology has now been largely achieved, it becomes more important to facilitate training and continued usage of inputs and modern agricultural technology.
- (vi) **Information Management:** An improved management information system (MIS) would help to improve the design, management, and evaluation of the impact of such programs. (a) Completion of registration of land ownership rights in the National Agency of Public Registry (NAPR) cadaster would provide a very important foundation for such an MIS, since the area owned by each land title holder would be clearly defined and electronic information on it would be available. (b) The agency managing the program should add a monitoring and evaluation (M&E) component to it and integrate it into an electronic platform that tracks specific performance data points. Any future programs should consider analyzing activities generated by the electronic cards to track purchases, revenues per supplier, location of purchases, and products purchased.

3.23 Regarding the Agro Credit Program, the government should consider the following issues in developing the program in future:

- (i) **Creating a stable policy environment:** Defining the life of the interest rate subsidy program, communicating this to farmer and service providers and adhering to it is important so that beneficiaries have accurate information on which to base their

²⁴ Compounds containing a mix of nitrogen, phosphate, and phosphorus, for example.

²⁵ List of approved pesticides, for example.

investment decisions. This is particularly important in the case of interest rate subsidies because they rely on subsidized interest rates to stimulate long-term investments which may collapse once the subsidy is withdrawn.

- (ii) **Information Management:** An improved management information system would help to improve the design, management and the impact evaluation of similar programs. The program implementation agency should institutionalize a monitoring and evaluation (M&E) component to their program. As with the Card Program, an M&E component should be put in place, which would be integrated with an electronic platform that tracks specific performance data, including through electronic databases generated from the online application and its banking platform.
- (iii) **Provide training to banks to help them evaluate risks in agriculture.** Training bank loan officers on assessment and monitoring of agricultural loans, as well as improving their understanding of climatic and production risks and measures to mitigate such risks, would contribute to improved loan performance.
- (iv) **Public spending should focus on addressing the fundamental causes of risk in the agricultural sector which include:** (i) production risks caused by climatic shocks including drought and flood damage which can be addressed through investment in infrastructure, better information, and advisory services; (ii) production risks caused by animal and crop disease which can be addressed through disease monitoring, research, advisory services and veterinary services; (iii) market risks which can be addressed through investment in the development of market-based risk mitigation measures such as commodity-linked finance.

4. Subnational Expenditure Review

A. OVERVIEW

4.1. **According to the government's decentralization reform aimed at reducing regional inequality and poverty, local governments are to take on more responsibilities for subnational public finance.** Despite significant progress in growth and poverty reduction in general, results at regional level have largely been uneven. The decentralization reform is designed to improve the allocative efficiency and equity of the public spending at local government levels: by allowing those closest to the needs of community make the decisions on spending. Traditionally Georgia's central government has been the main source of financing for local governments and making the decisions about subnational expenditures, but the new Self-Governance Law and local elections in 2014 marked a major step toward decentralization. Fiscal decentralization will follow starting from 2016, as envisioned in the new Budget Code, under which local governments will be sharing income tax revenues for greater fiscal autonomy.

4.2. **This chapter continues the discussion on subnational expenditure issues in the last Public Expenditure Review, focusing on issues related to decentralization, subnational capital expenditures, and expenditures for preschools.** Chapter 4 of the last PER (World Bank 2014) provided a comprehensive overview of the intergovernmental fiscal system that laid a solid foundation for this analysis. This chapter analyzes subnational spending in 2013–14 based on three specific questions: (1) what is the fiscal impact of the recent decentralization reform, in particular the temporary norms under the new Self-Governance Code; (2) how are capital grants allocated and could this be done better; and (3) how does the abolition of preschool parental fees affect local government spending?

4.3. **The current decentralization reform has significant fiscal implications for subnational revenues and spending.** Under the Self-Governance Code that took effect immediately after local elections in mid-2014, temporary norms were instituted to regulate the number of local government employees, spending on wages and salaries, and local government capital expenditures. The new norms for the first two are expected to bridge some gaps in hiring and spending on wages spending, but the adjustments are likely to introduce uneven, in some cases drastic, changes across local governments. Meanwhile, the norm on capital expenditures appears to have stimulated a budgeted increase of capital spending in the largest cities. Under the Budget Code that became effective in late-2014, it is estimated that the sharing of income taxes envisioned will add to local government own-source revenues an amount equivalent to 3 percent of total subnational revenues.

4.4. **Capital grants have been important in financing capital projects but the allocation scheme needs to be modified.** Local government capital spending accounted for a significant one-fifth of total subnational spending. Capital grants from three centrally-administered funds—the Regional Projects Implementation Fund (RPIF), the Municipal Development Fund (MDF), and the Village Support Program (VSP)—financed about half of all subnational capital projects. However, with deeper fiscal decentralization in sight and more fiscal resources and responsibilities expected to be delegated to local governments, substantial benefits are likely to accrue from gradually building the capacities of local governments and empowering them to choose and carry out public investments, within a phased time frame.

4.5. **Abolishing the preschool parental will have a large fiscal impact that will be distributed unevenly across local governments.** Preschool education is a major responsibility of subnational governments. Despite the need for equal opportunity in early childhood education, local governments differ widely in preschool education services, spending per child, parental fees, and enrollment rates. Elimination of preschool parental fees in 2013 incurred an additional cost for all local governments estimated at about GEL30-40 million (0.10–0.14 percent of GDP); however, given the differences across municipalities and cities, the fee removal might well exacerbate inequality in preschool services. From an equity perspective, addressing this issue would require reforms to the allocation scheme for securing equitable funding and strengthening preschool service delivery.

4.6. **In what follows:** Section B discusses the institutional framework of subnational governments in Georgia. Section C looks at the importance of subnational expenditures for the country and recent developments related to the decentralization reform. Section D hones in on capital expenditures, capital grants, and allocation schemes. Section E analyzes local government preschool spending and the fiscal impact of the elimination of the parental fees. Section F lays out policy recommendations.

B. INSTITUTIONAL FRAMEWORK

4.7. **Traditionally subnational governments in Georgia relied heavily on transfers from the central government.** These transfers accounted for two-thirds of local government income for 2011–13. Local governments received two types of grants: (1) a formula-based equalization grant to close local government revenue and spending gaps; and (2) a special purpose grant used largely to finance capital projects, which will be elaborated on later. Own revenue sources include property taxes and nontax revenues, such as rents, fines, penalties, and sale of goods and services.²⁶ The primary spending responsibilities of local governments are the provision of housing, utilities and communal services²⁷, and preschool education (kindergarten); the central government is responsible for the more resource-intensive services like general education and health.

