



Central Bank in Georgia was first established in 1919

# INFLATION REPORT

**2009**

**NATIONAL BANK  
OF GEORGIA**





NATIONAL BANK OF GEORGIA

**INFLATION REPORT**  
Q3 2009

TBILISI



## CONTENT

Introduction .....	4
1. Change in Consumer Prices .....	5
Box 1. Survey of Commercial Banks' Managers .....	8
2. Inflation Factors .....	11
2.1. Labor Market .....	11
2.2. Monetary Aggregates .....	12
2.2.1. Broad Money .....	14
2.3. Monetary Instruments .....	14
2.4. Interbank Market.....	16
2.5. Banking Sector .....	17
2.6. Factors Affecting the Exchange Rate .....	19
Box 2. Special Drawing Rights .....	22
2.7. Production and Demand.....	24
2.7.1. Private and Public Consumption .....	24
2.7.2. Investments .....	25
2.7.3. Estimates of the Q3 2008 GDP and Next Period Forecast .....	25
Box 3. Determination of the Shadow Economy Level by Cash Demand Model .....	26
2.8. External Trade.....	27
2.9. Government Operations.....	28
3. Inflation Forecast .....	31
4. Decisions of the Monetary Policy Committee.....	33

## INTRODUCTION

According to the Department of Statistics of Georgia the annual inflation rate stood at 0.4% in September 2009. The average annual inflation rate was at 2.5%, down 2.9 percentage points in the third quarter of 2009. Core inflation rates continued decreasing, with the annual rates for products within the limits of two and one standard deviations at -3.2% and -1.1%, respectively.

In September the annual inflation rates for domestically produced and imported goods were at -0.8% and -6.3%, respectively. The decrease in prices on imported goods was mainly driven by price decreases in the international markets.

Dynamics of the main factors of inflation can briefly be described as follows: due to decline in labor demand in the accounting period the growth rate of monthly average wages substantially decreased. In QII 2009 the monthly average wage rate was GEL 560.1, up only 1.4% year-on-year.

Reserve money grew 10.6% to GEL 1,690.7 million in QIII 2009. Cash in circulation also grew by GEL 84.4 million to GEL 1,285.6 million. The M2 and the M3 aggregates expanded, respectively, by GEL 204.6 million and GEL 497.6 million, amounting by end-September to GEL 1,913.5 million and GEL 4,091.9 million. The expansion of the broad money aggregates indicates that the national economy has been improving in the recent months.

Deposit liabilities of the banking system grew 16.5% to GEL 2,998.6 million in the accounting period, which was conditioned by the increase in deposits denominated in both domestic and foreign currencies. Deposit dollarization ratio was at 72.7%, down 0.6 percentage points compared to the June level. The volume of commercial banks' lending to the economy totaled GEL 5,285.1 million. Loan dollarization ratio also moved down 0.3 percentage

points to 77.6%. The weighted average interest rate on deposits remained at 10%, while the analogous parameter for loans decreased to 21.3%.

In the accounting period the NBG continued pursuing a loosened monetary policy in order to promote lending to the economy by using refinancing loans and the FX swap contracts. Interest rate on refinancing loans remained at 6%. It is worth noting that the demand for refinancing loans fell in the accounting period, and starting from September no refinancing loan auctions were held due to zero demand. These developments are explained by the commercial banks' excess liquidity prompting the NBG to increase the CD issuance volumes. As a result, the net liquidity withdrawal totaled GEL 101.1 million by end-September, significantly exceeding the June level (GEL 46.5 million).

In the accounting period the nominal and real effective exchange rates of Lari depreciated 2% and 3.4%, respectively. In QII 2009 the deficits of the trade balance and the current account contracted, respectively, 56% and 73% which was largely due to decrease in imports and increase in transfers.

According to the QII 2009 data, the nominal GDP declined 14.5% year-on-year – the lowest decline in a decade, while the real GDP declined 10.7%. Economic activity is expected to improve in the second half of 2009, and the NBG's projections suggest the real GDP to decline at circa 2% in QIII and 4%-4.5% throughout 2009.

The NBG's projections hold the annual inflation rate to be near 5%.

# 1. CHANGE IN CONSUMER PRICES

According to the Department of Statistics of Georgia, the overall level of consumer prices moved down 0.6% in QIII 2009. In QIII 2008 consumer prices were up 1.3%. Accordingly, the annual inflation rate was at 0.4% in September 2009, down from 2.3% in the previous quarter. The average annual inflation rate was at 2.5%, down 2.9 percentage points in QII 2009.

In the accounting period the inflation was mainly driven by seasonal price decreases on food products. Namely, prices on fruits and vegetables fell but the effect thereof was counterbalanced by domestic prices on gasoline pushed up by oil price increases in the international markets. Also the counterbalancing effect was due to the cost of education, which grew 43.4% quarter-on-quarter.

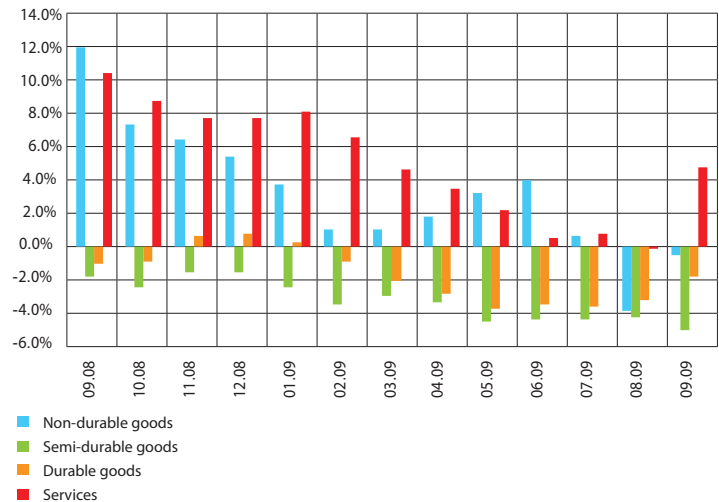
The core inflation rates also decreased in QII 2009 posting annual -3.2% and -1.1% for products within the limit of two and one standard deviations, respectively.

As already mentioned, in September 2009 the consumption basket prices grew 0.4% year-on-year. Prices decreased in the commodity groups comprising transport (4.6%), housing, water, electricity, gas and other types of energy (6.7%), and clothing and footwear (6.5%). Prices on food and non-alcoholic beverages decreased 1.5%.

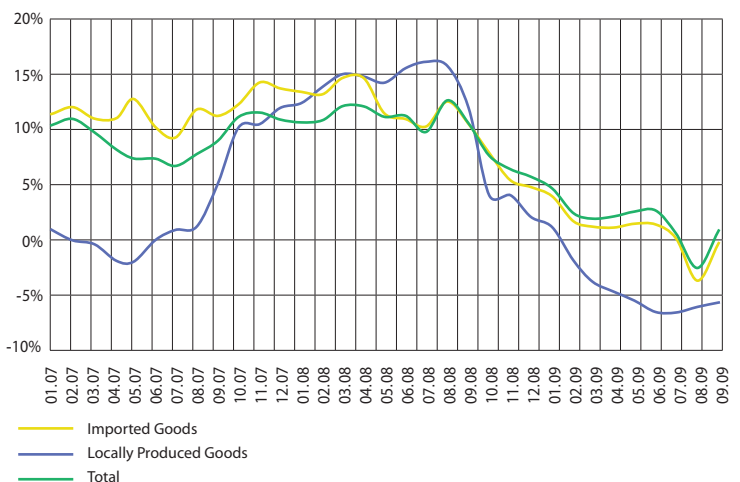
Prices grew 47.4% in the education sector and 10.7% in the healthcare sector, while the average level of prices in the hotels and restaurants commodity group moved up 4.7%.

The annual inflation rate for imported goods was at -6.3% in September. The decrease in prices on imported goods was driven by price decreases in the international markets. The inflation rate for domestically produced goods was at -0.8%.

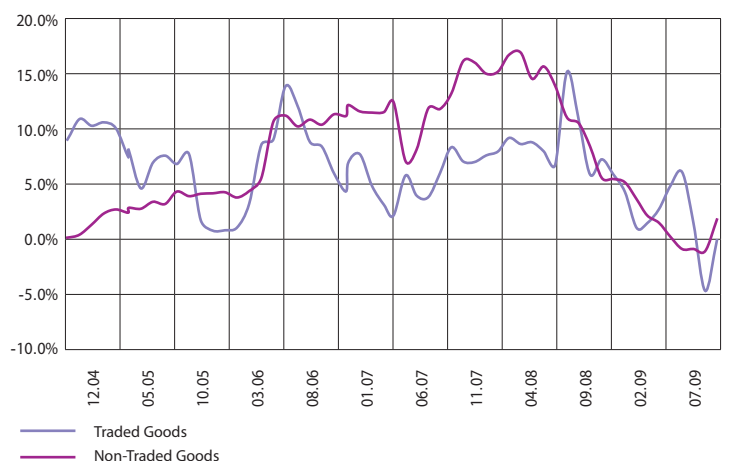
GRAPH 1.1  
Change in Annual Inflation for Goods by Consumption Durability and Services



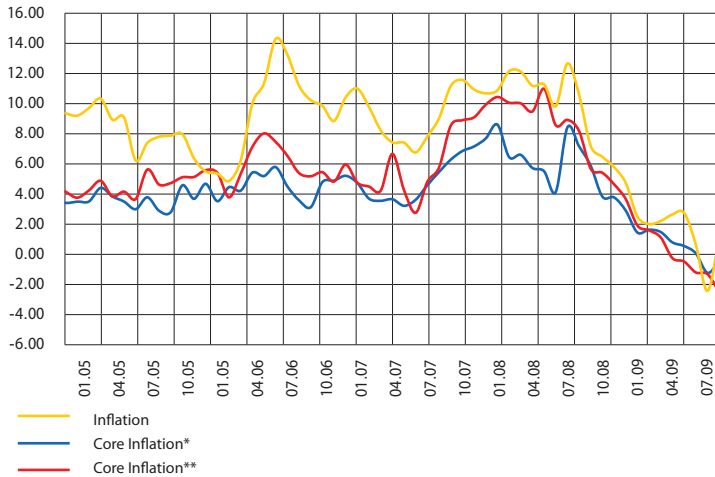
GRAPH 1.2  
Domestic vs. Imported Annual Inflation



GRAPH 1.3  
Inflation for Traded and Non-Traded Goods



GRAPH 1.4  
Annual CPI and Core Inflation (by 282 Components of the Consumption Basket as of Dec. 2006)<sup>2</sup>

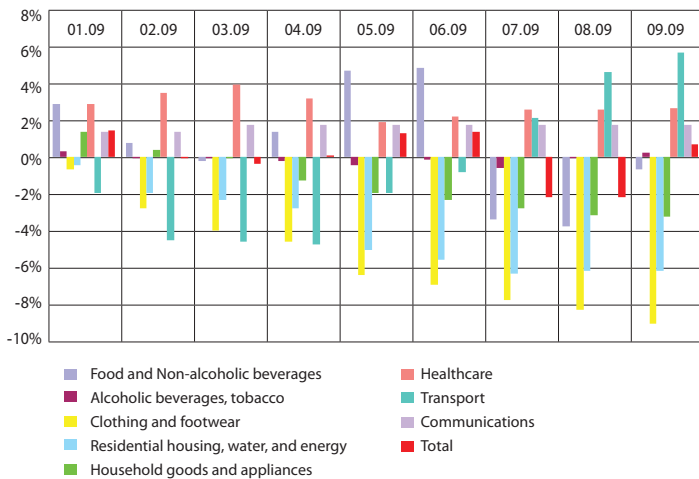


It is noteworthy to look at the price dynamics of traded<sup>1</sup> and non-traded goods. In September the price inflation was at 1.6% for non-tradables and at -0.1% for tradables.

Among goods of various consumption durability the annual inflation rate was at -0.5% for non-durables, -5.1% for semi-durables, and -1.9% for durables. Prices on services grew 4.7%

In the period from December 2006 through September 2009 prices on non-durables and services increased 18.3% and 27.2%, respectively, while prices on semi-durables fell 11.8%.

GRAPH 1.5  
Price Increases, Relative to December 2008



1 Goods and services, which can be sold at a distance from the production location.

2 \* For products within the limits of one standard deviation.

\*\* For products within the limits of two standard deviations.

