INFLATION REPORT

NATIONAL BANK OF GEORGIA





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INFLATION REPORT Q2 2011

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CONTENTS

1.	INTR	ODUCTION	7
2.	CHA	NGES IN CONSUMER PRICES	9
3.	INFL	ATION FACTORS	.13
	3.1	Labor Market	.13
	3.2	Monetary Instruments	.15
	3.3	Interbank Loans	.17
	3.4	Banking Sector	.17
	3.5	Factors Influencing Exchange Rate Dynamic	.21
	3.6	Production And Demand	.23
		3.6.1 Private And Government Consumption	.25
		3.6.2 Investment	.26
		3.6.3 2011 Forecast	.26
	3.7	External Trade	.29
	3.8	Government Operations	.31
4.	INFL	ATION FORECAST	.35
5.	DECI	SIONS OF THE MONETARY POLICY COMMITTEE	.37

BOXES

Box 1. Official International Reserves	27
Box 2. Purchasing Power Parity	30
Box 3. IMF Program	.33

DIAGRAMS

Diagram 2.1 Impact of Food Prices on Inflation	I
Diagram 2.2 Annual and Core Inflation Rates	
(for 266 components of the consumer basket, effective since December 2009)10	i
Diagram 2.3 Core Inflation Excluding Food and Fuels	I
Diagram 2.4 Price Increases with Respect to December 200910	I
Diagram 2.5 Annual Inflation by Production Location11	
Diagram 2.6 Inflation for Tradable and Non-Tradable Goods11	
Diagram 2.7 Changes in Annual Inflation Rates for Products with Various Consumption Durability11	
Diagram 3.1 Average Sectoral Wages of Hired Employees, Q4 2010 (GEL)14	
Diagram 3.2 Labor Productivity, Average Monthly Wages of Hired Employees and Unit Labour Costs	
(Annual percentage change)15	
Diagram 3.3 Lari Liquidity15	
Diagram 3.4 Dynamics of Liquid Assets and Liabilities, Liquidity Ratio, and Liquidity Demand16	,
Diagram 3.5 Dynamics of CD Auctions16	,
Diagram 3.6 Liquidity Withdrawal through CDs, Loan Extension to Commercial Banks and	
Net Liquidity Supply (GEL millions)16	,
Diagram 3.7 Short-Term Interbank Loan Index and Monetary Policy Rate17	
Diagram 3.8 Short-Term Loans in Domestic Currency, GEL millions17	
Diagram 3.9 Short-Term Loans in Foreign Currency, GEL millions18	ì
Diagram 3.10 Long-TermLoansinDomesticCurrency,GELmillions18	i
Diagram 3.11 Long-Term Loans in Foreign Currency, GEL millions	j

Diagram 3.12 Overdue Loans	19
Diagram 3.13 Deposits in Domestic and Foreign Currency	19
Diagram 3.14 Composition of Lari Deposits	20
Diagram 3.15 Composition of Foreign Currency Deposits	20
Diagram 3.16 Interest Rates on Loans and Deposits (%)	20
Diagram 3.17 Lari's Nominate Exchange Rate, 2009-2011	22
Diagram 3.18 Lari's Nominal Effective Exchange Rate Index (2007-2011)	22
Diagram 3.19 NBG's Interventions in the FX Market	22
Diagram 3.20 Dynamics of Georgia's Current Account and Trade Balance	22
Diagram 3.21 FDIs in Georgia	21
Diagram 3.22 Loan and Deposit Dollarization Rates	23
Diagram 3.23 Dynamics of Value-Added Growth in the Leading Economic Sectors (2005 – Q1 2011)	24
Diagram 3.24 Real GDP Growth, 2003-2011 (%)	26
Diagram 3.25 Exports, Imports, Trade Deficit and Trade Turnover (USD thousands)	28
Diagram 3.26 Top Export Commodities in Q2 2010 and Q2 2011 (USD thousands)	30
Diagram 3.27 Dynamics of Budget Expenditures	32
Diagram 3.28 Eurobond Yield and Mid-Swap Spreads	34
Diagram 4.1 Annual Inflation Forecast by Individual Components of the Consumer Basket	35
Diagram 4.2 Inflation Forecast (Econometric Modeling)	36