4.8. **The Self-Governance Code and the 2014 local elections were major steps in the decentralization agenda.** The Code, enacted in July 2014, outlined the decentralization of local self-government bodies by increasing their scope and financial independence and providing normative acts to regulate local governance. Seven new self-governing cities were established, and the mayors of the cities were elected in 2014 local elections. The system of local self-governments (LSGs) now comprises 12 cities, 59 municipalities, and 2 autonomous republics. Before the new code and the elections, the capital city Tbilisi was the only city where direct local elections were allowed. The election in 2014 of all the cities' mayors was the first in Georgian history. Governors (gamgebeli) of municipalities are also elected. This introduced more public accountability and wider representation in local government.

4.9. **With greater decentralization, the municipalities have also been given greater fiscal autonomy.** The Budget Code passed in December 2014 envisioned that from January 1, 2016 forward, the LSGs and the central government will share income taxes. According to the new code income taxes in a number of categories will be added to local government revenues. The central government will still collect all income taxes but those in the following categories of income will be transferred to local governments in their entirety: (1) income generated through business

²⁶ With the exception of the Autonomous Republic of Adjara, which retains all its income tax collections.

²⁷ Despite reductions in spending of utility, housing and communal services in recent years, it still accounted for 17 percent of local spending in 2014.

activity; (2) non-resident income generated from selling property in the local government; (3) individual income as additional value received from selling tangible assets; (4) individual income generated from a gift; (5) income from an inheritance; and (6) individual income from rent.

4.10. Temporary measures were imposed to regulate LSG expenditures. In the coming year LSGs will soon have bigger budgets to execute at their discretion, but there remains great disparity in LSG planning and budgeting. The central government therefore instituted some short-term rules in the Self-Governance Code enacted in July 2014 to encourage more capital investment, and set norms to discourage excessive hiring and spending on wages. In particular, lower and upper bounds of the number of employees in local governments were set based on the number and size of local administrative units, and salaries of public servants shall not exceed 25 percent of the expenditures. There is also a lower bound on the share of increase in nonfinancial assets (capital expenditures) in the total outlays of the municipality budget, which is set at the average of the shares over the previous three years (see Box 4.1 for details).

Box 4.1. Temporary Norms under the New Self-Governance Code:

The norms, effective from November 2014 to January 2019, are imposed to regulate local government capital spending, the number of public employees, and spending on salaries. This article does not apply to Tbilisi and occupied municipalities.

a) Rule on the increase in nonfinancial assets (article 155)

The share of “increase in nonfinancial assets” in the total outlay of the municipality budget should not be lower than the average of the shares over the previous 3 years.

b) Rule on the number of public servants in self-governing entities (article 156)

The number of public servants in governor’s (gamgebeli)/mayor’s office and apparatus of councils (sakrebulo) shall not be less than 30. In the municipalities where the number of voters is less than 45,000, the following formula governs the ceiling on the number of public servants that shall be hired:

$$\Sigma = 30 + 3.2x + \frac{y}{450}$$

Where x is the number of majoritarian districts in 2014 local council elections and y is the number of voters in the municipality. The number of public servants shall not exceed the minimum number of public servants (30) plus the number of majoritarian districts in the 2014 local council elections multiplied by a coefficient of 3.2 plus 1 public servant per 450 registered voters in the self-governing entity.

In the municipalities where the number of voters is more than 45,000, the following formula governs the ceiling on the number of public servants that shall be hired:

$$\Sigma = 30 + 2.3x + \frac{y}{500}$$

Where x is the number of majoritarian districts in 2014 local council elections and y is the number of voters in the municipality. The number of public servants shall not exceed the minimum number of public servants (30) plus the number of majoritarian districts in 2014 local council elections multiplied by a coefficient of 2.3 plus 1 public servant per 500 registered voters in the self-governing entity.

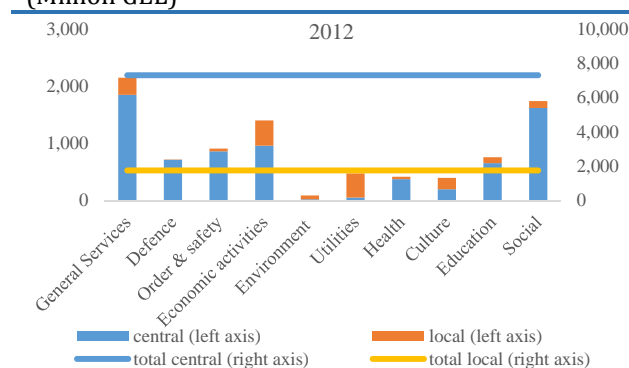
The number of contracted (non-staff) units in a municipality shall not exceed 10 percent of the number of public servants in governor’s (gamgebeli)/mayor’s office and apparatus of councils (sakrebulo). If the 10 percent corresponds to a number less than 5, the self-governing entities are allowed to increase the number of contracted units up to 5.

The amount of salary of public servants in governor’s (gamgebeli)/mayor’s office and apparatus of councils (sakrebulo) shall not exceed 25 percent of the expenditures foreseen by the municipal budget.

C. SUBNATIONAL EXPENDITURE TRENDS AND COMPOSITION

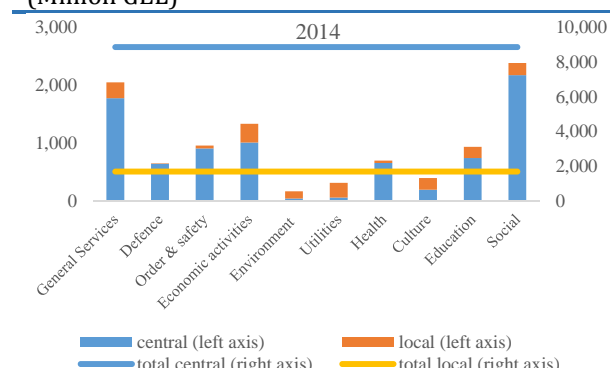
4.11. **Subnational expenditures, on average 18 percent of consolidated expenditures, have seen notable changes in 2012–14.** Among ECA countries, the share of subnational expenditures in Georgia’s consolidated expenditures is in the middle range (World Bank 2014). Although total subnational spending was largely unchanged in value in 2012–14, there has been a significant realignment from capital to recurrent spending. Local government spending declined slightly, from GEL1.8 billion to GEL1.7 billion, while central government spending expanded by 10 percent each year. Between 2012 and 2014, the central government cut back capital grant allocations to local governments, which led to a 44 percent drop in LSG capital spending, from GEL650 million to GEL364 million (Figure 4.1 and 4.2). Meanwhile, recurrent spending grew by 19 percent, from GEL1.1 billion to GEL1.7 billion. Local government social spending went up 36 percent a year mirroring the increase in central government social spending, in response to the current administration’s social priorities. Subnational education spending grew by a substantial 36 percent a year for 2012–14, driven by the increase in preschool spending after the service became free in 2013.