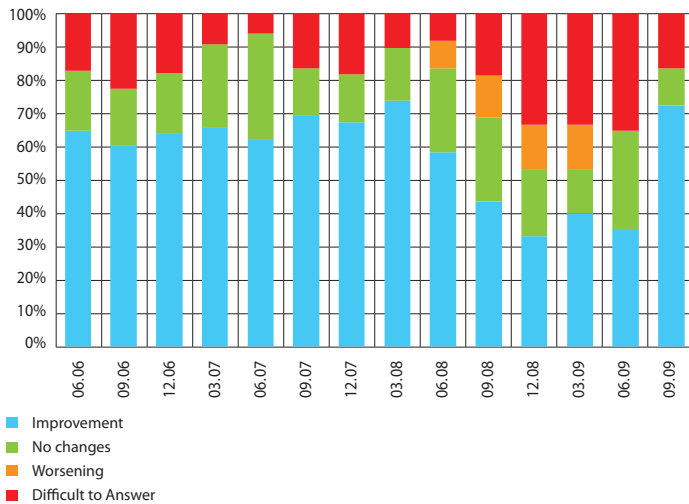


TABLE 1.1  
Inflation (CPI) Indicators by Components (%), Their Share in Consumption Basket (%), and Impact on the CPI (%)

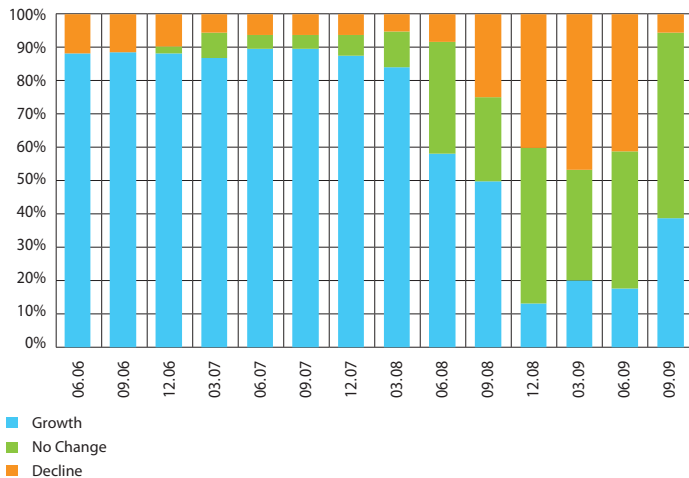
	December 2006 Weights	Sep09/Jun09		Sep09/Sep08		Oct08-Sep09/ Oct07-Sep08	
		Inflation	Impact	Inflation	Impact	Inflation	Impact
Total	100.0%	-0.6%	-0.6%	0.4%	0.4%	2.5%	2.5%
Food and non-alcoholic beverages	44.3%	-5.1%	-2.4%	-1.5%	-0.7%	2.2%	1.0%
Food	43.0%	-5.2%	-2.3%	-1.7%	-0.8%	2.1%	0.9%
Bread and Bakery Products	12.2%	1.2%	0.2%	-7.1%	-1.0%	-1.5%	-0.2%
Meat and Meat Products	6.6%	0.1%	0.0%	1.0%	0.1%	5.0%	0.3%
Fish Products	1.1%	-10.2%	-0.1%	-14.5%	-0.1%	0.7%	0.0%
Milk, Cheese, Eggs	5.2%	10.6%	0.4%	-12.2%	-0.6%	-5.6%	-0.3%
Oils and Fats	3.5%	-1.3%	0.0%	-21.1%	-0.9%	-11.0%	-0.5%
Fruits, Grapes	2.3%	-25.7%	-2.2%	38.0%	1.7%	49.7%	2.1%
Vegetables, Watermelons, Potatoes and Other Solanaceae	8.8%	-15.7%	-1.1%	-4.6%	-0.3%	-6.7%	-0.5%
Sugar, Jam, Honey, Syrups, Chocolate, Pastry	2.7%	13.1%	0.3%	22.2%	0.5%	9.5%	0.2%
Other Food Products	0.6%	-0.3%	0.0%	1.7%	0.0%	2.7%	0.0%
Non-Alcoholic Beverages	1.3%	-2.0%	0.0%	5.0%	0.1%	7.0%	0.1%
Alcoholic Beverages, Tobacco	3.7%	0.4%	0.0%	0.1%	0.0%	-0.1%	0.0%
Clothing and Footwear	5.0%	-2.2%	-0.1%	-6.5%	-0.2%	-4.7%	-0.2%
Housing, Water, Electricity, Gas, and Other Fuels	10.3%	-0.6%	-0.1%	-6.7%	-0.8%	-1.3%	-0.1%
Furniture, Home Appliances and Equipment, Housing Renovation	3.7%	-0.9%	0.0%	-2.2%	-0.1%	3.2%	0.1%
Healthcare	8.0%	0.4%	0.0%	10.7%	0.9%	15.2%	1.2%
Transport	9.0%	6.4%	0.6%	-4.6%	-0.5%	-3.2%	-0.3%
Communications	4.4%	0.0%	0.0%	2.3%	0.1%	3.7%	0.1%
Recreation, Leisure and Culture	2.7%	0.2%	0.0%	1.5%	0.0%	1.6%	0.0%
Education	3.5%	43.4%	1.3%	47.4%	1.4%	4.7%	0.1%
Hotels, Cafes, Restaurants	2.4%	-0.1%	0.0%	4.7%	0.1%	8.3%	0.2%
Other Goods and Services	3.2%	0.2%	0.0%	5.0%	0.1%	6.8%	0.2%
Non Durable Goods	68.0%	-2.6%	-1.8%	-0.5%	-0.4%	2.4%	1.7%
Semi-Durable Goods	6.5%	-1.9%	-0.1%	-5.1%	-0.3%	-3.4%	-0.2%
Durable Goods	1.9%	0.6%	0.0%	-1.9%	0.0%	-1.8%	0.0%
Services	23.6%	4.9%	1.2%	4.7%	1.1%	4.5%	1.1%

### BOX 1. SURVEY OF COMMERCIAL BANKS' MANAGERS

**GRAPH 1**  
What is your opinion regarding the economic situation in Georgia in a one-year perspective?



**GRAPH 2**  
Do you expect the construction sector to grow in the nearest one-year period?



The NBG conducts a quarterly survey of the Georgian commercial banks' managers. The purpose of this survey is to assess the banks' expectations with regard to the country's economic prospects, foreign exchange market, and inflation processes.

Top and mid-level managers of all the 19 commercial banks in Georgia took part in the QIII 2009 survey.

According to four-fifths of the respondents, the overall economic situation will not change in the three-month period. The expectations were more optimistic for a one-year perspective; while none of the respondents expected further worsening, almost three-fourths of the managers anticipated the overall economic situation to improve, 11.1% saw no changes, and 16.7% found it difficult to respond. Dynamics of the previous surveys suggest optimistic long-term forecasts, not counting the crisis exacerbation and post-August war period. Conclusions of the last survey are practically identical to those made prior to the crisis (March 2008 vs. September 2009).

According to the survey, 72% of the respondents thought that in a one-year period the economic growth will be at highest in the trade sector and at lowest in the manufacturing sector. Long-term dynamics of the respondents' answers suggest that the construction sector was traditionally considered as the fastest growing field, but the attitude drastically changed in the recent year.

According to the latest survey, only 39% of the respondents foresaw growth in the construction sector (the sector's rating was at lowest in December 2008 (13%), whereas in the period from 2006 through early 2008 it fluctuated near 90%).

Based on the survey results, in QIII 2009 expectations of the commercial banks' managers with regard to the lari exchange rate movement differed depending on time horizon. Majority of the respondents (72%) see no change in the short-term perspective, 11% expect appreciation, 11% foresee depreciation and only 6% find it difficult to answer. Banks define their credit policies for three months based on inflation forecasts for the same period; according to the inquiry, three-fifths of the banks intend to leave unchanged the existing credit conditions, while 17% of the banks plan credit easing.

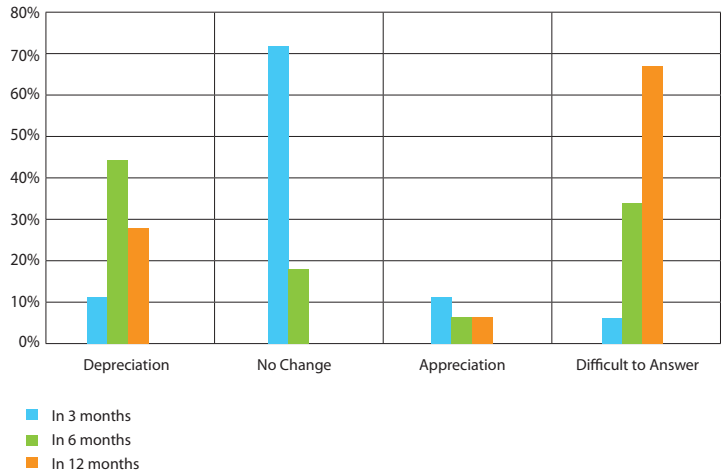
In a medium-term perspective (six months) 44% of the commercial banks' managers expect the lari exchange rate to depreciate, 17% foresee no change, and one-thirds find it difficult to answer.

The estimates are most uncertain for a one-year period. Two-thirds of the managers refrained from making an exchange rate forecast, 28% expect depreciation, and only 6% count on appreciation. Consequently, 44% of the respondents find it difficult to say what the credit conditions would be after one year.

The QIII 2009 survey shows that the respondents' inflation expectations are almost similar for both mid- and long-term perspectives. For a one-year perspective the managers expect the annual inflation rate to be at 9.6%, while in a two-year perspective the inflation rate is expected to average 9.4%. The inflation expectations for a two-year perspective are characterized by a lower dispersion as opposed to that of a one-year perspective.

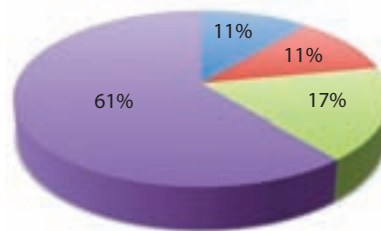
It is worth noting that inflation forecasts made by the respondents in the previous surveys were lower than the actual inflation rate. However, the situation changed after December 2008.

GRAPH 3  
Respondents' Forecast of Lari Exchange Rate

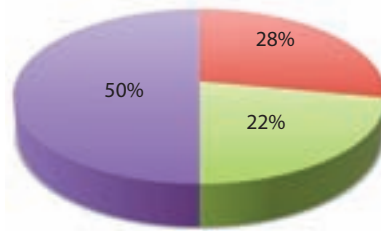


GRAPH 4  
How would the Bank Credit Conditions Change?

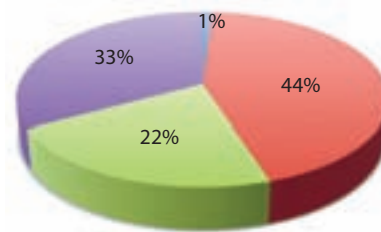
In 3 months



In 6 months

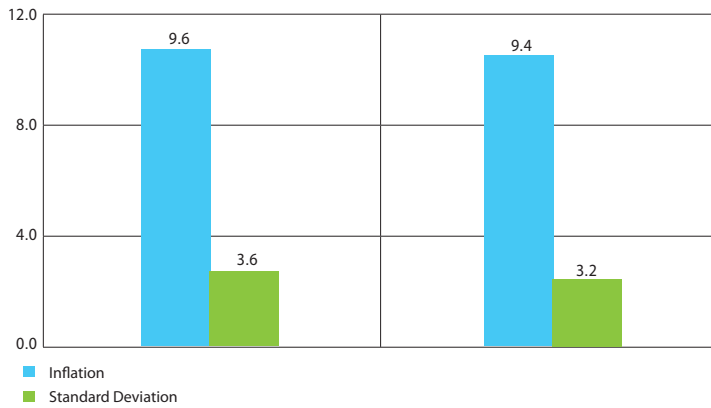


In 12 months

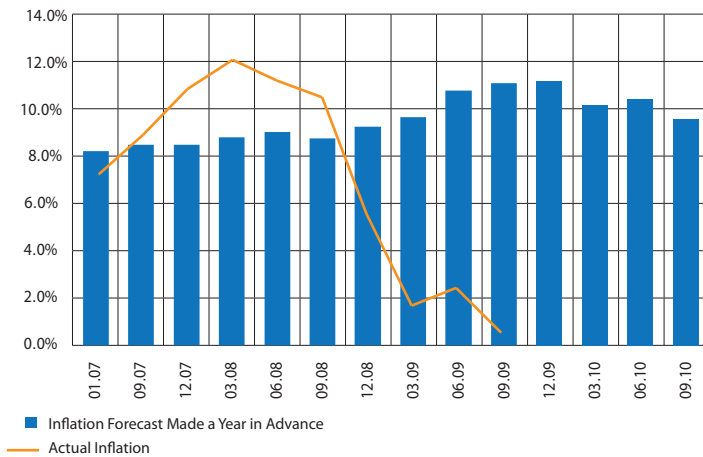


Legend for Graph 4:  
■ Tighten  
■ No Significant Changes  
■ Ease  
■ Difficult to Answer

GRAPH 5  
Annual Inflation Forecast



GRAPH 6  
Inflation Rate: Forecast vs. Actual



For instance, in September 2009 they expected the annual inflation rate to reach 11.1%, but the actual inflation stood at 0.4% only.

The QIII 2009 survey clearly shows that banks anticipate stabilization and improvement of overall economic conditions in a long-term perspective. Growth is mainly expected in the trade sector, and to a less extent in the communications, construction and transport sectors. The bank managers see the Lari exchange rate unchanged in the short-term perspective, but refrain from making long-term forecasts. With regard to inflation forecasts, banks adhere to an opinion that inflation rate will be within a one-digit figure in one- and two-year perspective.

## 2. INFLATION FACTORS

### 2.2.1. LABOR MARKET

The global financial crisis had a considerable negative effect on the demand in the labor market. Due to the slump in economic activity the real growth of labor productivity dropped, turning negative since QIII 2008. The average wage growth rate also slowed down in pace. As a result, the growth rate of personal expenditures essentially decelerated.