TABLES

Table 2.1 CPI Inflation by Components (%), Consumer Basket Weights (%),	
and Individual Contributions to Inflation (pps)	12
Table 3.1 2011 Growth of Real Value-Added per Employed in Q1 2011, year-on-year	13
Table 3.2 2011 Growth of Average Wages of Hired Employees in Q1 2011, year-on-year	14
Table 3.3 Sectoral Contributions to Real GDP Growth, Q1 2011 (%)	24
Table 3.4 Consolidated Budget Indicators (GEL millions)	31

INTRODUCTION

According to the National Statistics Office of Georgia (Geostat), at end-June 2011 the annual inflation stood at 10%. The annual inflation was still primarily determined by food prices, with the latter contributing 90% to the overall inflation. It should be pointed out that along with appearance of new agricultural crops in the market, prices for fruits and vegetables decreased. This affected the annual inflation rate, with the latter declining 3.8% in Q2 and settling at 8.5% in July.

In June, the annual domestic and import inflation rates equaled 9.5% and 9.4%, respectively. It should be noted that in the reporting period the inflation of non-tradables fell to 2.2%, while still remaining high for tradable goods (14.3%) due to high food inflation. The core inflation (change in consumer prices excluding food and fuels) further declined to 0.3%. The growth rate of service prices is also low, equaling 1% in June. Such pattern of price changes clearly indicates that the high level of inflation is caused by price increases in the international markets and demand pressure on prices is weak.

Dynamics of main inflation determinants can be described as follows. In Q1 2011, the real economy rose 5.8%. It should be noted that in the last quarters a slowdown in economic growth was manifested. This tendency is likely to be preserved in Q2 as well, pointing to weakening of demand. The real final consumption of households deflated by the CPI grew 5.7%, and the latter rate, tantamount to the real growth of the total economy, indicates the lack of demand pressure on prices.

The real effective exchange rate depreciated 1.6% in Q2 2011, while the nominal effective exchange rate appreciated 3%. In the reporting period a few

factors conditioned appreciation of the lari, including revenues from tourism, money remittances from abroad, higher growth rate of loans denominated in foreign currency compared to loans extended in lari, the US dollar depreciation tendencies and emerged expectations of the lari's appreciation. The lari's appreciation trends pushed import prices downwards.

In Q2 2011, the volume of loans extended by commercial banks increased by GEL 545.6 million equaling GEL 6,974.5 million. The annual growth rate of crediting amounted to 29.5% by end-June 2011 (excluding the exchange rate effect). The amount of loans denominated in the domestic currency rose by GEL 228 million to GEL 1,948.3 million, while foreign currency loans expressed in the US dollars grew by USD 256 million to USD 3,016 million. The growth rates amounted to 27.1% for domestic currency denominated loans. These rates are in conformity with the current forecast of economic growth (5.5%).

The deposit liabilities of the banking system increased by GEL 165.1 million in Q2 2011, reaching GEL 4,929.9 million. By end-June, the annual growth rate of lari deposits equaled 37.6%, while the foreign currency deposits grew 41.5% annually. In the reporting period the non-residents' deposits increased 5.8%, amounting to GEL 587.7 million at end-June.

In the reporting period the total deposit dollarization declined by 2.2 pps to 69.9% at end-June. Similar to total deposits, the dollarization rate for individuals' deposits also decreased, although still remaining high at 86.5%.

The NBG continued to use monetary policy instruments with the view of enhancing efficient liquidity management in the banking sector and promoting revitalization of the latter. The average amount of funds placed on commercial banks' corresponding accounts was approximately equal to the required level of reserves in Q2. This fact points to an increase in efficiency of liquidity management in the banking sector. In the reporting period demand for the Certificates of Deposit considerably exceeded issuance volume, resulting in a GEL 445 million CD placement throughout the quarter.