Figure 4.1. Local and Central Government Spending by Function, 2012
(Million GEL)



Source: Ministry of Finance.

Figure 4.2. Local and Central Government Spending by Function, 2014
(Million GEL)



Source: Ministry of Finance.

4.12. **Decentralization will expand local governments’ spending envelopes from 2016 on.** Under the new Budget Code, LSGs will keep revenues collected from a number of income tax categories starting in 2016. In 2014, income taxes from these categories amounted to 13 percent of total income taxes and 3 percent of total revenues—a significant addition to the local budget. Based on 2014 statistics, LSG revenues as a share in total government revenues is expected to rise from 7 percent to 10 percent.

4.13. **The continuing decentralization reform has stimulated movements in capital spending.** Before the new Self-Governance Code was adopted in 2014, there was a substantial fall in local government capital spending largely driven by consolidation of capital grants. From 2012–14, spending on infrastructure projects in cities and municipalities was cut drastically, by 66 percent in Tbilisi, 62 percent in self-governing cities, and 37 percent in rural municipalities (Figure 4.4). With the new code becoming fully operational in the second half of 2014, there have been noticeable changes in local government budgeting for capital expenditures in 2015: Tbilisi planned a near tripling of capital spending; the four largest self-governing cities—Batumi, Kutaisi, Rustavi, and

Poti—in total budgeted a 40 percent increase; while rural municipalities and new cities are likely to spend less on capital investment.²⁸

Figure 4.3. Local Government Capital Expenditures, 2012-15
(Million GEL)

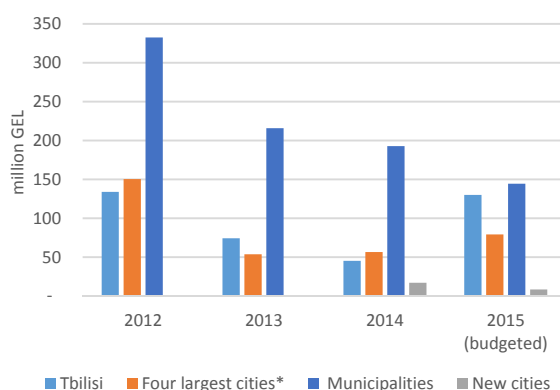
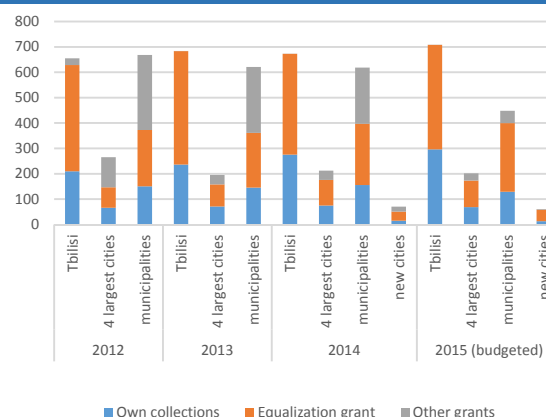


Figure 4.4. Revenue Sources of Local Governments, 2012-15
(Million GEL)



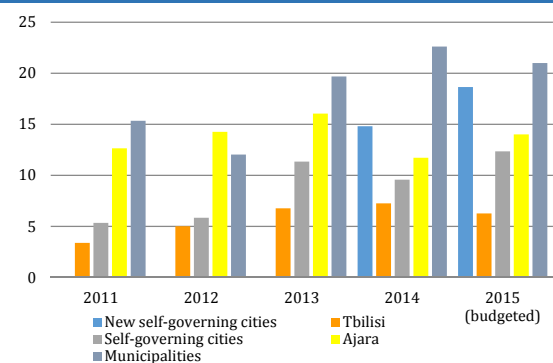
Source: Ministry of Finance. Note: budgeted allocation of capital grants for 2015 is not available. New cities are Telavi, Zugdidi, Gori, Akhaltsikhe, Ozurgeti, Mtskheta, and Ambrolauri.

4.14. The decentralization reform is expected to bridge the gaps in hiring and unit wage spending across local governments. Subnational governments employ about 25,000 public employees, about 1.5 percent of total employment in Georgia and over 9 percent of public servants. In some municipalities the decentralization reform and the new code is likely to boost local government hiring; in others public employment is expected to fall. For example, after the Akhaltsikhe municipality was split to a city and a municipality under the New Governance Code, the number of employees is budgeted to almost double in 2015 over 2013.²⁹ On the other hand, employment in the Ambrolauri municipality fell after its split, most likely to meet the new thresholds on staffing. In Adjara and Batumi employees of the Legal Entities of Public Law (LEPLs) were excluded from the staff count, but now the Single Treasury Account reform has mandated local governments to consider LEPL employees as public employees. As a result the number of public employees more than quadrupled. The shares of spending on wages and salaries in total expenditures (Figure 4.5) are generally higher in small local administrative units (about 22 percent) than in large cities (10 percent) and Tbilisi (7 percent). The average wage per public employee also varies widely: labor unit cost in Mtskheta in 2015 is about GEL2,000 a year, while in Poti it reaches GEL18,000. The disparity is largely explained by the number of public servants per 1,000 population: nearly 20 in Mtskheta and only 3 in Poti (Figure 4.6). The Self-Governance Code normative measures are expected to close such large gaps in time, but this is not likely reflected in 2015 budgets.

²⁸ New cities are Telavi, Zugdidi, Gori, Akhaltsikhe, Ozurgeti, Mtskheta, and Ambrolauri.

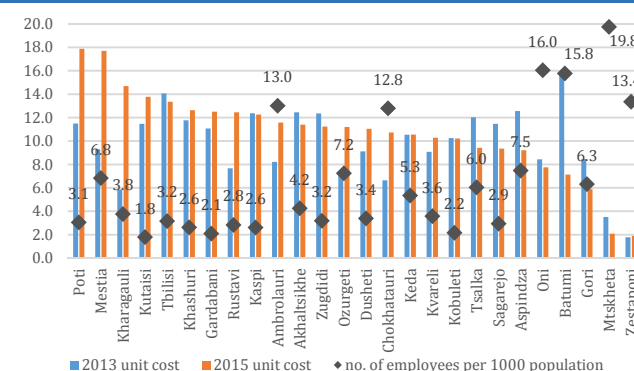
²⁹ Since the new code was enacted in July 2014, it was a transition year and is not a proper benchmark.