In QII 2009 the real value-added per employee fell 9.1% year-on-year. It must be noted, however, that the rate of decline eased down significantly. Substantial decline was registered in the trade (33.9%), hotels and restaurants (31.1%), real estate operations, renting, and consumer services (25.8%), and transport and communications (23.3%) sectors. The decline was comparably slower in the financial intermediation (18.0%) and manufacturing (16.9%) sectors, while in the education and agriculture sectors the real value-added per employee fell 1.5% and 1.0%, respectively. Notwithstanding the overall downtrend in the real value-added per employee some economic sectors posted positive year-on-year growth rates in QII 2009; these sectors include, in particular, construction (24.0%), public administration and defense (19.8%), and healthcare (4.7%)

The drop in labor demand was one of the main factors that determined the slowdown in growth of monthly average wage rate. In QII 2009 the monthly average wage rate equaled GEL 560.1 per employee in the official economy<sup>3</sup>, up 1.4% year-on-year. Monthly average wage rate fell in almost all economic sectors in the accounting

period. Sectoral analysis showed that in QII 2009 the rate of decline was particularly large in the fish catching and fishery, and mining and quarrying sectors, with the monthly average wage rates down circa 44.0% and 26.6% year-on-year, respectively. Decline in the monthly average wage was also remarkable in the hotels and restaurants (18.3%), agriculture (9.7%), financial intermediation (6.8%), and public administration (5.6%) sectors. Comparably slower decline was observed in the trade (4.3%), manufacturing (2.5%), and production and distribution of electricity, gas and water (1.7%) sectors. Wages continued growing but at a slower pace in those sectors which are largely financed from state budget. In the education and healthcare and social assistance sectors average wage rates grew 10.3% and 8.6%, respectively. However, in the communal, social and personal services sector wages fell 8.2% year-on-year. In addition to the above-mentioned two sectors, positive wage growth rates were also recorded in

TABLE 2.1.1  
Real Value-Added per Employee, QII 2009, Y-o-Y, (%)

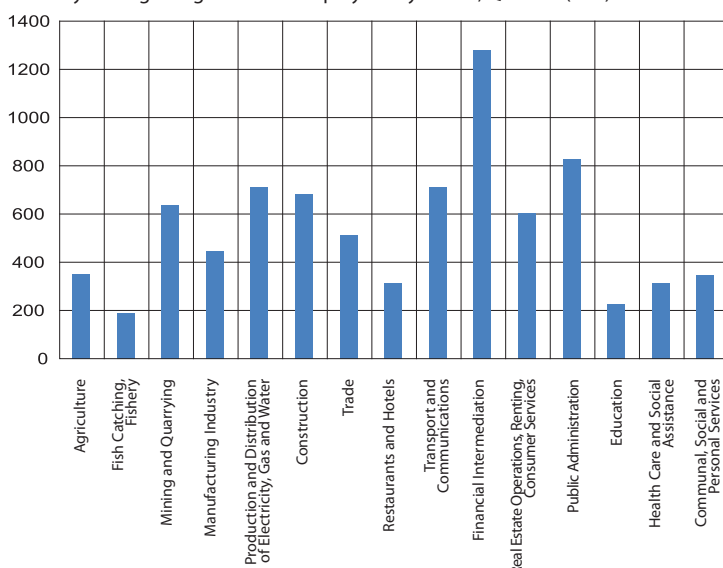
	Real Value-Added
Agriculture	99.0
Manufacturing Industry	83.1
Construction	124.0
Trade	66.1
Hotels and Restaurants	68.9
Transport, Communications	76.7
Financial Intermediation	82.0
Real Estate Operations, Renting, Consumer Services	74.2
Public Administration, Defense	119.8
Education	98.5
Healthcare	104.7
Total	90.9

<sup>3</sup> Source: data from the current business and labor statistics.

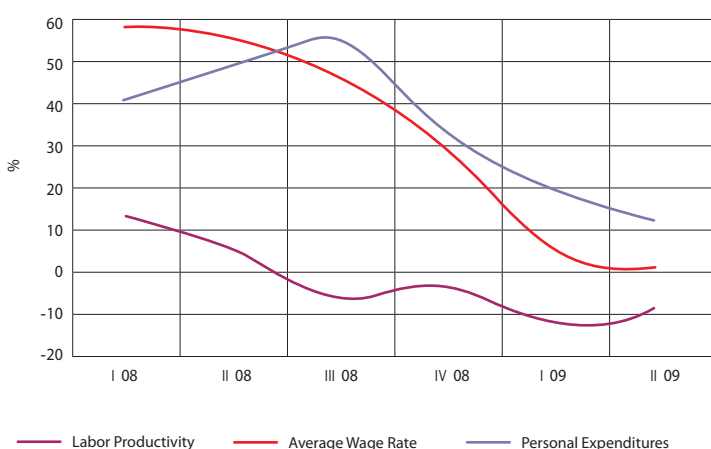
Table 2.1.2  
Nominal Monthly Average Wage Rates of Employees, QII 2009, Y-o-Y, (%)

	Nominal Rate
Agriculture, Hunting and Forestry	90.3
Fish Catching and Fishery	56.0
Mining and Quarrying	73.4
Manufacturing Industry	97.5
Production and Distribution of Electricity, Gas and Water	98.3
Construction	
Trade; Repair of Cars, Home Appliances, and Goods of	105.5
Personal Consumption	95.7
Hotels and Restaurants	81.7
Transport and Communications	111.8
Financial Intermediation	93.2
Real Estate Operations, Leasing, Consumer Services	109.1
Public Administration	94.4
Education	110.3
Health Care and Social Assistance	108.6
Communal, Social and Personal Services	91.8
Total	101.4

GRAPH 2.1.1  
Monthly Average Wage Rates of Employees by Sector, QII 2009 (GEL)



GRAPH 2.1.2  
Real Value-Added per Employee, Monthly Average Wage Rate, and Personal Expenditures (Annual Percent Change)



the transport and communications (11.8%), real estate operations (9.1%), and construction (5.5) sectors.

Significant differences in the average sectoral wage rates were still present in QII 2009. The highest monthly average wage rates were recorded in the financial intermediation (GEL 1,331.2) and public administration (GEL 872.3) sectors, exceeding the monthly average for the whole economy 2.4 and 1.6 times, respectively. The lowest monthly average wage rates were registered in the fish catching and fishing (GEL 205.2) and education (GEL 264.4), making up 36.6% and 47.2% of the monthly average rates for the whole economy, respectively. Wages below the average level were mainly in those sectors which are largely financed from the state budget (education, healthcare and social assistance, and communal, social and personal services) but the uptrend in wage rates was still observable.

Consequently, the decline in labor productivity and the slowdown in wage growth rates caused the growth rate of personal expenditures to essentially slow down. In QII 2009 personal expenditures grew 11.6% year-on-year, compared to the 47.7% growth rate in QII 2008. Slowdown in the growth rate of personal expenditures as well as their low level represented one of the main factors of consistently low inflation in the country's economy in the recent period.

## 2.2 DYNAMICS OF MONETARY AGGREGATES

Monetary aggregates. In QIII 2009 reserve money grew by GEL 161.9 million (10.6%), totaling GEL 1,690.7 million at end-period. In average terms, monetary base expanded by GEL 190.5 million (12.6%) quarter-on-quarter. Based on the latest quarterly data, annual decline of reserve money was 2.5%, compared to QII 2008.

In the accounting period the NBG supplied USD 29.0 million through the FX auctions, equivalent of circa GEL 48.4 million. Net foreign currency purchases from currency conversions for the government amounted to USD 122.0 million, equivalent of circa GEL 203.4 million. As a result of the above-mentioned foreign exchange operations the volume of money in circulation grew by circa GEL 155.0 million.

In QIII 2009 the government deposits decreased by GEL 56.8 million and, according to the September data, equaled GEL 322.8 million. This led to an excess of budgetary expenditures over the revenues.

In the accounting period the NBG continued issuance of the Certificates of Deposits to assist commercial banks in improving liquidity

management. The placement of the CDs equaled GEL 147.0 million in the nominal terms, while the repayment amounts reached GEL 149.0 million. The volume of the CDs in circulation contracted to GEL 146.1 million at end-September from GEL 148.1 million at end-June.

Refinancing loans were used by commercial banks in July-August, but no deal took place starting from September. This was conditioned by the presence of large balances on banks' corresponding accounts with the NBG. Deposits of individuals and legal entities consistently grew in this period. Despite deposit growth, banks maintained low levels of lending activity, which resulted in excessive liquidity surplus. Consequently, refinancing loan facility enjoyed no demand in this period.

TABLE 2.2.1  
Components Determining Change in Reserve Money (GEL, thousand)

	31-Dec-08	31-Jan-09	27-Feb-09	31-Mar-09	30-Apr-09	31-May-09	30-Jun-09	30-Jul-09	31-Aug-09	30-Sep-09
Net Foreign Assets	9.1%	-14.2%	-7.3%	5.2%	-1.6%	3.8%	-1.1%	12.5%	-0.9%	0.9%
Government Deposits	-7.3%	-1.0%	6.6%	-0.2%	17.9%	4.9%	6.7%	-2.7%	5.0%	1.1%
Bank Liabilities	10.1%	1.5%	-1.8%	-3.1%	-5.6%	-1.9%	-1.8%	4.2%	-4.4%	-3.1%
Other	-5.2%	5.6%	-0.7%	-2.4%	2.5%	-2.7%	-1.4%	0.6%	-0.9%	-1.2%
Change in Reserve Money	6.7%	-8.2%	-3.2%	-0.5%	13.1%	4.1%	2.4%	14.6%	-1.2%	-2.3%

TABLE 2.2.2  
Reserve Money Dynamics (End-month Data)  
(GEL, thousand)

	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Reserve Money	1,314,986	1,273,230	1,266,759	1,433,225	1,492,199	1,528,724	1,751,524	1,730,491	1,690,665
Cash in Circulation	1,165,976	1,140,243	1,141,167	1,198,714	1,180,359	1,201,168	1,245,729	1,295,874	1,285,586
Deposits of Banks	149,010	132,987	125,592	234,511	311,840	327,556	505,795	434,617	405,078
Balances on Corresponding Accounts	149,010	132,987	125,592	234,511	311,840	327,556	505,795	434,617	405,078

TABLE 2.2.3  
Reserve Money Dynamics (Monthly Average Data)  
(GEL, thousand)

	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Reserve Money	1,284,901	1,245,729	1,278,369	1,352,463	1,437,441	1,516,452	1,613,447	1,731,655	1,706,981
Cash in Circulation	1,179,213	1,128,597	1,115,190	1,176,766	1,171,289	1,176,915	1,216,792	1,263,611	1,285,734
Deposits of Banks	105,688	117,133	163,179	175,698	266,152	339,537	396,655	468,043	421,247
Balances on Corresponding Accounts	105,688	117,133	163,179	175,698	266,152	339,537	396,655	468,043	421,247

In the accounting period commercial banks repaid GEL 81.0 million to settle the lender of last resort facility.

As a result of these operations, net liabilities of commercial banks decreased by GEL 54.6 million in QIII 2009, amounting to GEL 101.1 million.

As a result of the above-mentioned monetary flows, reserve money grew by GEL 161.9 million in the accounting period, of which GEL 77.5 million is attributed to the growth of balances of commercial banks' corresponding accounts with the NBG in Lari (totaling GEL 405.1 million), and GEL 84.4 million – to the growth of cash in circulation (totaling GEL 1,285.6 million).

### 2.2.1 BROAD MONEY

In QIII 2009 the M3 aggregate was GEL 4,091.9 million, up by GEL 497.6 million. Foreign currency denominated deposits grew by GEL 293.0 million (15.5%), equaling GEL 2,178.4 million at end-September. Domestic currency denominated deposits grew by GEL 131.6 million (19.1%), amounting to GEL 820.2 million at end-period.

The M2 aggregate grew 12.0% (GEL 204.6 million) in the accounting period, which was largely due to the GEL 131.6 million growth of domestic currency denominated deposits.

Annual growth rate of the M3 aggregate was 3.2%, while the M2 fell 15.2%. Both rates tended downwards in the beginning of the year but the trend reversed in August, pointing to a positive tendency place in the economy in the recent months. This creates favorable grounds for the recovery of lending activity and achievement of optimal annual inflation level.

### 2.3. MONETARY INSTRUMENTS

In QIII 2009 the NBG's policy remained oriented to strengthening commercial banks' liquidity management and banking activity.

Similar to QII 2009, balances on the corresponding accounts continued growing in the accounting period; in July the total amount reached its year-maximum of USD 529.3 million,

GRAPH 2.2.1.1  
Interest Rates on Loans and Deposits

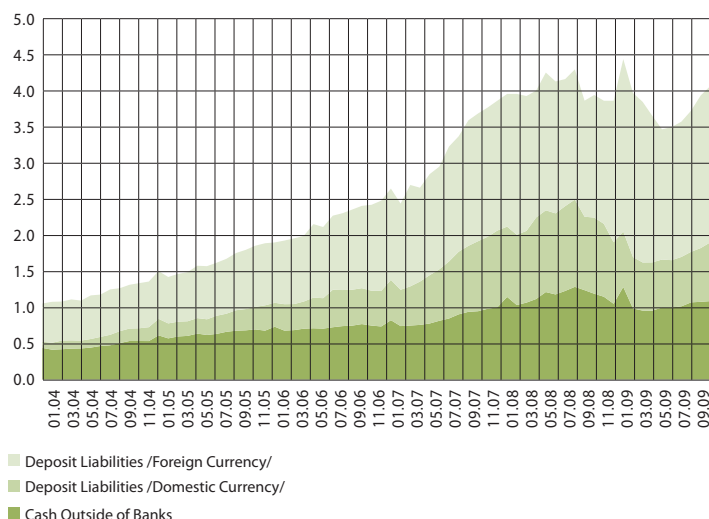


TABLE 2.2.1.1  
Monthly Changes in Monetary Aggregates (2008, Jan. 2009, September, End-Month Data)  
(GEL, thousand)

	Jan 09	Feb 09	Mar 09	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep-09
Broad Money /M3/	3,993,585	3,870,699	3,674,850	3,487,608	3,519,203	3,594,347	3,746,882	3,960,264	4,091,916
Money Mass /M2/	1,707,794	1,631,696	1,633,590	1,672,904	1,663,771	1,708,962	1,780,361	1,832,843	1,913,512
Cash Outside of Banks	991,498	961,048	960,173	1,005,005	1,004,352	1,020,409	1,075,848	1,083,575	1,093,340
Lari in Circulation	1,165,976	1,140,243	1,141,167	1,198,714	1,180,359	1,201,168	1,245,729	1,295,874	1,285,586
Deposits in National Currency	716,296	670,648	673,417	667,899	659,419	688,553	704,513	749,268	820,172
Deposits in Foreign Currency	2,285,791	2,239,003	2,041,260	1,814,705	1,855,431	1,885,385	1,966,521	2,127,421	2,178,403



standing at USD 505.8 million at end-month; although the balances slightly contracted over the following two months to average USD 448 million at end-period. Total balances on the corresponding accounts with the NBG considerably exceeded required reserves, which led to a large liquidity surplus in the banking system

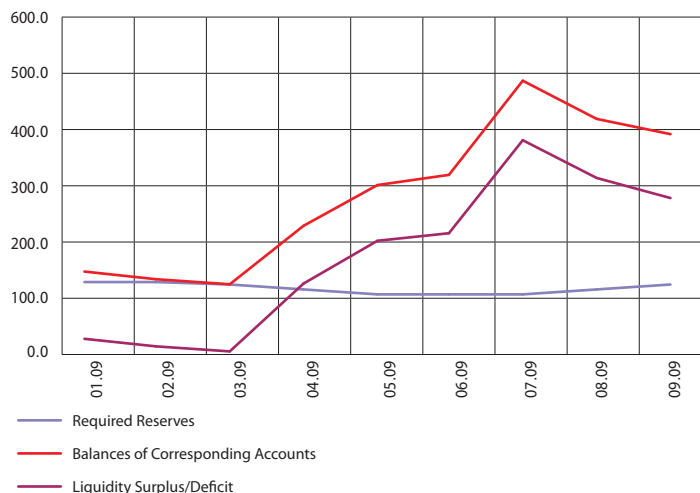
In QIII 2009 the NBG continued issuing Certificates of Deposits (CDs) for liquidity management purposes. The maximum interest rate on the CDs was within the range of 2.32% - 4.97% with insignificant deviations during the first two months of the period, steadily moving down in September. Despite this, the total volume of CDs placed in the accounting period amounted to GEL 147 million, down by GEL 2 million quarter-on-quarter. The weighted average interest rate was at 3.95% only, as opposed to 9.2% in QI 2009. This argued in favor of the finding that the banking system was in excess of liquidity; being aware of high economic risks commercial banks limited lending and, notwithstanding the lowered interest rate ceiling, preferred to purchase the CDs. Nominal volume of the CDs placement slightly decreased by 1.3%.