In May and June 2011, tendencies of economic growth slowdown were manifested, further reducing demand pressure on prices. Moreover, in June consumer prices dropped at a bigger-than-expected rate, implying downward revisions of the target indicators and displaying the possibility that the inflation rate will fall below the target level early in 2012. Thus, the MPC decided to start monetary policy loosening, cutting the policy rate by 25 basis points.

In line with the NBG's inflation forecast, further decline in annual inflation is to follow. By the current projections, the annual inflation will fall in the range of 4.2%-4.8% by end-Q3, while settling at 4.3%-5.5% at end-year.

2. CHANGES IN CONSUMER PRICES

According to the National Statistics Office of Georgia (Geostat), in Q2 2011 the general level of consumer prices fell 3.8% quarter-on-quarter. The analogous figure in 2009 amounted to -0.4%. As a result, by end-Q2 2011 the annual inflation decreased to 10.0% from 13.9% in Q1 2011. The annual average inflation grew by 2.0 pps in the reporting period, settling at 11.3%.

The quarterly inflation was mainly affected by changes in food prices. In particular, fruits and vegetables from new harvest drove prices down. In the reporting period prices also decreased in the education sector. With respect to the previous quarter, prices went up for beef and porc meat, corn and wheat flour.

In quarterly terms the commodity group of food and non-alcoholic beverages saw price increases for all its categories, at the exception of "meat and meat products" and "other food products".

In the reporting period, a quarter-on-quarter decrease in consumer prices was largely determined by a reduction in prices on communication. Prices also decreased for "clothing and footwear" group items.

Similarly to the above categories, prices decreased for other commodity groups, albeit at a lower rate. Conversely, prices grew for "healthcare" and "hotels, cafes, and restaurants". The general price level in transport also increased, affected by price increases for petrol and diesel.

Ultimately, in Q2 2011 the prices in the consumer basket moved down 3.8%.

As it was already mentioned, in Q2 2011 the annual inflation rate equaled 10.0%. Prices went up for diesel and petrol, increasing 24.4% and 18.7%, respectively. The annual inflation was largely fueled by price gains in the "food and non-alcoholic beverages" category. The increases in food prices accounted for 90% in the overall inflation.

DIAGRAM 2.1 Impact of Food Prices on Inflation



Inflation Food inflation

In June 2011 year-on-year price increases were registered for the following food products: "fruits and grapes" (34.4%), "oils and fats" (29.3%), "meat and meat products" (26.4%), and "milk, cheese, and eggs" (26.2%). Price increases were also notable for "bread and bakery" (23.0%), "other food products" (19.6%), "vegetables and watermelons" (16.6%), and "sugar and confectionery" (12.5%). Prices for "alcoholic beverages, tobacco" grew 9.2% in annual terms.

By end-June, the annual price increases were registered in "hotels, cafes, and restaurants" (10.0%), "transport" (8.1%), "other goods and services" (6.6%), and "furnishings and household appliances" (3.5%). "Housing, water, electricity, gas, and other fuels", "recreation and culture", and "clothing and footwear"

DIAGRAM 2.2 Price Increases Relative to December 2009



DIAGRAM 2.3

Annual and Core Inflation Rates (for 266 components of the consumer basket, effective since December 2009)¹



DIAGRAM 2.4

Core Inflation Excluding Food and Fuels



posted price increases at annual 1.5%, 1.1%, and 1.4%, respectively.

In June, an annual reduction in prices was posted in three commodity groups. Prices for "communication" services fell at significant 13.1%. Relatively lower price decreases were registered for "education" and "healthcare" groups (2.0% and 0.9%, respectively).

In Q2 2011 the growth rates of core inflation indicators slowed down. In particular, the annual core inflation rates amounted to 8.7% and 5.9% for products within two and one standard deviations, respectively.

It should also be pointed out that the increase in the price level of the consumption basket excluding food and fuels was relatively low, falling to 0.3% at the end of the reporting period. This pointed to weak demand pressure on prices.