Figure 4.5. Share of Wages In Total Expenditures By Local Governments (percent)



Source: Ministry of Finance.

Figure 4.6. Share of Wages In Total Expenditures By Local Governments (GEL, number of employees)

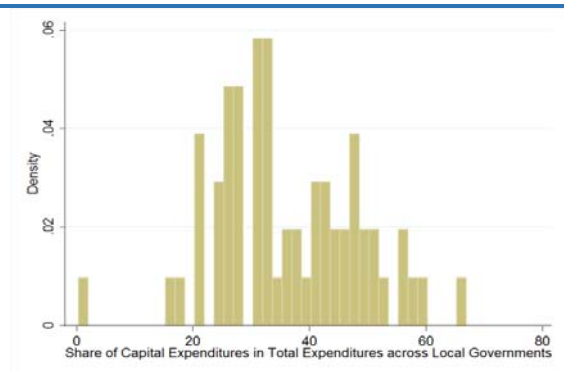


Source: Ministry of Finance.

D. SUBNATIONAL CAPITAL EXPENDITURES

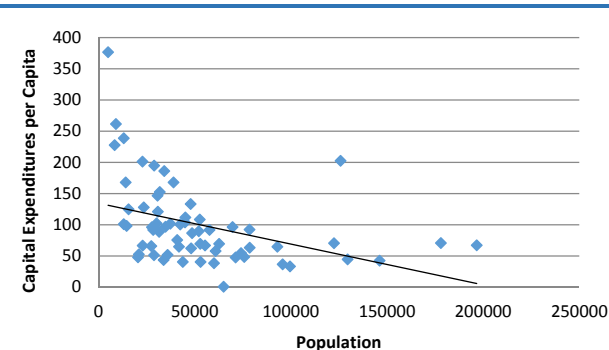
4.15. **Capital spending represents a substantial portion of local government spending.** In 2013, local governments devoted an average of 30 percent of their spending on public investments, or GEL100 per capita. This is about 40 percent of Georgia's total capital spending and 2.5 percent of its GDP. However, the high shares mask major variance across local governments: the share of capital in total spending ranges from less than 1 percent to more than 60 percent (Figure 4.7). Capital spending also represents a smaller share of the spending of larger municipalities (Figure 4.8). This is in part due to economies of scale, which drive down the share of public spending devoted to the capital investments of larger local governments (World Bank 2014). Larger municipalities also have on average fewer budget constraints and are therefore able to spend on a wider range of activities out of their self-sourced revenues.

Figure 4.7. Local Government Capital Spending Variances, 2013



Source: 2013 BOOST database and staff calculations.

Figure 4.8. Population and Capital Spending per Capita, 2013



Source: 2013 BOOST database and staff calculations.

4.16. **There is a high degree of variation in capital spending by local governments, which reflects the difference in economic development and institutional capacity.** Local governments differ in size and economic development, as evidenced by the heterogeneity of their populations and

the share of the socially vulnerable ³⁰ (Table 4.1). As of 2013, population of Georgian local governments range from 5,000 to 178,000 in municipalities and from 48,000 to 1.2 million in cities. A reported wide disparity in institutional capacity is not surprising: large subnational governments like Tbilisi can plan and execute capital budgets effectively but small municipalities lack that capacity. The level and composition of total public spending, and the capital grants invested by various funds and programs (described later) also vary tremendously, with high coefficients of variation. The high degree of variation in spending patterns reflects the differences in economic development and institutional capacity. On average, large municipalities or cities tend to be more developed and have more institutional capacity; they are also characterized by, a lower share of socially vulnerable people, higher capital spending and more funding from the RPIF, more spending on culture, education, and social services and less on general public services such as law and order (Figure 4.9).³¹

Table 4.1. Local Government Characteristics and Spending (in GEL), 2013

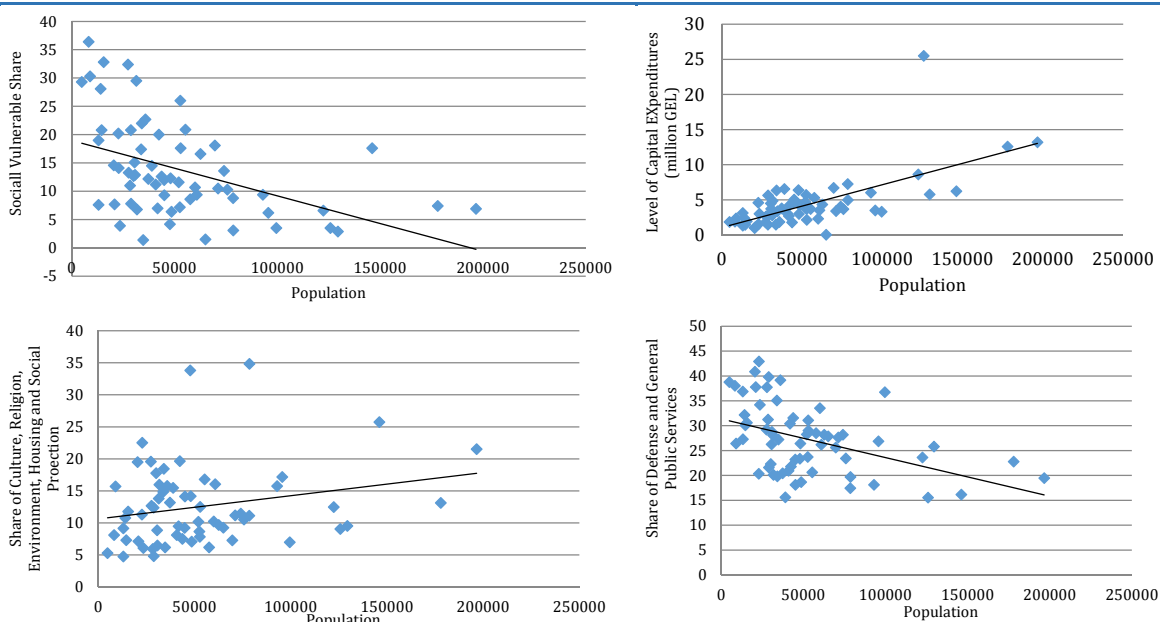
	Mean	Standard Deviation	10 th pc	25 th pc	50 th pc	75 th pc	90 th pc
Population	70,294	145,537	14,597	28,605	43,097	67,359	122,453
Percent of Socially Vulnerable People	13.7	8.4	3.9	7.3	12.1	18.6	28.1
Amount spent by...							
Municipal Development Fund	793,582	1,360,506	0	0	412,242	618,290	2,388,555
Regional Projects Implementation Fund	1,746,436	1,892,842	0	0	1,560,622	2,369,199	3,523,424
Village Support Program	632,833	511,640	0	0	626,692	983,435	1,338,553
Share of local expenditures devoted to...							
Capital Expenditures	32.6	15.5	10.7	24.9	32.5	43.8	50.6
General Public Services	26.3	13.5	15.5	18.4	23.2	29.8	36.8
Defense	1	0.5	0.5	0.7	0.9	1.2	2
Economic Affairs	25.76	14.8	1	18.1	24.5	35.6	52.1
Environment Protection	5	3.9	0.1	2.4	4.4	7.4	11.2
Health Care	0.9	0.6	0.4	0.6	0.8	1.1	1.8
Housing	12.1	8.9	1.7	5.1	10.1	17.6	25.2
Public Order and Safety	3.32	1.51	2	2.6	3.1	3.8	5.5
Social Protection	5.4	3.5	2.3	3.1	4.5	6.4	9.4