As of September 30, 2009 liquidity absorption through the CDs equaled GEL 146.1 million.

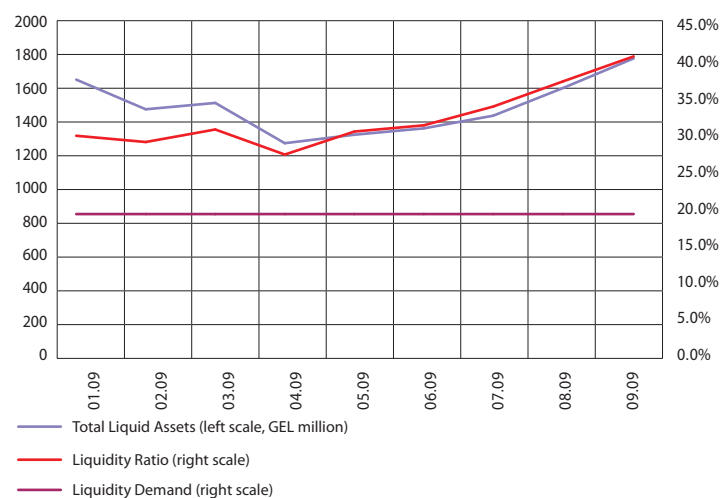
Overall, as of September 30 the net absorption of liquidity amounted to GEL 101.11 million, or 5.9% of reserve money, whereas there was a net supply of GEL 46.5 million, or 3% of reserve money as of June 30.

The NBG continued the FX swap operations the purpose of which is to regulate money mass, underpin the Lari exchange rate stability expectations, enhance banking intermediation, and reduce the currency-induced credit risk. Six 364-day FX swap auctions were held in the

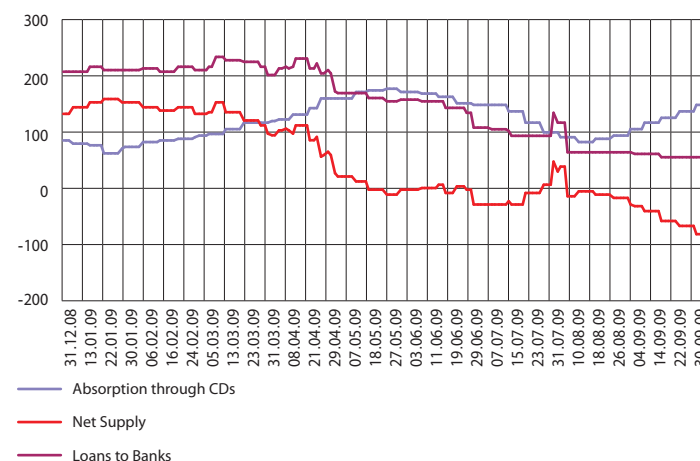
GRAPH 2.3.1  
Required Reserves, Balances on Corresponding Accounts, Liquidity Surplus/Deficit (GEL, million)



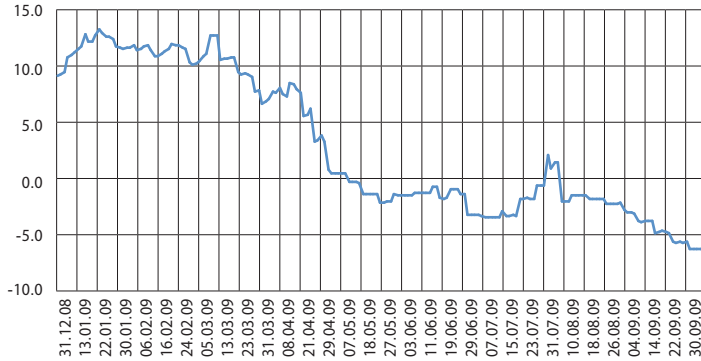
GRAPH 2.3.2  
Dynamics of Liquid Assets, Liquidity Ratio, and Liquidity Demand



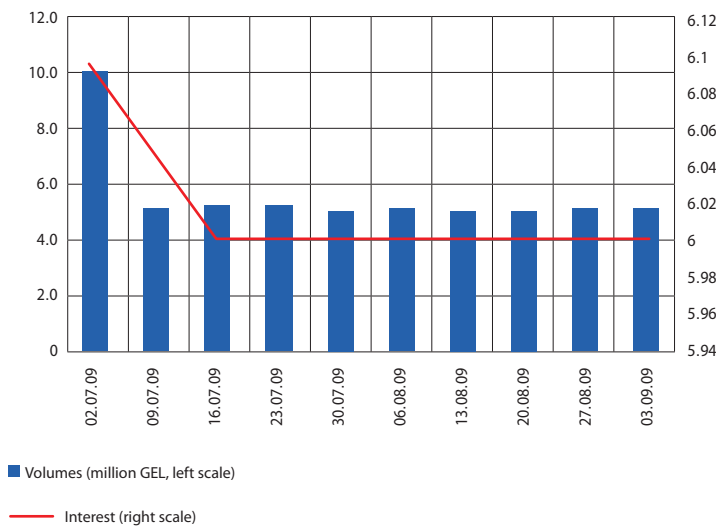
GRAPH 2.3.3  
Liquidity Absorption the CDs, Loans to Banks, and Net Liquidity Supply (GEL million)



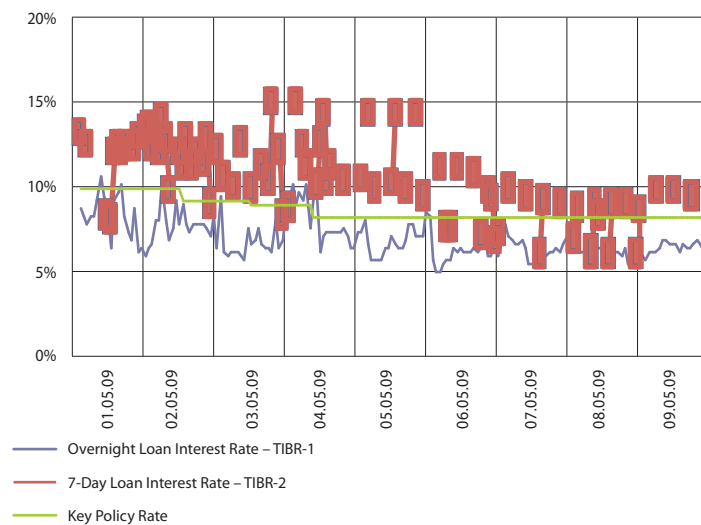
GRAPH 2.3.4  
Net Supply/Absorption to Reserve Money Ratio (%)



GRAPH 2.3.5  
Volumes of Refinancing Loans and Interest Thereon, QIII 2009



GRAPH 2.4  
Interbank Short-Term Loan Indices and Key Policy Rate



accounting period, with the placement of USD/ GEL forward deals of GEL 5 million each. The weighted average forward exchange rate at these auctions ranged from 1.6769 GEL/USD to 1.7048 GEL/USD, representing a slight quarter-on-quarter depreciation from the 1.6542–1.6814 range. The total volume of the FX swap contracts remained unchanged at the level of GEL 30 million. The interest rate against the spot Lari exchange rate ranged within 0.14%–1.33%.

The interest rate on refinancing loans, representing the main monetary policy instrument, remained unchanged at 6% after the 15 April Meeting of the Monetary Policy Committee. However, demand for refinancing loans continued decreasing; only GEL 56.05 million was issued through the 7-day loans, with demand falling to zero from early September. Similarly, there was no demand for the overnight loans in the accounting period.

2.4. INTERBANK MARKET

The interbank market considerably recovered in QIII 2009. The volume of loans denominated in domestic currency grew to GEL 993.3 million, up 80% quarter-on-quarter. Foreign currency denominated loans also grew in volumes, in particular, the US dollar-denominated loans amounted to 991.7 million, the euro-denominated loans – 905 million, and the UK pound-denominated loans – 0.12 million.

Short-term loans continued to dominate in the accounting period. The Lari-denominated loans with maturity of less than 7 days comprised 96.4% of the total volume of loans, with the overnight loans accounting for 76%. 99.1% of the US dollar-denominated loans were loans with maturity of less than 7 days (a remarkable quarter-on-quarter increase from 75.3%), with the share of overnight

loans equaling circa 33%. As regards the euro-denominated loans, loans with a less than 7-day maturity comprised only 47% thereof.

The weighted average interest rate on the Lari-denominated overnight loans equaled 4.7%, slightly up from 4.5% in the previous quarter. For the Lari-denominated loans with 7-day maturity, the weighted average interest rate substantially decreased to 4.8% from 8.5%, which is likely due to the increased supply.

The TIBR-1 and TIBR-7 indices indicate changes in the interbank interest rates. The TIBR-1 dynamics show that the interest rate on the overnight loans tended downwards, which was largely due to excess liquidity and over-supply against the backdrop of increased market activity. As regards the TIBR-7, despite high volatility, the index nonetheless showed a strong quarter-on-quarter downtrend.

Using monetary instruments as described above the NBG managed to maintain the inflation within the target range.

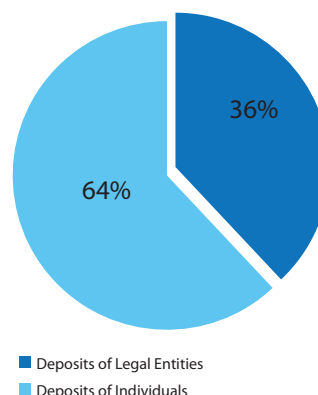
## 2.5. BANKING SECTOR

Deposit liabilities of the banking system amounted to GEL 2,998.6 million in QIII 2009, up 16.5% (GEL 424.6 million) quarter-on-quarter and down 8.3% year-on-year.

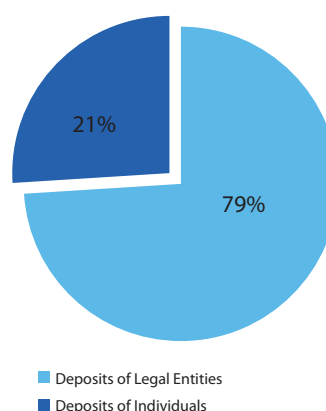
Foreign currency denominated deposits in Lari terms grew by GEL 293.0 million to GEL 2,178.4 million. The growth was evident for term deposits of individuals. In dollar terms, foreign currency denominated deposits grew by USD 161.7 million, or 14.2%. Term deposits accounted for 75.8% of total foreign currency deposits. It is noteworthy that the largest share of foreign currency deposits (64.2%) fell on individuals.

Domestic currency denominated deposits amounted to GEL 820.2 million, up by GEL 131.6

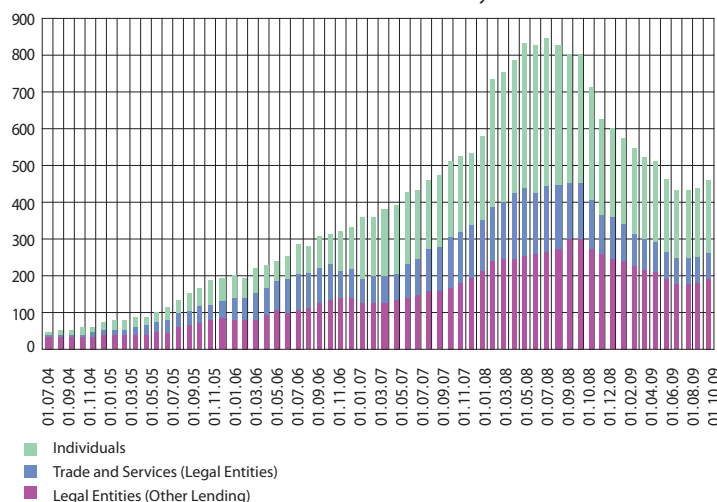
GRAPH 2.5.1  
Foreign Currency Denominated Deposits



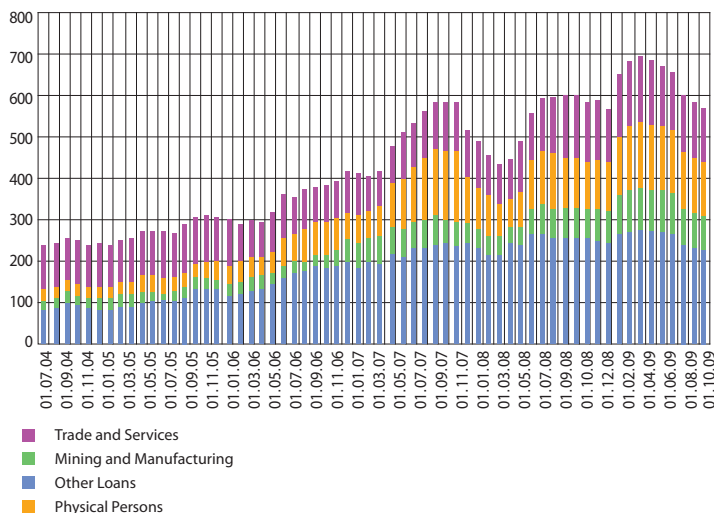
GRAPH 2.5.2  
Domestic Currency Denominated Deposits