The annual import inflation showed upward tendencies in the recent period, owing to price increases in the international markets. In the reporting period the price growth rates of imported goods relatively slowed down, amounting to 9.4% in June. The domestic inflation equaled 9.5%. In the same period the price level rose 14.3% for tradable goods and 2.2% for non-tradable goods.

** For products within two standard deviations.

^{1*} For products within one standard deviation.

The analysis of inflation by consumption durability shows that in Q2 2011 monthly price decreases for non-durable consumer goods amounted to 5.2%. Analogously, prices dropped for durable and semidurable goods, albeit at lower rates (2.0% and 0.8%, respectively). Prices for services fell 0.3%.

The annual inflation rates for products with different consumption durable equaled 14.6% for non-durable goods, 1.7% for semi-durable goods, and -3.5% for durable goods. Prices for services in June 2011 grew 1.0% year-on-year.

DIAGRAM 2.5





DIAGRAM 2.6

Inflation for Tradable and Non-Tradable Goods



DIAGRAM 2.7

Changes in Annual Inflation Rates for Products with Various Consumption Durability



- Semi-durable goods
 - Services

TABLE 2.1

CPI Inflation by Components (%), Consumer Basket Weights (%), and Individual Contributions to Inflation (pps)

	December 2009 weights	Jun11/	Jun11/Mar11		Jun11/Jun10		Jul10-Jun11/Jul09-Jun10	
		Inflation	Impact	Inflation	Impact	Inflation	Impact	
Total	100.0%	-3.8%	-3.8%	10.0%	10.0%	11.3%	11.3%	
Food and Nonalcoholic beverages	40.1%	-8.0%	-3.7%	22.2%	8.9%	22.8%	9.2%	
Food	40.5%	-8.3%	-3.9%	22.6%	9.1%	23.2%	9.4%	
Bread and bakery	11.7%	-0.4%	0.0%	23.0%	2.7%	19.4%	2.3%	
Meat and meat products	6.8%	8.2%	0.6%	26.4%	1.9%	14.5%	1.0%	
Fish products	1.3%	-3.3%	0.0%	3.9%	0.0%	9.1%	0.1%	
Milk, cheese, and eggs	4.8%	-10.8%	-0.5%	26.2%	1.0%	16.5%	0.7%	
Oils and fats	3.5%	-0.5%	0.0%	29.3%	1.1%	30.1%	1.1%	
Fruits, grapes	1.8%	-17.4%	-0.5%	34.3%	0.7%	46.1%	0.8%	
Vegetables, melons, potatoes and other tubers	7.8%	-27.4%	-3.1%	16.6%	1.3%	33.7%	2.8%	
Sugar, jams, honey, syrups, chocolate, pastry	2.3%	-9.9%	-0.3%	12.5%	0.3%	15.1%	0.4%	
Other food products	0.4%	0.2%	0.0%	19.6%	0.1%	13.5%	0.1%	
Nonalcoholic beverages	1.3%	1.8%	0.0%	10.6%	0.1%	10.0%	0.1%	
Alcoholic beverages, tobacco	2.9%	-0.2%	0.0%	9.2%	0.3%	9.8%	0.3%	
Clothing and footwear	4.3%	-1.5%	-0.1%	1.4%	0.1%	-1.0%	0.0%	
Housing, water, electricity, gas and other fuels	13.9%	0.1%	0.0%	1.5%	0.2%	2.3%	0.3%	
Furnishings, household equipment, routine house maintenance	3.6%	-0.3%	0.0%	3.5%	0.1%	3.7%	0.1%	
Healthcare	9.0%	1.1%	0.1%	-0.9%	-0.1%	2.9%	0.3%	
Transport	10.4%	0.8%	0.1%	8.1%	0.9%	7.4%	0.8%	
Communication	4.2%	-6.3%	-0.2%	-13.1%	-0.5%	-7.2%	-0.3%	
Recreation and Culture	2.2%	0.9%	0.0%	1.1%	0.0%	-0.2%	0.0%	
Education	5.2%	-0.8%	0.0%	-2.0%	-0.1%	6.7%	0.3%	
Hotels, cafes and restaurants	1.8%	1.1%	0.0%	10.0%	0.2%	7.2%	0.1%	
Miscellaneous goods and services	2.5%	0.0%	0.0%	6.6%	0.2%	8.1%	0.2%	
Non-durable goods	67.9%	-5.2%	-3.8%	14.6%	10.0%	15.9%	10.8%	
Semi-durable goods	5.8%	-0.8%	0.0%	1.7%	0.1%	-0.3%	0.0%	
Durable goods	3.4%	-2.0%	-0.1%	-3.5%	-0.1%	2.9%	0.1%	
Services	22.8%	-0.3%	-0.1%	1.0%	0.2%	2.4%	0.5%	