Sources: 2013 BOOST Database and Bank staff calculations.

³⁰ “Socially vulnerable” people are individuals receiving benefits from social security, administered by the central government.

³¹ The best-fit line (red) is estimated with OLS. Since Tbilisi is an outlier in terms of population, it is excluded from the graph but the pattern is robust to its inclusion and to changes in the number of local governments grouped together. The figures in the rest of this section are constructed following the same logic and are robust to similar changes.

Figure 4.9. Local Government Populations, Socially Vulnerable Populations and Spending, 2013



Sources: 2013 BOOST Database and Bank Staff Calculation.

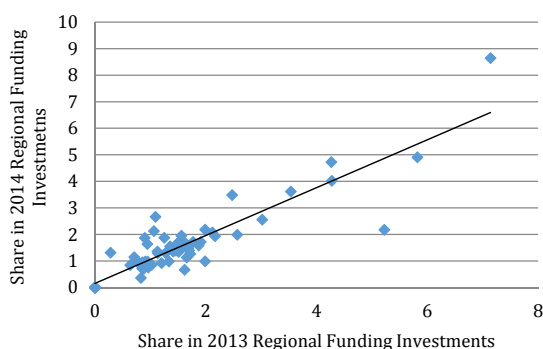
4.17. On the revenue side, the central government plays a key role in financing capital projects. In general, local governments have three sources of financing for capital projects—its own collections (property tax, user fees, etc.), the equalization grants, and special purpose grants, which tend to be earmarked for capital projects. For 2013–14, the special purpose grants accounted for 17 percent of total local government revenues and financed nearly 80 percent of subnational capital spending equivalent to 22 percent of total subnational spending; the rest was financed by equalization grants and local governments' own sources.

4.18. Local governments finance capital projects through special purpose capital grants from the RPIF, the MDF, and the VSP. The RPIF, administered by Georgia's Ministry of Finance (MOF) and the Ministry of Regional Development and Infrastructure (MRDI), provides funding to improve access to such public services as sewerage system, kindergarten, natural gas, water supply, hospitals, and roads. Funds are allocated project by project: projects are submitted to the MRDI and selected according to criteria defined by the central government. The RPIF has also set funding ceilings for each municipality based on population. The MDF is a public legal entity that helps local governments to prepare, finance, and construct investment projects. It helps build up the institutional and financial capacity of local governments by issuing loans or grants to implement projects to improve public infrastructure related to, e.g., from water supply, sewerage, solid waste collection, and road repair. The VSP, which is also administered by the MOF and MRDI, provides funding for small-scale projects (e.g. rehabilitating a small road).

4.19. Capital grants from the RPIF, MDF and VSP are centrally administered; local governments have limited discretion to select or carry through infrastructure projects. In 2013 the RPIF financed projects in 70 percent of Georgia's municipalities and cities; the total amount represented nearly 30 percent of total local government investment. Although allocations are based on projects, not on areas of local governments, RPIF spending across local governments shows persistence over time (Figure 4.10). The MDF program, which allocates funding municipality by municipality, has been growing in importance; in 2013 it assisted 50 percent of local governments,

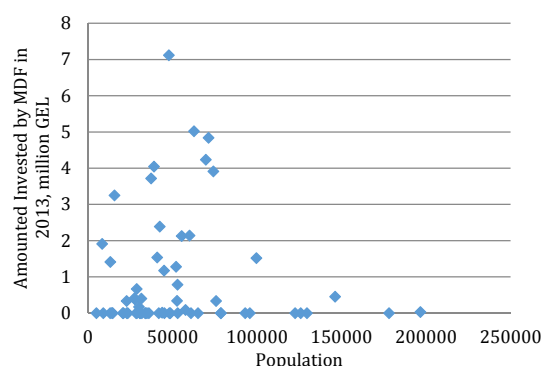
disproportionately benefiting small cities and municipalities (Figure 4.11). It financed nearly 70 projects, accounting for 13 percent of total local government investment. In 2013, the VSP provided funding for most municipalities and cities but only accounted for 6 percent of total local government capital spending.

Figure 4.10. RPIF Spending, 2013 and 2014



Source: 2013 Boost Database and Bank staff calculation.

Figure 4.11. MDF Spending by Recipient Population, 2013



Source: 2013 Boost Database and Bank staff calculation.

4.20. Gradually increasing the discretion of local governments to choose their public investments may have substantial benefits. Capitalizing on local knowledge and expertise to select and manage projects has the potential to heighten the quality of public infrastructure. However, decentralizing infrastructure investment decisions may be premature for LSGs where institutional capacity to identify and realize projects is low.

E. PRESCHOOL EXPENDITURES

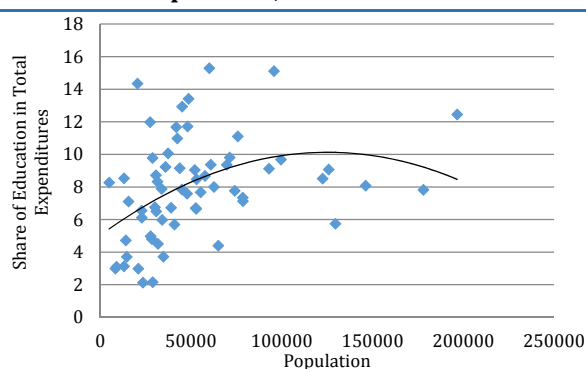
4.21. Preschool is a major responsibility of local governments. Preschool education is central to the development of an individual's human capital. In Georgia, preschool institutions are not-for-profit entities. According to the Georgian Constitution, unlike general education, which is mandatory, the state is not responsible for providing every child with funding and access to preschool. Responsibility for supervising and financing preschool education was delegated to local self-governing units in 2005. The role of the central government has since been limited to drafting and approving curricula and other programs for preschool institutions, and supporting their application through the Ministry of Education and Science. Most local governments have specialized agencies ("preschool care unions") to coordinate and monitor public preschools, provide methodological guidance and assure quality, and establish fees for parents. In general, preschools are largely financed through equalization grants, like most other local government services.