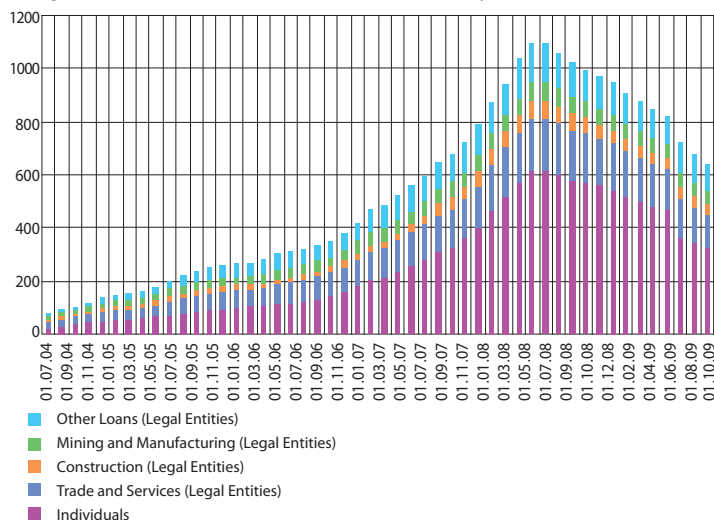
GRAPH 2.5.3  
Short-Term Loans Denominated in Domestic Currency



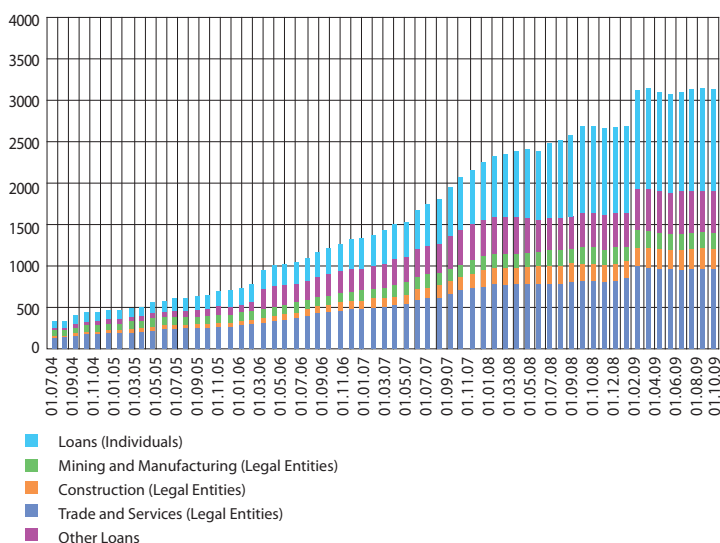
GRAPH 2.5.4  
Short-Term Loans Denominated in Foreign Currency



GRAPH 2.5.5  
Long-Term Loans Denominated in Domestic Currency



GRAPH 2.5.6  
Long-Term Loans Denominated in Foreign Currency



million or 19.1% quarter-on-quarter. The growth took place solely in September, amounting to GEL 70.9 million.

Factoring in the growth rates of deposits denominated in both foreign and domestic currency, the deposit dollarization ratio moved down 0.6% to 72.7% at end-September, which was the lowest ratio recorded in the recent year. It is worth noting that the lari-denominated deposits considerably increased along with the overall deposits uptrend formed in the recent period. This process clearly evidences that economic agents' confidence in the banking system improved, and that the lari recaptures the position it had prior to the economic crisis.

The deposit interest rates remained near 10.0% in the accounting period. The weighted average annual interest rate on the lari-denominated deposits was at 10.8%, down 0.6 percentage points quarter-on-quarter. On foreign currency denominated deposits the rate was at 9.9%, up 0.2 percentage points quarter-on-quarter. For foreign currency denominated deposits of legal entities, the interest rate increased 1.3 percentage points to 11.5% at end-period. In annual terms, the interest rate on the lari-denominated deposits fell 0.4 percentage points, while the rate on foreign currency deposits moved up 0.5 percentage points.

Total lending to the economy in QIII 2009 decreased by GEL 173.0 million to GEL 5,285.1 million.

Loans in domestic currency amounted to GEL 1,193.3 million in the accounting period, down 5.3% or GEL 66.1 million. Loans to legal entities accounted for 53.0% of total loans, of which 62.0% were long-term loans.

Foreign currency denominated loans amounted to GEL 4,091.8 million, down GEL

106.9 million. In dollar terms, this type of lending decreased to 2,439.8 million at end-period, down 3.7% or USD 92.7 million. Loans to legal entities comprised 65.7% of these loans, while long-term loans accounted for 80.8%. The decrease in lending in foreign currency was largely due to loans to legal entities. By economic sectors, the decrease was at lowest for loans extended to trade, transports, and construction sectors.

Overdue loans totaled GEL 215.3 million in QIII 2009, up 8.2% or GEL 16.4 million. It must be noted, however, that there was a decrease of USD 28.7 million in the last month.

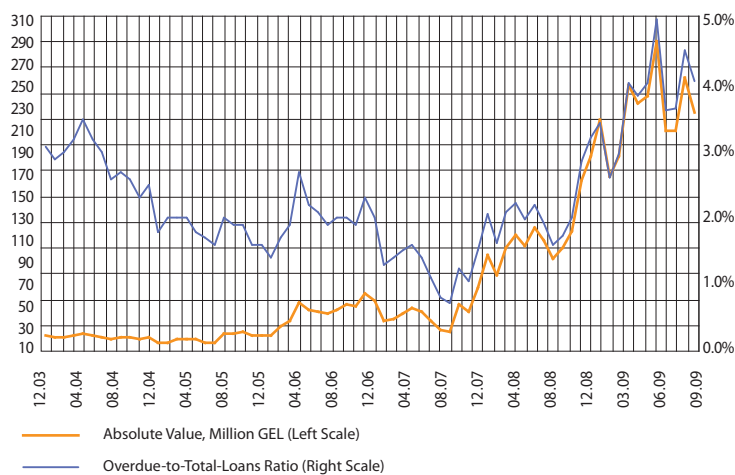
Interest rates in the banking system moved down quarter-on-quarter running at an annual 21.8% in QIII 2009. The weighted average annual interest rate on domestic currency loans was at 23.1%, while that on foreign currency loans remained at 20.9%. For legal persons interest rate on foreign currency loans was near 17.8%. For the domestic currency denominated loans the rate decreased 0.8 percentage points to 23.1%. In annual terms, interest rates moved down 1.3 percentage points on foreign currency denominated loans, and up 0.3 percentage points on loans in domestic currency.

Return on assets (ROA) and return on equity (ROE) were negative in the accounting period. As of September 2009, the ROA was at -1.7% while the ROE was at -7.2%. It must be noted, however, that September 2009 was the first month after the August war when banks posted profits.

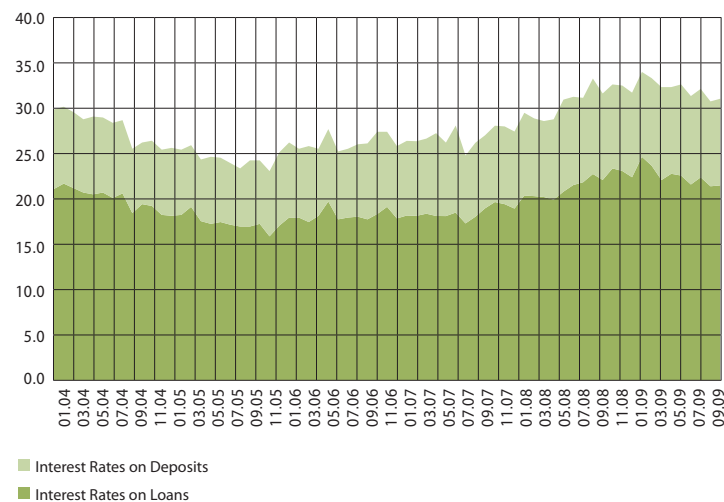
## 2.6 EXCHANGE RATE FACTORS

The NBG's main goal is to ensure price stability. Hence, it is critical to monitor and analyze all those factors which influence price stability. It is a conventional fact that in small open economies exchange rate and inflation strongly correlate

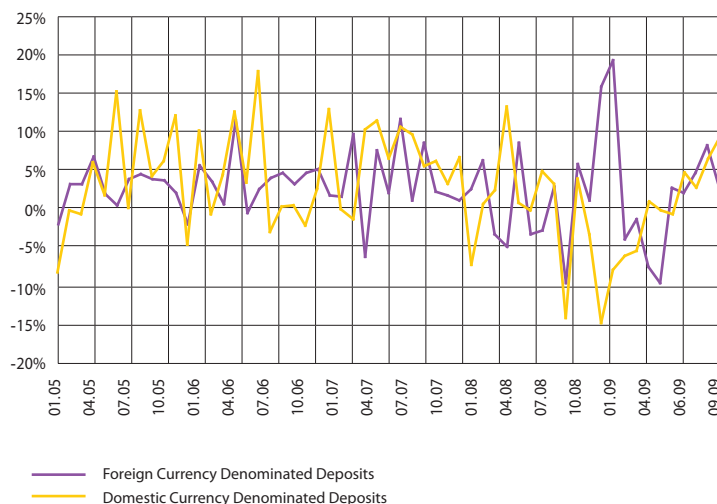
GRAPH 2.5.7  
Overdue Loans



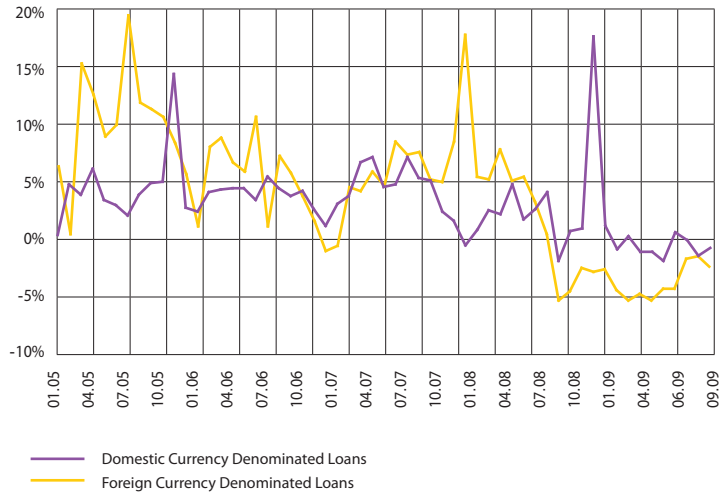
GRAPH 2.5.8  
Interest Rates on Loans and Deposits



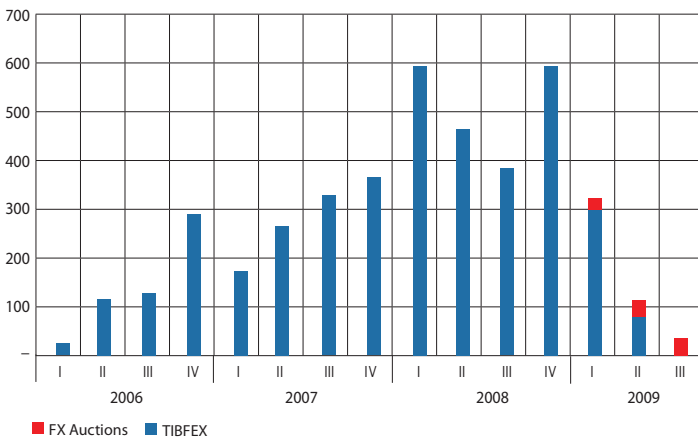
GRAPH 2.5.9  
Deposit Growth Rates (month-on-month)



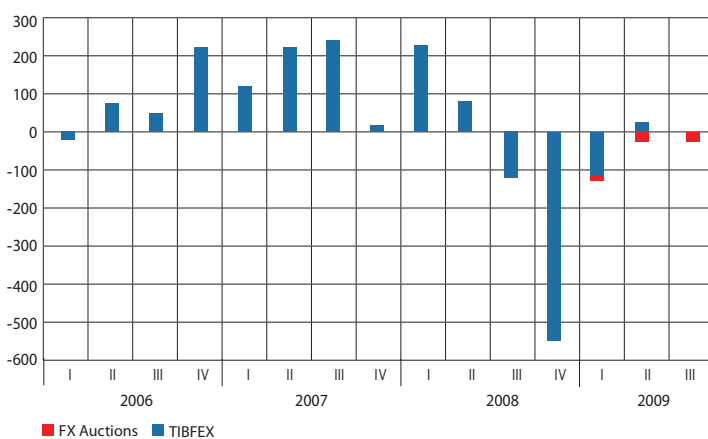
GRAPH 2.5.10  
Loan Growth Rates (month-on-month)



GRAPH 2.6.1  
NBG Interventions at the TIBFEX (million USD)



GRAPH 2.6.2  
Net Purchases of the NBG at the TIBFEX (million USD)



due to the fact that on the one hand, exchange rate determines prices on imports which hold a considerable share of the consumption basket and on the other hand, it influences a country's gross national income. Furthermore, exchange rate creates a significant credit risk, thus affecting a country's financial stability as a whole.

Proceeding from the above-mentioned, it is important to analyze the factors that determine the exchange rate. Presently, the Lari exchange rate relative to foreign currencies is driven by demand and supply forces in the FX market. Demand for foreign exchange is mainly influenced by imports financed from export proceeds and foreign capital inflows. In addition, foreign exchange auctions held by the NBG also play an important role in avoiding acute exchange rate movements that may occur as a consequence of temporary demand-and-supply imbalances.