3. Inflation Factors

3.1 LABOR MARKET

The Geostat data for Q1 2011 shows that the labor productivity of employed in the economy grew at annual 3%. The average wages of hired employees rose at significant 11.8% in the same period. Thus, the annual growth of labor productivity slowed down considerably, compared to the preceding quarters, while the growth rate of wages for hired employees accelerated.

In Q1 2011 significant annual growth rates of real value-added per employed were registered in "financial intermediation", "hotels and restaurants", "real estate operations". Positive growth rates were also posted by "education", "transport and communication", and "education" sectors.

On the other hand, in annual terms an essential decline in labor productivity occurred in construction, trade, industry, public administration, and agriculture.

According to the Geostat's Enterprise and Wage Statistics surveys, in Q1 2011 the average monthly wages amounted to GEL 631.3 million, up 11.8% yearon-year. In the reporting period an absolute majority of economic sectors posted positive wage growth rates.

Sectoral analysis shows that the highest growth of salaries was again registered in "fishing, fishery", amounting to 61% year-on-year. Significant growth rates were posted by "real estate operations" (43%), "hotels and restaurants" (35%), "community, social and personal services" (26%), and "health and social work assistance" (23%). The nominal wages in the mining and trade sectors rose at annual 16-17%. Relatively moderate growth rates were manifested in construction, "transport and communication", and education sectors (5-8%).

In Q1 2011 a significant annual decline in nominal wages of hired employees was registered only in the agriculture sector (11%).

TABLE 3.1

2011 Growth of Real Value-Added per Employed in Q1 2011, year-on-year

	Value-Added Index
Agriculture and Processing of Agricultural Products	99.4
Industry	93.8
Construction	93.5
Trade	93.6
Hotels and Restaurants	122.9
Transport, Communication	105.8
Financial Intermediation	132.7
Real Estate, Renting and Business Activities	117.8
Public Administration, Defense	98.8
Education	109.8
Health and Social Work	105.5
Total	103.0

TABLE 3.2.

2011 Growth of Average Wages of Hired Employees in Q1 2011, year-on-year

	Nominal Wage Index
Agriculture, hunting and forestry	88.5
Fishing, fishery	161.0
Mining and quarrying	116.8
Manufacturing	117.1
Production and distribution of electricity, gas, and water	99.6
Construction	108.1
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	116.5
Hotels and restaurants	135.4
Transport and communication	106.3
Financial intermediation	100.1
Real estate, renting and business activities	143.5
Public administration	100.3
Education	104.8
Health and social work services	122.7
Other community, social and personal service activities	126.5
Total	111.8

DIAGRAM 3.1

Average Sectoral Wages of Hired Employees, Q1 2011 (GEL)



In Q1 2011 there was a significant inequality in average wages across different sectors. The highest average monthly wages were traditionally in "financial intermediation" (GEL 1,316, up 0.3% quarter-on-quarter), and "public administration" (GEL 929, down 13.6% quarter-on-quarter). The average wages in these two sectors exceeded the average wage level in the whole economy 2.1 and 1.5 times, respectively. The lowest average wages of hired employees remained in "education" (GEL 311) and "agriculture" (GEL 336), constituting approximately half of the average wage level in the economy. In the reporting period the difference between the lowest and the highest sectoral wages practically did not change in annual terms, while widening 3% with respect to the preceding quarter.