4.22. Georgia's local governments spend a notable amount on preschool education. In 2013 preschool spending averaged 7.9 percent, with a standard deviation of 3.5 percent. Variable costs, especially salaries and food, constitute the bulk of preschool expenditures. Specifically, in the 2011–12 academic year salaries accounted for an average of 59 percent, and food for 25 percent. The shares of preschool spending show wide disparity, but almost all municipalities spend more than 5 percent of total spending on preschools expenditures. In general, larger local governments tend to spend larger shares of their budget on education, but the preschool spending shares of the biggest cities are not as high as those of medium-sized local governments (Figure 4.12). Total

preschool education spending in Georgia accounts for about 0.3 percent of GDP³² and in recent years has held steady as a share of GDP.

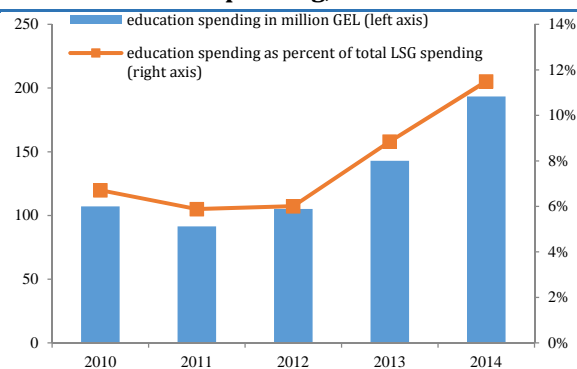
4.23. Elimination of preschool parental fees in September 2013 has driven up local government spending on education. The majority of local governments spending on education goes to preschools, so the change in education spending very much reflects the change in preschool spending. Before the change in 2012, spending on education by local governments did not change much; in 2012 it was almost the same as in 2010 (Figure 4.13). However, since parental fees were eliminated, there have been upticks in both local government education spending and the shares of education spending in total outlays. Local government spending on education grew by 36 percent in 2013 and another 35 percent in 2014. By the end of 2014, local government spending on education was nearly twice what was spent in 2012.

Figure 4.12. Preschool Education Spending, Shares and Population, 2013



Source: 2013 BOOST database.

Figure 4.13. Education Spending, Million GEL, and Share of LSG Spending, 2013



Source: 2013 BOOST database.

4.24. The heightened cost after parental fees were eliminated is expected to vary significantly across Georgia due to differences in preschool spending per child, parental contributions, and preschool enrollment rates before the policy change. According to the 2011 welfare monitoring survey, average monthly spending per child ranged from GEL48 in Kakheti to GEL136 in Adjara (Table 4.2). This reflects differences in both the efficiency and quality of preschool services. For instance, teachers and caregivers in Tbilisi preschools are typically much better trained than in the rest of Georgia. Preschool enrollment rates also vary widely, from 21 percent in Samtskhe-Javakheti to 63 percent in Tbilisi. The parental fee contribution as a share of total preschool spending also varied, from less than 10 percent in Guria to more than 35 percent in Tbilisi. Hence the fiscal impact of the 2013 reform eliminating parental fees would differ considerably by region and it is expected to be closely related to pre-reform preschool spending, parental contribution in preschool spending, and preschool enrollment.

³² Based on the WMS survey, 2011 preschool spending is known with great accuracy. Preschool spending in 2013 was inferred from local governments budgeting for education that year. In both 2011 and 2013, the share of preschool education spending in total GDP was about 0.3 percent.

Table 4.2. The Composition of Preschool Education Expenditures

(As percent of total preschool expenditures)

Region	Total Preschool Spending (% of GDP)	Total Preschool Spending (% of total transfers)	Total Preschool Spending (% of equalization transfers)	Percentage of Preschool Spending Covered by Parent Fees (%)	Preschool Enrollment Rate (%)	Average Monthly Expenditures per Child (2011 GEL)	Average Wage of Care Givers (2011 GEL)
Adjara A.R.	0.0295	48.4	-	29.0	28	135.7	279
Guria	0.00769	6.59	19.2	8.2	52	82.9	212
Imereti	0.0363	9.64	17.1	13.2	55	71.7	200
Kakheti	0.0147	8.01	17.8	11.6	57	48.3	162
Kvemo Kartli	0.016	8.8	21.4	38.8	22	58.2	219
Mtskheta-Mtianeti	0.00584	8.17	30.7	11.3	58	73.5	149
Racha-Lechkhumi and Kvemo Svaneti	0.00188	2.93	6.6	5.7	45	84.4	149
Samegrelo-Zemo Svaneti	0.0167	6.85	16.4	18.7	33	60.5	171
Samtskhe- Javakheti	0.00472	4.35	11.7	29.4	21	53.1	163
Shida Kartli	0.0104	7.19	12.8	20.1	36	52.2	172
Tbilisi	0.129	9.94	9.96	37.6	63	96.2	314
Total	0.272	8.81	12.6	28.5	44	80.0	235

Source: 2011 WMS and staff calculations.

4.25. Making preschool education free will also encourage enrollment, which will raise the costs for local governments. Before the fees were eliminated, enrollment rates were much higher among rich than among poor households, ranging from 30 percent in the poorest households to more than 50 percent in the richest. Without fees enrollment rates for less well-off families are expected to rise and enrollment rate gaps are likely to diminish. Regions more heavily reliant on parental fees as a source of preschool funding are generally associated with lower enrollments, except for Tbilisi. This means that with parental fees eliminated, regions that were more reliant on parental fees will be confronted by a more acute increase in costs because of two shocks: (1) higher preschool spending to compensate for the higher parental fee, and (2) a bigger increase in enrollment due to the lower enrollment rate before the change.