In March 2009 the NBG launched FX auctions, which became the only means of its interventions after the abolishment of the Tbilisi Interbank Foreign Exchange in May 2009. It is noteworthy that unlike direct intervention at the TIBFEX, FX auctions rely more on market mechanisms. Replacement of the TIBFEX with FX auctions helped to essentially weaken the perception that the NBG artificially manages the exchange rate. Volumes of currency needed to prevent large deviations from long-term trends and to avoid speculative currency transactions are significantly smaller when supplied through the auctions compared to those supplied by means of direct interventions at the TIBFEX.

Demand for foreign currency is significantly affected by the level of economy dollarization, which in turn depends on economic agents' expectations regarding future exchange rate movements. These expectations form the

choice of economic agents the currency in which to keep their savings. In addition, there exist general psychological factors associated with political situation risks, which is reflected in the households' lack of confidence in the Lari and their preference of the US dollar as a safe currency.

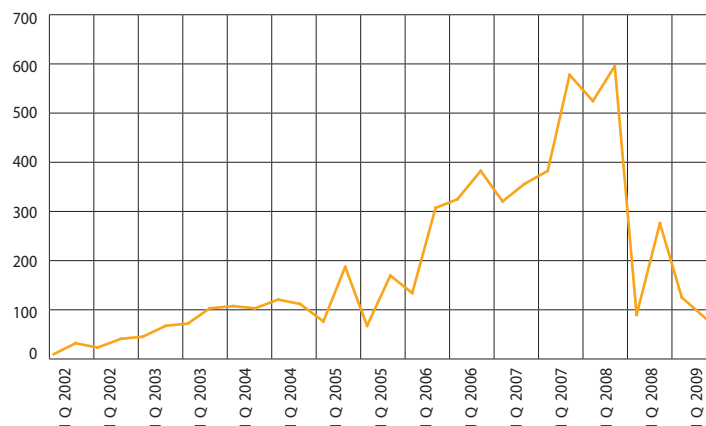
In Q1 and Q2 2009 FDI volumes considerably contracted year-on-year. While in the first two quarters of 2008 FDIs totaled USD 1.1 billion, in 2009 the volumes fell 80% to USD 230 million. Portfolio investments also contracted in 2009. Such a drop in foreign capital inflows was largely due to the Russian aggression in August 2008 and the ongoing global financial crisis.

It must be noted, however, that the lack of foreign private capital was partly counterbalanced by foreign donor assistance and the increase of external debt.

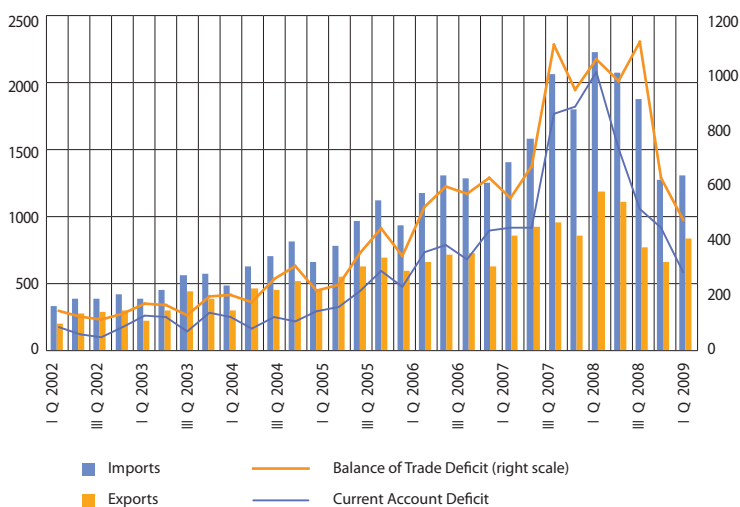
Import volumes also fell along with the slump in economic activity and contraction of foreign investment inflows. In Q2 2009 annual decline in imports was at 41%. But due to the fact that in Q2 2009 imports declined at a much faster pace than exports and the volume of transfers augmented, trade and current account deficits also substantially narrowed to 56% and 73%, respectively. Such an improvement in the current account reduced demand for foreign currency in 2009 and hence exerted an upward pressure on the Lari exchange rate.

It is recognized that in the conditions of free capital movement exchange rate dynamics are essentially affected by interest rate differentials between relevant domestic and foreign assets. Such a relationship between the exchange rate and the interest rate differentials is referred to as uncovered interest rate parity, which implies that if equilibrium interest rates in domestic

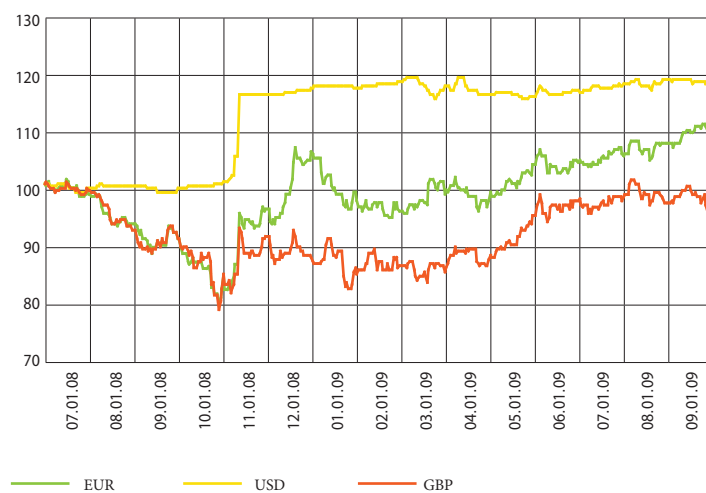
GRAPH 2.6.3  
Foreign Direct Investments in Georgia (million USD)



GRAPH 2.6.4  
Balance of Trade and Current Account Deficits



GRAPH 2.6.5  
Lari Nominal Exchange Rate Dynamics (2008)

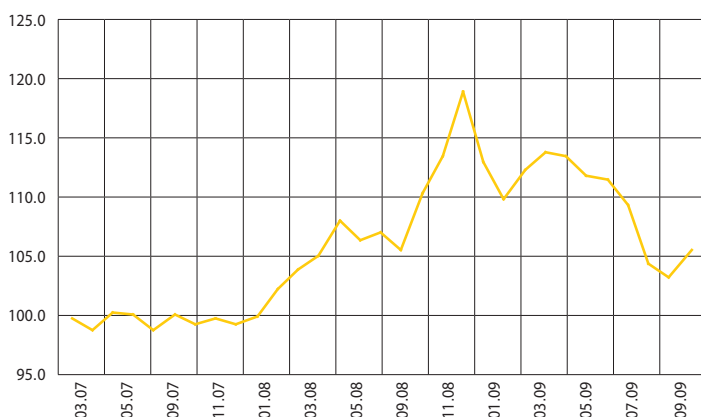




GRAPH 2.6.6  
Lari NEER (Dec 95 = 100)



GRAPH 2.6.7  
Lari REER (Dec 95 = 100)



currency exceed those in foreign currency then, risks being equal, there exist expectations of domestic currency depreciation. We may bring as an example the Georgian government’s T-bill rates ranging within 5%–6% and the US T-bill rates ranging within 0.1%–0.3%<sup>4</sup>. It must be noted, however, that interest rate differentials in Georgia are rather due to increased political and economic risks than due to the Lari depreciation expectations.

In July-August 2009 the Lari real exchange rate depreciated 5.4% but moved up 2% in September. Hence, the depreciation was at 3.4% in the accounting period. The nominal effective exchange rate also depreciated 2%. The lari nominal exchange rate appreciated 2.4% relative to the UK pound, and depreciated 1.4% and 4.6% relative to the US dollar and the euro, respectively.

## BOX 2. SPECIAL DRAWING RIGHTS

**A Special Drawing Right (SDR)** is an international reserve asset created by the International Monetary Fund in 1969 to support the Bretton Woods system of fixed exchange rates. Special Drawing Rights are allocated to member states in proportion to their IMF quotas, and serve to supplement their official reserves. SDRs also serve as a settlement unit. The

IMF periodically issues and allocates SDRs, while reserving the right to annul them.

The value of the SDR was initially defined as an equivalent of 0.888671 grams of pure gold \_ which, at the time, was also equivalent to one U.S. dollar. After the collapse of the Bretton Woods system in 1973 it became necessary to redefine the SDR base.

<sup>4</sup> The maturity of the US T-bills is 6 months, similar to that of the Georgian T-bills. Data obtained from the NBS and the US Treasury websites.



This took place in 1974 when the SDR was redefined as a basket of 16 main currencies of the IMF member states. In 1981 the SDR composition was simplified, with the basket consisting of only 5 currencies: the US dollar, the Japanese yen, the Deutsche mark, the UK pound, and the French Frank. Later on, the Deutsche mark and the French franc were replaced with the euro.

The IMF periodically recalculates the weights of the four basket currencies. Since June 1, 2006 the SDR basket is established as follows: 0.41 euro (34%), 18.4 Japanese yen (11%), 0.0903 UK pound (11%), and 0.632 US dollar (44%). The basket determines both the SDR exchange rate relative to different currencies and the SDR interest rate.

Within a period not exceeding 5 years the IMF Executive Board reviews the IMF quotas of member states, and, based on the evaluation of current world economic trends and changes in economic conditions of member states, makes decisions regarding the expediency to advise the IMF Board of Governors on the quota adjustment in order to ensure the voting process on a fairer basis.

A quota determines not only a membership subscription but also potential volumes of IMF loans and SDR allocation. Total IMF quotas amount to SDR 217.5 billion equivalent. Voting power of each country consists of basic votes and votes based on a quota system. Each member state has 250 basic votes plus one additional vote for every 100 000 SDRs.

The first IMF allocation in 1970-72 was for a total amount of SDR 9.3 billion in yearly installments. The second allocation in 1979-80 was for SDR 12.1 billion in yearly installments.

At the 2009 London Summit of G20 it was proposed that the IMF allocate SDRs equivalent of USD 250 billion. This proposal was considered by the IMF Board of Governors on April 7, 2009. In addition

to that, the G20 addressed the IMF to speed up the ratification process of the Fourth Amendment to the IMF Articles of Agreement that remained pending for almost 10 years. The purpose of this Amendment is to make the allocation of SDRs more equitable, in proportion to the quota; the point is that after the first two general allocations the IMF quotas of member states significantly changed along with the economic changes, whereas the SDR allocations remained the same. Moreover, countries that joined the Fund after 1981 – one third of the current IMF members – had never received an SDR allocation. The recent changes in the US legislation made it possible to ratify the amendment concerned in August 2009.

The special allocation of SDRs, as provided for in the Fourth Amendment, will be made not in proportion to the quota but based on a special methodology, as described in the Amendment, which ensures equitable proportion between cumulative SDR allocations and current quotas.

The third general allocation of SDRs took place on August 28, 2009 amounting to SDR 161.2 billion or 250 billion equivalent of the US dollar. Under this allocation each member state received SDRs accounting for 74.13% of its quota. The special one-time SDR allocation was made on September 9, 2009, totaling SDR 21.5 billion (equivalent of USD 33 billion).

Georgia was not the IMF member state at the time of the first two allocations of SDRs, and hence was not eligible for such allocations. As regards the third allocation, Georgia received SDR 111.4 million on August 28 and SDR 32.5 million on September 9 (in total USD 225.5 million equivalent). The SDRs received by member countries under the general and special allocations of SDRs will count toward their reserve assets. A member state may choose to sell part or all of its SDR holdings to other members

or the IMF in exchange for hard currency, or buy more SDRs as a means of reallocating its reserves.

The third allocation of SDRs is by far larger than the previous allocations, raising the total allocation circa 10 times. The accounting procedures changed with the third allocation; unlike the previous allocations, when the SDRs receipt was not considered as a balance of payments transaction and as an unconditional liability of the country, the SDRs received under the third allocation shall be reflected in the balance of payments as assets (under the reserve assets item), and as liabilities (under the other investments, other long-term liabilities item).

The general SDR allocation is a key example of a cooperative multilateral response to the global crisis, offering significant support to the Fund's members in this challenging period.

Presently, member subscriptions depend on the state of economy. However, the existing allotment of voting power obviously does not reflect the increasing growth rates in China and India. There exist serious concerns regarding voting power between China and the USA on the one hand, and the EU and the rest of the IMF member states on the other. The stakeholders agreed upon discussing this issue in January 2011, although the consensus will be difficult to reach. The Euro-area states – accounting for 25% of the world economy – are allotted 40% of total voting power, while the US – accounting for one-fourth of the global GDP – has 17% (which enables it to bar any undesirable decision). Japan holds the second position in terms of both subscription volumes and voting power (6.2%). Georgia has 0.08% of total voting power.

## 2.7. PRODUCTION AND DEMAND

In QII 2009, due to the global financial crisis and political unrest in the country, contraction of Georgia's GDP hit its record-low level in a decade. The nominal GDP fell 14.5% year-on-year to GEL 4,271.5 million. Similar to the preceding quarter, the real GDP declined at a slower pace than the nominal, running at 10.7% in QII 2009. The GDP adjusted for seasonal factors fell 2.3% quarter-on-quarter.

Based on the GDP data estimated by production method, positive growth rates in QII 2009 were recorded in a few sectors, including, in the first instance, the budget-dependent education (2.0%) and healthcare and social assistance (8.5%) sectors. In addition, for the first time in the recent period, the GDP growth rate was significant in the production and distribution of electricity, gas, and water sector, running at 8.8%, which was largely due to growth in the electricity sub-sector.

The real growth rate of the public administration

sector, which comprises a substantial share of the country's GDP, was also positive equaling 4.0%. For this sector, real growth is estimated by using a specific methodology, which may essentially differ from the nominal growth. In QII 2009 this difference was remarkable – while moving up 4% in real terms, the sector fell 23% in nominal terms. Given that the public administration sector accounted for 17% of the nominal GDP such a difference considerably affected the GDP deflator, which equaled -4.2% in QII 2009. According to our estimates, the effect of the public administration sector on the GDP deflator equaled -4.8 percentage points.