The value-added produced in the country per employed in 2010 and in the first half of 2011 has been growing. However, in the last quarters the growth rate of labor productivity relatively slowed down.

In parallel, the growth rate of average wages considerably increased. The respective growth rates in the last two quarters of 2010 equaled 7.2% and 5.5%, further rising to 11.8% in Q1 2011.

As a result, in Q1 2011 the ratio of average wages to labor productivity, or unit labor costs², grew significantly at 8.5%, mainly fueled by cost increases in industry, trade, and healthcare. Along with lowered labor productivity in industry and trade, the average wages in these sectors significantly increased in annual terms. The latter was due to the base effect – in Q1 2010 both sectors experienced declines in average wages.

The high growth rate of unit labor costs in the health sector was caused by a significant reduction in

² Same as wage (personnel) costs as a percentage of real valueadded (GDP).

hired employees and a concurrent increase in average wages (not accompanied with a rise in labor productivity). However, the share of health sector in the unit labor costs for the whole economy is relatively small.

3.2. MONETARY INSTRUMENTS

In Q2 2011 the NBG used available monetary policy instruments with the view of reducing an expected level of inflation and inflationary expectations. The NBG's primary instruments represent open market operations, reserve requirements, and permanent instruments.

In the reporting quarter the NBG actively used monetary instruments for both supply and withdrawal of liquidity. Supply of short-term liquidity was performed by means of refinancing loans, targeted at regulation of interbank short-term interest rates. Changes in the NBG's monetary policy rate are initially reflected in the interbank short-term interest rate, while being further transmitted to market interest rates. During the reporting period the NBG's policy rate did not change, remaining at the 8% level per annum. In the given period withdrawal of medium-term excess liquidity was performed through Certificates of Deposits.

Liquidity demand of the banking sector was determined by the average level of required reserves. The preliminary estimates of banks' liquidity situation are made by means of forecasts, identifying volume of short-term liquidity needed by the banking sector to comply with the reserve requirements. One-week refinancing loans allow commercial banks to efficiently manage short-term liquidity and obtain needed funds through refinancing loan auctions held usually once a

DIAGRAM 3.2

Labor Productivity, Average Monthly Wages of Hired Employees and Unit Labour Costs (annual percentage change)







week. It is remarkable that commercial banks started to actively use this instrument after the second quarter of 2010, which was mainly related to introduction of permanent refinancing loans. In the reporting period 13 refinancing loan auctions were held and the amount of liquidity supply at each of them oscillated between GEL 35-190 million averaging GEL 116.4 million. In Q2 the total amount of contracted refinancing loans fell behind the Q1 level by 11%. In addition, during the reporting period 5 standing refinancing loans

DIAGRAM 3.4 Dynamics of CD Auctions



DIAGRAM 3.5 Dynamics of Liquid Assets and Liabilities, Liquidity Ratio, and Liquidity Demand



were extended in the total amount of GEL 58.5 million. The weighted average interest rate on refinancing loans equaled 8.2%, or slightly lower than the 8% monetary policy rate, effective since February 2011. In the reporting period the ratio of net liquidity withdrawal to reserve money averaged 19.4%. As of June 30, 2011 the net liquidity withdrawal stood at GEL 285 million.

In Q2 the average amount of funds on the corresponding accounts amounted to GEL 206.8 million, slightly exceeding the required level of GEL 198.7 million. The average volume of funds on the corresponding accounts in Q2 2010 stood at GEL 172.8 million, while the required level was GEL 116.6 million. Narrowing of this different occurred starting from Q2 2010 as a result of increased activity in the interbank money market, a rise in the level of lari's required reserves, and introduction of perfmanent refinancing loans, which enhanced efficiency of commercial banks' liquidity management.

In Q2 2011 the NBG continued withdrawal of medium-term liquidity from the banking system by means of the 3-month CDs. Meanwhile, in April the NBG issued CDs with 6-month maturity, supplied to the market via auctions, as in the case of the 3-month CDs. In the reporting period, the total placement of CDs equaled GEL 445 million, with demand exceeding supply two times. The face value of 3-month CDs placed equaled GEL 210 million, while that of 6-month CDs – GEL 235 million. With respect to the preceding quarter, the issuance of CDs fell 2.2%, whereas demand contracted 21.8%.