4.26. In different scenarios the immediate increase in preschool spending after the parental fee elimination is estimated to total GEL24–39 million. Four scenarios are considered (Table 4.3). In Scenario 1 enrollment remains the same as pre-reform and the central government compensates for the amount used to be paid in fees by parents. In this scenario the cost of the reform will be GEL24 million. In Scenario 2, enrollment increases so that preschool places currently available are totally filled. In that scenario enrollment will increase by about 10 percent to max out preschool capacity, leading to a higher cost of GEL33 million. Scenario 3 corresponds to the case where enrollment increases up to the average enrollment rate for households in the top three quintiles of the consumption distribution. In that case, enrollment will increase by 4.3 percent, at a cost of GEL27 million. In Scenario 4, enrollment is assumed to increase up to the average enrollment rate for households in the top quintile of the consumption distribution, bringing a 19 percent increase in enrollment and a much larger fiscal cost of GEL39 million.

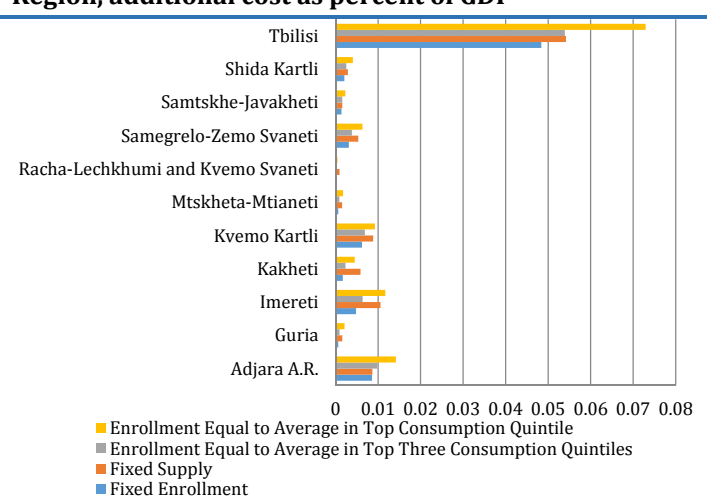
Table 4.3. Additional Fiscal Cost of Eliminating Preschool Fees, Million GEL

Scenarios	Estimated Fiscal Impact
<i>Fee Reform Scenario 1</i> Fixed Enrollment	24
<i>Fee Reform Scenario 2</i> Fixed Supply	33
<i>Fee Reform Scenario 3</i> Enrollment Equal to Average in Top Three Consumption Quintiles	27
<i>Fee Reform Scenario 4</i> Enrollment Equal to Average in Top Consumption Quintile	39

Source: Staff calculations.

4.27. Inter-regional differences in spending are likely to exacerbate inequality in the provision of preschool services.

For some regions the implied fiscal impact is much heavier than for others, driven by differences in parental fees, enrollment rates, and per child preschool spending (Figure 4.14). Before the parental fee was eliminated there was already a large disparity in the quality of preschool services: for instance, Tbilisi provides much better preschool services and its cost per child is nearly 30 percent higher than the rest of the local governments. After the fee exemption, more developed local governments like

Figure 4.14. Fiscal Impact of Parental Fee Elimination by Region, additional cost as percent of GDP

Source: 2011 WMS and staff calculations.

Tbilisi are likely to be in a better position to curb the fiscal impact; others where parental contributions were high and enrollment rates low may not be able to fully compensate for the amounts parents used to pay. This will lead to further deterioration of the quality of preschool education in these localities and result in more unequal preschool services across the country.

F. THE WAY FORWARD

4.28. As they gain more fiscal autonomy, local governments need to build up their institutional capacities and align their spending priorities to the needs of their constituents.

Institutional capacities differ considerably across local governments and inadequate capacity for planning, selecting, and executing budget items could make it harder for them to serve the local population. It is therefore important to draft technical guidelines and put in place accountability mechanisms, especially for such sophisticated spending activities as capital investment. Technical guidelines can inform local governments as they submit or select and conduct public investment projects (see Box 4.2). Equally important is the creation of top-down and bottom-up accountability systems (see Box 4.3). The central government has also developed temporary norms on subnational spending that are sensible measures to guide local government spending as fiscal decentralization gets started. However, the government needs to be careful not to formulate rules in ways that could

possibly cause distortion in local government spending behavior. Besides setting spending floors and ceilings, transfers or rewards could be used to motivate local governments to meet fiscal targets.

Box 4.2. Guidelines for Public Investment

Six basic principles can help governments avoid the recurrent problems associated with appraisal and execution of public infrastructure projects that have been documented in many international studies.

1. Investment Guidance and Preliminary Screening. Investment choices should always be justified as a welfare-improving public policy. They should not be affected by political considerations or aim to generate private benefits for any individual.

2. Formal Project Selection and Appraisal. Projects that pass preliminary screening must still undergo rigorous scrutiny of their costs and benefits. The emphasis should be on the following basic elements: (a) the need for the project is well justified; (b) project objectives are clearly specified; (c) broad alternative options to meet the project's objectives are identified and comparatively examined; (d) the most promising option is subject to detailed analysis; (e) project costs are fully and accurately estimated; and (e) project benefits are assessed qualitatively as likely to justify the costs. It is helpful to maintain a portfolio of appraised projects. That can help not only in tracking how many projects have been selected but also in revisiting rejected projects should project circumstances change so that they become likely to generate net positive benefits. Hence, all appraised projects should be recorded in a project database ranked by priority for budget consideration.

3. Project Budgeting. It is vital to ensure that there is recurrent funding to operate and maintain the assets created by a project. This is especially important for donor-funded projects that create assets but operation and maintenance costs are assumed to be borne by the local or central government. More generally, after a project is selected, it is important to double-check that the project is accurately costed and can be tendered and implemented (a "ready-to-go" check). This reduces the risk of delays due to belated procurement planning—a surprisingly common problem.

4. Project Implementation. Projects that have been objectively appraised and selected for investment should be scrutinized for execution realism. Project design should set out clear organizational arrangements and a realistic timetable.

5. Facility Operation. Once a project is completed, there should be a process to ensure that the facility is ready for operation and that services can be delivered. This process requires adequate budget funding of service delivery agencies to operate and maintain assets.

6. Basic Completion Review and Evaluation. Finally, there should be a basic completion review and ex-post evaluation of finished projects. Basic completion review should apply systematically to all projects: it consists of an examination of (a) whether the project was finished within the original or amended budget and time frame, and (b) whether the outputs were delivered as specified. Ex-post project evaluation should focus on a comparison of whether project outputs and outcomes realize the objectives of the project design. It should be carried out no earlier than two to three years after project completion. This is a way to ensure that there is learning and feedback from projects that will create a positive dynamic for systemic improvement over time. If the evaluation shows that procurement processes, for example, led to costly delays, it should help address that upstream problem as a systemic corrective.