### 2.7.1. HOUSEHOLD AND GOVERNMENT CONSUMPTION

In QII 2009 final consumption expenditures – representing the determinant portion of the country's GDP – dropped 6.4% to GEL 4,386.1 million. Contraction occurred for the first time in the recent

years, reflecting developments which took place after H2 2008.

Household consumption – comprising three fourths of final consumption – fell 2.2%, conditioned by both economic and financial factors. Along with the worsened conditions in real sector and the growth of unemployment, banks essentially limited consumption loans to individuals. At the same time, the contraction of total consumption was primarily due to the drop in government consumption – despite that household consumption was almost 3 times higher than government consumption, the drop in the latter accounted for 73.8% of total contraction. Government consumption dropped largely due to the GEL 250 million decrease in expenditures on collective services. Part of the government consumption related to individual goods and services (healthcare and education) grew by GEL 30 million, although this had no impact on the general picture.

Accordingly, the decline in both household and government consumption appeared to be one of the primary factors that essentially alleviated inflationary pressure in 2009.

### 2.7.2. INVESTMENTS

Similar to the preceding period, in QII 2009 the gross capital formation plummeted 61.1% year-on-year to GEL 604.4 million.

It is worth noting that the decline in formation of fixed capital, being the result of the economic and financial crisis, was accompanied by the reduction in companies' stocks. Change in this component investment accounted for 72% of the decline in gross capital formation.

### 2.7.3. 2009 GDP ESTIMATES

In accord with the forecasts from the previous quarter, economic contraction posted a double-digit

GRAPH 2.7.1  
Seasonally Adjusted GDP (million GEL)

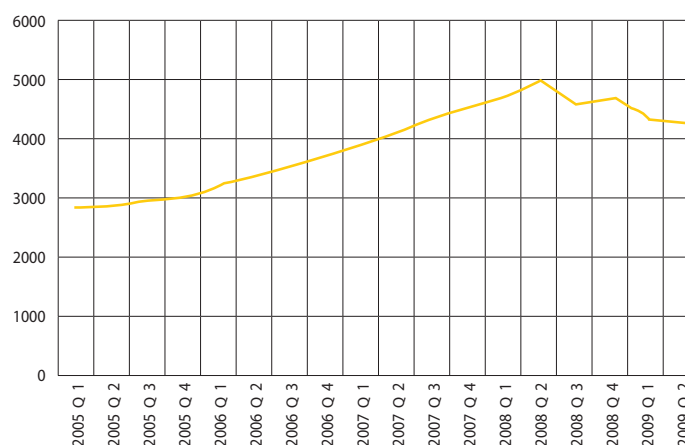


TABLE 2.7  
Contribution of Economic Sectors to Georgia's GDP Growth (%), QII 2009

	Growth Rate	GDP Weight	Impact
Agriculture, Forestry, Fishing	-7.6%	8.9%	-0.7%
Mining and quarrying	18.3%	0.7%	0.1%
Manufacturing	-23.4%	8.2%	-1.9%
Electricity, gas and water supply	8.8%	1.9%	0.2%
Processing products by household	2.8%	1.5%	0.0%
Construction	-2.6%	4.8%	-0.1%
Trade services, Repair services	-32.7%	14.2%	-4.6%
Restaurant and Hotel services	-11.4%	1.8%	-0.2%
Transport and storage	-14.9%	6.7%	-1.0%
Communications	-1.0%	3.1%	0.0%
Financial Intermediation	-10.7%	2.8%	-0.3%
Real estate, renting and business activities	-3.6%	3.7%	-0.1%
Imputed rent of own occupied dwellings	3.2%	2.1%	0.1%
Public administration and defence	4.0%	16.1%	0.6%
Education	2.0%	2.8%	0.1%
Health care and social services	8.5%	4.8%	0.4%
Other community, social and personal service activities	-25.8%	3.4%	-0.9%
Private households with employed persons	0.6%	0.1%	0.0%
FISIM adjustment	-12.0%	-1.1%	0.1%
<b>(=) Gross Domestic Product at basic prices</b>		<b>86.4%</b>	<b>-8.2%</b>
(+) Taxes on products	-17.7%	14.0%	-2.5%
(-) subsidies on products	3.2%	-0.5%	0.0%
<b>(=) Gross Domestic Product at market prices</b>	<b>-10.7%</b>	<b>100.0%</b>	<b>-10.7%</b>

GRAPH 2.7.1.1  
Final Consumption Growth Rate (y/y, %)

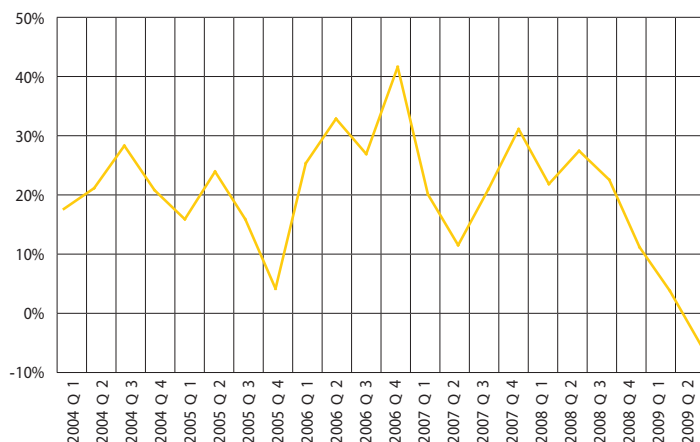


figure in QII 2009 for the first time in the recent years against the backdrop of economic crisis and political unrest.

Annual growth rate of the economy is expected to improve in H2 2009. While certain recovery in economic activity is expected, such an improvement will be largely due to the so called “base effect” – in QIII and QIV of 2008 the Georgian economy began declining.

Taking into account the above-said, the rate of GDP contraction is estimated to be near 2% in QIII and 4%-4.5% in 2009.

### BOX 3. MEASURING THE SIZE OF SHADOW ECONOMY BY CASH DEMAND METHOD

Cash demand constantly increases in almost every country. The reasons include economic and consumption growth, inflation, demographic changes, etc. Cash demand also depends on the quality of services offered by banks.

High tax rates and complicated taxation procedures push economic agents towards shadow economy in an effort to bypass such procedures and avoid higher costs. Entities operating in the underground economy make all efforts to avoid non-cash settlement in order to conceal transaction evidence. This determines their preference of ready money cash transactions, thus generating additional demand for cash. Consequently, the purpose of the cash demand model is to determine the size of demand for cash generated by the shadow economy to avoid taxes and tax procedures.

The model estimates the cash demand equation, where one of the key explanatory variables is tax burden. The model builds on the assumption that the changes caused in cash demand by the changes in tax

burden are associated with the shadow economy.

It must be emphasized, however, that the model measures only a part of the shadow economy, which is related to the fiscal system. Nor does the model consider foreign currency and non-cash transactions in the shadow economy. To estimate the equation for Georgia, we used quarterly data for the period 2000-2008 from the Statistics Department and the NBG. A consideration was given to fundamental factors affecting change in cash demand, in particular, GDP, GDP per capita, disposable income, household consumption, wages, inflation, exchange rate, dollarization, interest rates, a number of bank branches, and a number of ATMs. In addition, factors contributing to growth of the shadow economy, and hence cash demand were taken into account. These include taxation level (measured by the tax-revenues-to-GDP ratio), tax rate index, extent of complexity of tax procedures – measured by the level of employment in public sector (in default of a better measurement).

After obtaining the cash demand equation by using a regression analysis, only a few factors appeared to have statistical significance. The estimated equation is given as follows:

$$\begin{aligned} \Delta CC / GDP = & -0.23 \cdot \Delta CC (t-1) / GDP + 0.13 \cdot \Delta PC / GDP + 0.27 \cdot \Delta DT / GDP + \\ & (-2.13^{**}) \quad (6.70^*) \quad (1.99^{**}) \\ & + 0.27 \cdot \Delta IT / GDP + 0.06 \cdot \Delta SE - 0.001 \cdot \Delta TRW + \text{dummy2008} \\ & (1.99^{**}) \quad (1.76^{***}) \quad (-2.51^{**}) \quad (-3.06^*) \end{aligned}$$

where:

CC / GDP – logarithm of cash-in-circulation-to-GDP ratio;

PC/GDP – logarithm of household-consumption-to-GDP ratio;

DT/GDP – logarithm of direct-taxation-proceeds-to-GDP ratio;

IT/GDP – logarithm of income-tax-revenues-to-GDP ratio;

SE – number of employed in public sector;

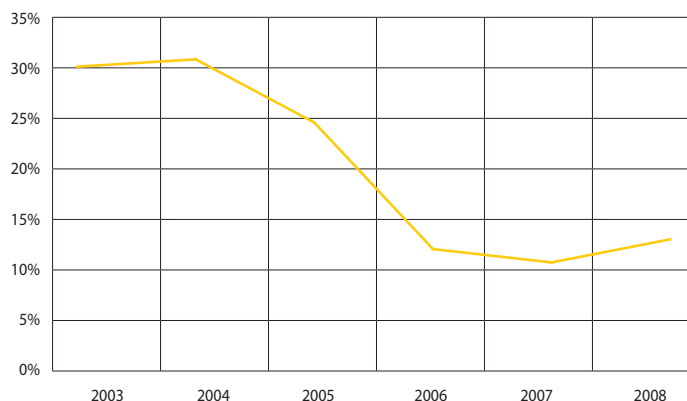
TRW – tax rates index;

\*, \*\*, and \*\*\* – 1%-, 5%-, and 10% significance level;

The regression was tested for stationarity of parameters and normal distribution of residuals.

To estimate the volume of cash in underground circulation we singled out “excessive” cash demand from the equation, which is sensitive to changes

GRAPH  
Shadow Economy



in taxes and tax regulations. To estimate the value-added produced in the shadow economy we used the Friedman identity, where, in default of a better measurement, we assumed the velocity of money circulation in the shadow economy to equal the M2 velocity in the official economy.

The graph below shows the ratio of the shadow economy GDP to the official GDP in 2003–2008.

The data obtained indicate that the shadow economy is on a downturn in the recent years, falling to 13% from 30%, which is mainly due to administrative and tax code improvements implemented during these years.

## 2.8. EXTERNAL TRADE

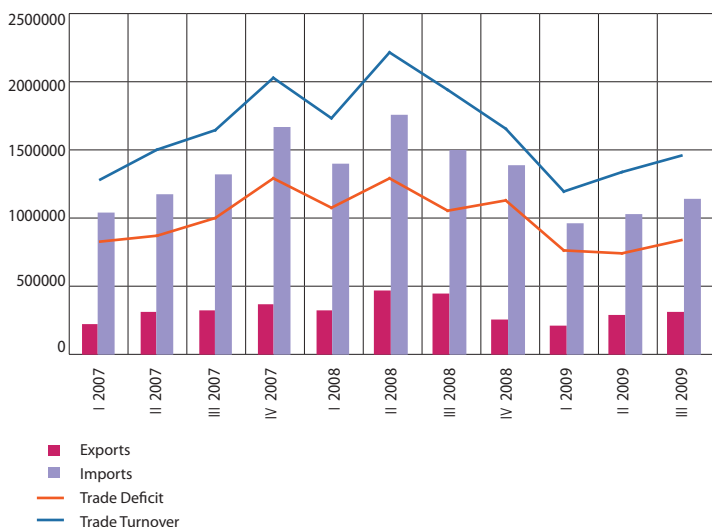
Georgia’s external trade turnover had a permanently growing tendency since 2003. In 2008, for the first time in the recent years, both imports and exports posted a decline as a result of the August war and the following impact of the world financial crisis. In particular, decline in external trade turnover was at 12.9% quarter-on-quarter in QIII 2009 (contrary to the seasonal trend) and at 19% in QIV 2008 year-on-year. In 2009 external trade considerably fell year-on-year but there are signs of recovery.

As of January-September 2009 external trade

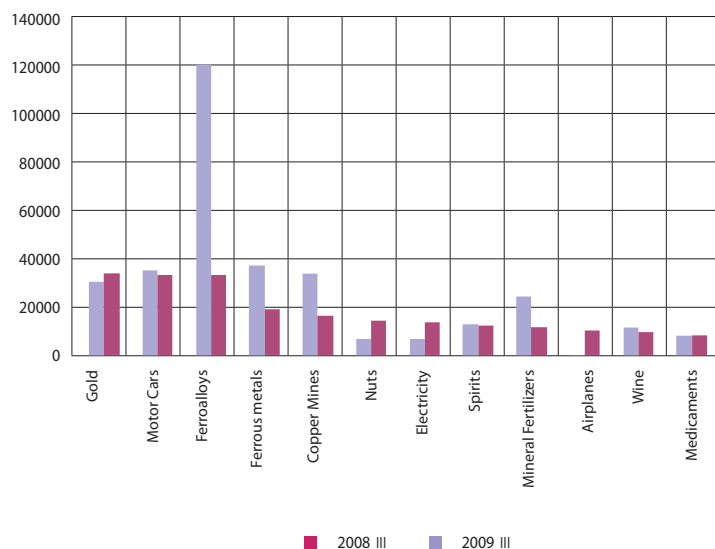
turnover contracted 33% to USD 3,957.5 million, of which the exports of goods equaled USD 826.5 million (down 33.4% y/y), and the imports – USD 3,131.0 million (down 32.9% y/y). Consequently, as of January-September trade deficit narrowed 32.7% year-on-year, totaling USD 2304.6 million. In QIII 2009 both exports and imports moved down 29.9% (to USD 311.4 million) and 24% (to USD 1138.5 million) year-on-year, respectively, while the trade deficit narrowed 21.5% to USD 827.1 million.

It must be noted, however, that in the accounting period both imports and exports posted positive

GRAPH 2.8.1  
Exports, Imports, Trade Deficit, and Trade Turnover (thousand USD)



GRAPH 2.8.2  
Top Export Items, QIII 2009 vs. QIII 2008 (thousand USD)



quarter-on-quarter growth rates equaling 10.9% and 5.2%, respectively. Such a quarter-on-quarter growth was largely due to seasonal factors; as a rule, economic activity starts from its lowest in the first quarter and moves upwards throughout the next three quarters.