Applying these principles should help avoid "white elephant" projects. White elephant projects are high-capital-cost projects with grossly negative social rates of return, such as excess-capacity infrastructures (e.g., a road or airport where there is little or no traffic demand), capital investment that is never completed and is abandoned (e.g., incomplete bridges, houses, buildings), or capital investment that is completed but for which little or no operation and maintenance funding is available. Such projects should be screened out as early as possible. They often arise due to corrupt access to contract funds, which accountability mechanisms can mitigate.

Box 4.3. Accountability Mechanisms

The guidelines in Box 4.2 constitute a useful public accountability mechanism. They safeguard against abuse of discretion in project selection by forcing central and local governments to explain publicly, fully and fairly, how they are conducting their responsibilities in selecting public investment projects. The central government could be in charge of auditing the selection and execution of projects by local governments with discretion (upward accountability), and an independent commission may be created to introduce checks and balances and audit the selection and execution of projects by the central government itself (horizontal accountability).

In addition, social (downward) accountability mechanisms can complement public accountability mechanisms in three ways. (1) Citizens could participate in project selection and execution through neighborhood or community councils. For instance, the local governments could organize town-hall meetings before selecting projects or submitting them to the central government, in order to get information from the local community to assess which projects would be most useful. Similarly, they could organize town-hall meetings once projects have been selected and planned, in order to get feedback about efficient implementation. (2) A complaint system should be put in place where citizens can report any abuse at any point while a project is underway. This could be done by setting up an independent commission within Georgia's Ministry of Regional Development and Infrastructure, which would collect and address complaints. (3) Surveys should be conducted and meetings organized after projects are completed to assess citizen satisfaction with them. Surveys might be conducted during a town-hall meeting organized at the completion of the project to discuss its outcomes.

Social accountability mechanisms could be put in place both in the group of local governments that have discretion over public infrastructure investments and in the group where projects are submitted to the central government and citizens have an important role to play in terms of nominating projects.

4.29. As part of the decentralization agenda, the mechanism by which RPIF allocates funds could be modified to give local governments more discretion in selecting and executing their public investment projects. A possible approach is to identify a group of municipalities and cities with relatively high institutional capacities and, within this pilot group, allocate resources for public investment municipality by municipality, rather than on project by project, delegating selection and execution of projects to the discretion of the local governments. This reform offers a way to gradually shift responsibilities to local centers of decision-making. It will give local governments more incentives to take into account the needs and preferences of local populations and build institutional capacity through learning by doing. This scheme could then later be gradually applied to other local governments. Moreover, by associating local citizens with the decision-making process of local governments and introducing audit procedures controlled by the central government, the reform also has the potential to address persistent issues of inefficient local government spending.

4.30. The national government needs to institute measures to prevent a large divergence in local government preschool spending per child. Such divergence in early childhood education would undermine equity in human capital formation and equality of opportunity. A variety of measures have successfully address this problem: (1) Canada and Chile use conditional grants to fund local government preschool services, and the central governments set the level of per child spending and define national standards for service, such as access, coverage and quality. (2) Poland sets spending standards per child, mandates that specified tax revenues be used explicitly for preschool, and fill in the funding gap with conditional grants if the local government does not have sufficient own-source funds. (3) The United Kingdom combines financing of services through local revenues and a general equalization grant from the central government, with national standards of service enforced by administrative means.

References

- Bucheli, Marisa; Lustig, Nora; Rossi, Maximo; Amabile, Florencia (2014), "Social Spending, Taxes and Income Redistribution in Uruguay", in Lustig, N., C. Pessino and J. Scott (eds.), The Redistributive Impact of Taxes and Social Spending in Latin America. Special Issue. *Public Finance Review*, Vol. 42, Issue 3, May.
- Cancho, Cesar; Bondarenko, Elena (2015), Fiscal Incidence Analysis in Georgia, *Working Paper*.
- Higgins, Sean; Pereira, Claudiney, (2014), "The Effect of Brazil's Taxation and Social Spending on the Distribution of Household Income", *Public Finance Review*, May 2014, 42: 346-367.
- Higgins, Sean; Lustig, Nora (2013), Measuring Impoverishment: An Overlooked Dimension of Fiscal Incidence. *Tulane University Economics Working Paper* 1315.
- Hill, Ruth; Tsehay, Eyasu; Woldehanna, Tassew (2015), "The Distributional Impact of Fiscal Policy in Ethiopia." Background paper for World Bank Poverty Assessment.
- International Food Policy Research Institute (2013), How best to target agricultural subsidies? The case for an indicator-based targeting system in Malawi.
- International Monetary Fund (2014), World Economic Outlook.
- Inchauste, Gabriela; Lustig, Nora; Maboshe, Mashekwa; Purfield, Catriona; Woolard, Ingrid (2015), *The distributional impact of fiscal policy in South Africa*. Policy Research working paper; no. WPS 7194. Washington, DC: World Bank Group.
- Jaramillo, Miguel (2014), "The Incidence of Social Spending and Taxes in Peru." In Lustig, Nora, Carola Pessino and John Scott. 2014. Editors. The Redistributive Impact of Taxes and Social Spending in Latin America. Special Issue. *Public Finance Review*, May, Volume 42, Issue 3.
- Jellema, Jon; Wai-Poi, Matthew; Afkar, Rythia (2015), The Distributional Impact of Fiscal Policy in Indonesia. World Bank. Forthcoming.
- Paz Arauco, Verónica; Gray Molina, George; Jiménez Pozo, Wilson; Yáñez Aguilar, Ernesto (2014), Explaining Low Redistributive Impact in Bolivia. In Lustig, Nora, Carola Pessino and John Scott. 2014. Editors. The Redistributive Impact of Taxes and Social Spending in Latin America. Special Issue. *Public Finance Review*, May, Volume 42, Issue 3.
- Scott, John (2014) Redistributive Impact and Efficiency of Mexico's Fiscal System. In Lustig, Nora, Carola Pessino and John Scott. 2014. Editors. The Redistributive Impact of Taxes and Social Spending in Latin America. Special Issue. *Public Finance Review*, May, Volume 42, Issue 3.
- World Bank (2012), Georgia Public Expenditure Review: Managing Expenditure Pressures for Sustainability and Growth.

World Bank (2014), Georgia Public Expenditure Review: Public Expenditures in Georgia: Strategic Issues and Reform Agenda.

World Bank (2014), World Development Indicators.

United Nations (2014), Millennium Indicators Database.

Younger, Stephen D. and Artsvi Khachatryan. "Fiscal Incidence in Armenia". Background Paper for World Bank Armenia Public Expenditure Review. Forthcoming.