In QIII 2009 gold was the top export item, followed by motor cars the export/re-export of which grew 47.7% quarter-on-quarter. Due to the contraction in

volume, export of ferroalloys fell 38.1% quarter-on-quarter, dropping from the first to the third position in the export list. Along with easing of the global financial crisis, prices grew on ferrous and non-ferrous metals being the main Georgian export item.

In the accounting period the top ten export items were as follows: gold, motor cars, ferroalloys, ferrous scrap, copper mines, nuts, electricity, spirits, mineral fertilizers, and aircraft.

In QIII 2009 investment goods accounted for 7.1% of total exports, intermediate consumption accounted for 60.7%, and consumer goods – for 32.1%.

With regard to registered imports, the value of petroleum products continued to increase at 23.2% quarter-on-quarter, mainly fueled by the world price gains. Petroleum products traditionally held the first position in the imports list. Import of motor cars, occupying the second position, grew 11.2% quarter-on-quarter.

In the accounting period investment goods accounted for 13.3% of total imports, intermediate consumption accounted for 49.9%, and consumer goods – for 35.6%. This breakdown is fairly stable, with no significant changes occurred.

In January-September 2009 main destinations of the Georgian exports were in the following order: Turkey, Azerbaijan, Canada, Armenia, Bulgaria, Ukraine, Russia, Kazakhstan, Belgium, and Italy. The share of these trading partners accounted for 77.1% of total exports. The major trading partners in imports were Turkey, Azerbaijan, Ukraine, Bulgaria, Germany, Russia, China, the US, Brazil, and Romania, overall accounting for 68.9% of total imports.

## 2.9. GOVERNMENT OPERATIONS

In QIII 2009 the consolidated budget revenues and grants totaled GEL 1,293 million, of which grants amounted to GEL 92 million, and tax and

non-tax revenues – to GEL 1,201 million. Revenue mobilization accounted for 28.7% of GDP, up 1.2% year-on-year. In quarter-on-quarter terms the share of total revenues in GDP grew 2.3 percentage points. Tax burden (tax-revenues-to-GDP ratio) equaled 24.3%, up 1 percentage point quarter-on-quarter, but down 0.4 percentage points year-on-year. For the period of last two years tax burden averaged near 25%. Grant receipts comprised quite a high ratio of 2% with respect to GDP in QIII 2009; in this context, it is worth noting the EU assistance to IDP's in the amount of EUR 12 million.

In QIII 2009 total expenditures of the consolidated budget amounted to GEL 1,736 million, up by GEL 130 million quarter-on-quarter, but down 1.4% year-on-year. Year-on-year decline was largely due to considerable expenditures allocated in QIII 2008 to build houses for families suffered from the August war. Current and capital expenditures amounted to GEL 1,318 million and GEL 418 million, respectively. The latter substantially grew quarter-on-quarter, but contracted 12% year-on-year due to the similar reasons. Growth of expenditures on non-financial assets helps to fight unemployment and serves as an economic stimulus in both short- and long-term perspective. Ratio of total expenditures to GDP was at 38.5%, up 1% quarter-on-quarter and 1.8% year-on-year.

In QIII 2009 the consolidated budget deficit amounted to GEL 443 million, or 9.8% of GDP. The main source of budget deficit financing represented a GEL 316 million increase in foreign liabilities. In this context, it is worth mentioning the budget assistance loans received from the World Bank and Asian Development Bank, totaling USD 169 million. GEL 58 million was mobilized by means of proceeds from privatization. The use of free current assets was equal to GEL 41 million, while net growth in internal liabilities stood at GEL 27 million.

TABLE 2.9.1  
Consolidated Budget Parameters

	QIII 2009	Ratio to GDP
<b>Total Revenues and Grants</b>	<b>1,293.3</b>	<b>28.7</b>
Revenues	1,201.3	26.7
Tax Revenues	1,094.3	24.3
Non-Tax Revenues	107.0	2.4
Grants	92.0	2.0
<b>Total Expenditures</b>	<b>1,736.6</b>	<b>38.5</b>
Current Expenditures	1,318.6	29.3
Capital Exp. and Net Lending	418.0	9.3
<b>Deficit</b>	<b>-443.3</b>	<b>-9.8</b>
<b>Deficit Financing</b>	<b>443.3</b>	<b>9.8</b>
Privatization	58.5	1.3
Use of Free Current Assets	41.2	0.9
Net Increase in Internal Liabilities	27.1	0.6
Net Increase in Foreign Liabilities	316.5	7.0

GRAPH 2.9.1  
Budgetary Expenditures Dynamics (percentage of GDP)





Effect of the fiscal policy on money supply increased against the backdrop of lowered effectiveness of monetary transmission mechanisms stemming from decreased capital inflows and excessive liquidity in the banking system. Spending of grants and loans received from international financial institutions and donor countries became one of the main sources of money supply in the recent period moving up levels of prices and economic activity. Reserve money grew 10.6% (by GEL 161.9 million) in QIII 2009. Contribution of government operations to the change in reserve money was 17.6%. It becomes evident that fiscal policy promoted increase in reserve money, which indicates that the government conducted an expansionary policy supporting economic activity. State budget expenditures were particularly large in July – exceeding GEL 700 million, mostly comprising capital expenditures and government purchases.

In the accounting period expenditures on general public services represented a considerable portion of state budgetary expenditures, amounting to GEL 435 million. These expenditures were used to finance different levels of the government, financial and fiscal activities of executive and representative bodies, as well as to service state debt.

Expenditures on social protection represented the second largest portion of state expenditures, amounting to GEL 312 million. The major share of these expenditures was used to finance social assistance to elderly persons, family allowances, social safety of children.

GEL 252 million was spent on economic activities in QIII 2009. Allocations under this category were mainly used to finance motor transport, roads, multi-purpose development projects and agriculture.

By end-September 2009 total state debt grew 18.5% year-on-year to GEL 7,044.9 million (up GEL 1,107 million), with external debt up by GEL 1,050.3

million and domestic debt up by GEL 57 million. By end-period total state debt accounted for 38.5% of the estimated 2009 GDP, exceeding the December 2008 level by 7.3 percentage points. Modest external debt growth, if used for stimulating economic activity during crisis times, should be considered positive.



### 3. INFLATION FORECAST

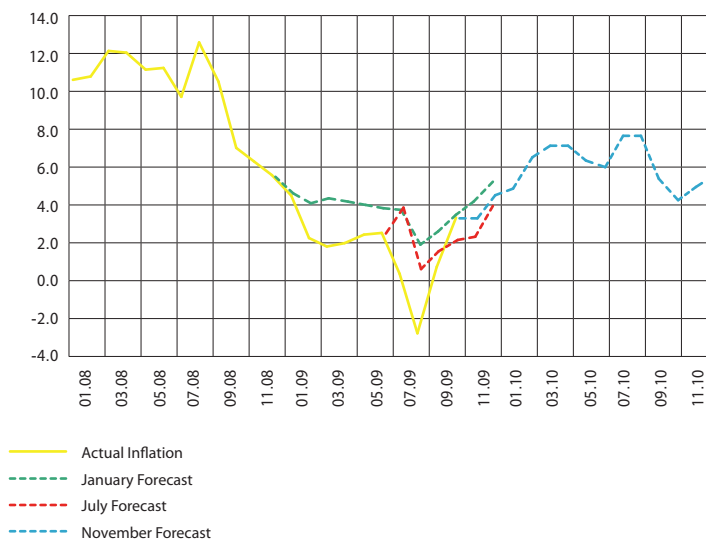
In forecasting inflation the NBG mainly uses two approaches. On the one hand, the NBG monitors each of the product indices included in the consumption basket and makes inflation forecasts under certain assumptions and projections. On the other hand, the NBG applies econometric modeling of inflation dynamics.

For short-term inflation forecasting, the NBG takes into account projections of world prices on certain important products of the consumption basket. Based on the assumptions made for inflation forecasting, transportation costs will follow the dynamics of oil prices throughout 2009-2010. Certain growth is expected for wheat prices. Another assumption is that regulated prices will remain unchanged over the next year. Also unchanged will remain prices on sunflower oil. The assumptions for dynamics of prices on fruits, vegetables, and dairy products are based on seasonal factors. The November 2008 price hike on medicaments is assumed to discontinue its effect on annual inflation by end-year, while the September 2009 increase in cost of education will continue having effect until end-2010. For prices on the rest of the product groups in the consumption basket, the assumptions are based on the existing trend expectations in the respective economic sectors. The inflation forecasts based on this methodology suggest that the annual inflation rate will move up to 4.5% at end-year and 7% at end-Q1 2010, which will be followed by a slight decrease throughout the subsequent period to 5.5% at end-2010.

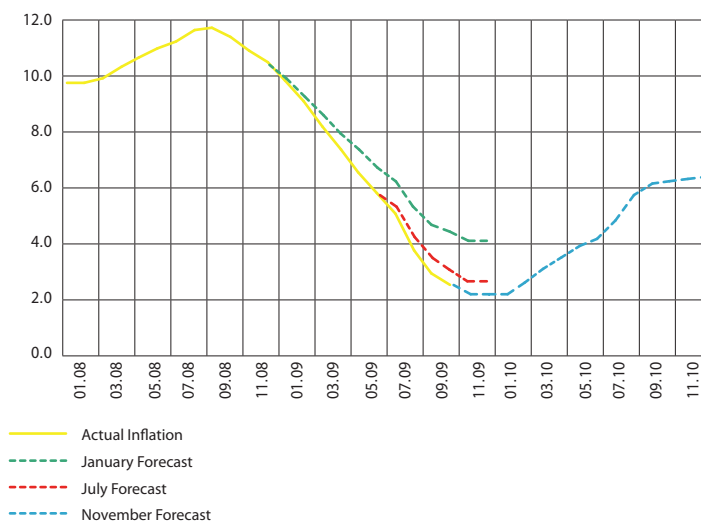
It is worth noting that inflation forecasts made in the previous quarter were revised slightly upwards by 0.5 percentage points.

As regards the projected average annual inflation for end-2009, the rate eased circa 0.5% compared to the previous quarter projections.

GRAPH 3.1  
Annual Inflation Forecast



GRAPH 3.2  
Average Inflation Rate Forecast



It must be pointed out that the inflation projections made by using this methodology are suitable for a six-month time horizon, as the precision level falls for a longer period.

The long-term equilibrium monthly inflation forecasting model was updated and revised.

The estimated equation is given as follows:

$$\delta p = 0,10\delta e_{-2} - 0,061\delta e_{-4} + 0,046\delta m_{-1} + 0,04\delta m_{-2} - 0,016\delta m_{-3} + 0,008\delta p^{oil}_{-1} + 0,085\delta p^{food}_{-1} - 0,02ecm;$$

where:

P – Consumer Price Index;

m – Money Mass;

e – Exchange Rate GEL/USD;

P<sup>oil</sup> – Average Global Price on Oil;

P<sup>food</sup> – Fruits and Vegetables Price;

ecm – is a variable depicting a long-term equilibrium and is expressed as follows:

$$ecm = p_{-1} - 0,43e_{-1} - 0,57m_{-1} + 0,78y_{-1} - 5,79$$

where:

y – is GDP.

The equation also includes seasonal and dummy variables to describe seasonality and structural changes;

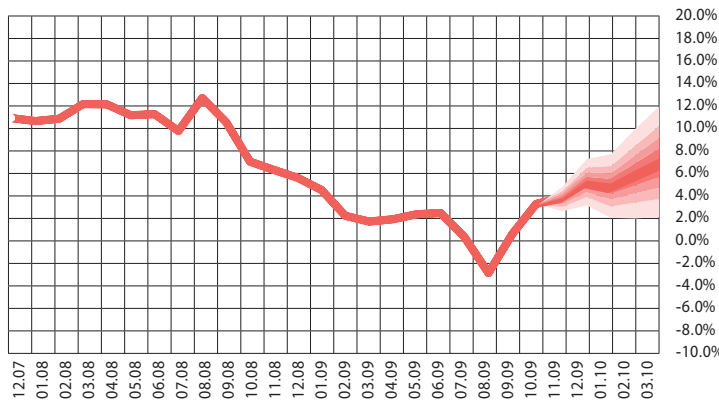
With regard to the explanatory variables included in the model, the following assumptions are made:

- Broad money excluding foreign currency deposits will grow at the annual rate of 9.9% by end-year;
- Growth rate of real GDP will be at -5.9% in 2009 and -4.1% at end-Q1 2010;
- The lari nominal exchange rate relative to the US dollar will remain at the current level;
- Fruits and vegetables price will increase on a seasonal basis, in line with the previous year tendency;
- Oil prices will not change in international markets and average 77 USD/barrel in QIV, further increasing to 80 USD/barrel in Q1 2010;

The annual inflation forecasts obtained by using the estimated model can be depicted as follows (Graph 3).

Based on the obtained results, the annual inflation rate is projected at 10% probability to be within 4.97% - 5.28% at end-year

GRAPH 3.3  
Average Annual Inflation Forecast (by Products)



## 4. DECISIONS OF THE MONETARY POLICY COMMITTEE

The Monetary Policy Committee held three meetings in the accounting period. The Committee maintained the key policy rate at 6% at all three meetings. The Committee made this decision based on the forecasts of economic parameters. In particular, inflation estimates did not undergo significant changes during the period, suggesting that the inflation rate would be low throughout the year and remain within desirable limits in the medium term.

Growth rate of the Georgian economy was projected to decline at more than 4%. Economic

stimulus was fostered by the fiscal policy as a whole, and in the first instance by the emission of treasury bills. During the accounting period positive changes were observable in the banking system, including accumulation of liquidity, growth of deposits, and improved profitability of the banking sector. Signs of economic recovery were also observable in the international markets. In due consideration of these and other factors the Committee held the key policy rate in the accounting period unchanged.

3/5 Leonidze Str., Tbilisi 0105, Georgia  
Tel: 44 24 88; Fax: 44 25 77;  
E-mail: [Info@nbg.ge](mailto:Info@nbg.ge); [www.nbg.ge](http://www.nbg.ge)