DIAGRAM 3.6

Liquidity Withdrawal through CDs, Loan Extension to Commercial Banks and Net Liquidity Supply (GEL millions)



3.3. INTERBANK LOANS

In Q2 2011 the volume of extended interbank loans grew in quarterly terms, largely fueled by an increase in the dollar denominated loans. The loans in lari decreased 3.5% to GEL 1.57 billion, while the dollar loans almost doubled to USD 318.2 million. Similar to the preceding period, the volume of euro-denominated loans increased again, posting a 51% growth rate.

The market was still dominated by the overnight loans; the share of lari denominated overnight loans in the total lari loans slightly increased to equal 77.1%. The same share for dollar denominated loans dropped to 71.1% from 74.9%.

3.4. BANKING SECTOR

By end-Q2 2011 the volume of credit portfolio in the banking sector totaled GEL 6,974.5 million, or GEL 545.6 million more than at end-March. In annual terms, the credit portfolio grew 29.5% (excluding the exchange rate effect⁴), where the lari loans increased 27.1% and the foreign currency loans rose 30.1%. A remarkable annual growth was registered for consumer loans denominated in lari (55.8%), with the share of long-term consumer loans now standing at 68.8%. It should be noted that a considerable growth of this type of loans occurred in the reporting period, which was probably due to a record reduction in interest rates on lari denominated consumer loans with 1-5 year maturity from 26% to 19% (concurrently, the interest rates on foreign currency denominated consumer loans increased for any maturity period).

The total portfolio dollarization in nominal terms equaled 72.1% at the end of the reporting period. This is higher than the corresponding level in 2010 by

DIAGRAM 3.7

Short-Term Interbank Loan index and Monetary Policy Rate



DIAGRAM 3.8

Short-Term Loans in Domestic Currency, GEL millions



Trade and services (legal entities)

Overdrafts on clients' current accounts

Other loans to legal entities

⁴ In this section percentage changes in volumes are expressed excluding the exchange rate effect, unless the volumes are denominated only in lari.



DIAGRAM 3.9 Short-Term Loans in Foreign Currency, GEL millions

DIAGRAM 3.10

Long-Term Loans in Domestic Currency, GEL millions



- Mining and quarrying industry (legal entities)
- Construction (legal entities) Trade and services (legal entities)

Loans to individuals

0.5 pps, excluding the exchange rate effect, although a significant decline was registered for loans to individuals (8.5 pps).

In Q2 2011 the overdue loans declined by GEL 17.8 million to GEL 170.7 million (in June 2010 the analogous figure equaled GEL 201.1 million). The reduction in lari denominated overdue loans amounted to GEL 13.3 million, while the overall share of overdue loans in total loans stood at 2.4% in nominal terms. It should also be pointed out that 70.5% of total overdue loans are denominated in foreign currency. In the reporting period, the volume of non-performing loans denominated in lari declined 10.3% to GEL 112.5 million, while dropping 2.6% for foreign currency loans to equal GEL 601.5 million. It is remarkable that in Q2 banks wrote down loans in the amount of GEL 39.4 million, where the lari loans accounted for 55.8%. As of June 2011, the share of NPLs in the credit portfolio constituted 10.6%.

DIAGRAM 3.11 Long-Term Loans in Foreign Currency, GEL millions



Trade and services (legal entities)

Similar to Q1, the downtrend in market interest rates was sustained in the banking sector. One of the reasons was presumably related to increased competition in the sector. The interest rate fell by 1.1 pps in Q2, amounting to annual 16.9%. In contrast to consumer loans, the interest rates for lari denominated loans grew by 0.2 pps, while declining by 1.6 pps for foreign currency loans. It is notable that the market interest rate on the latter (13.9%) reached a historical minimum.

The deposit liabilities of the banking sector in Q2 2011 grew by GEL 165.2 million in nominal terms, amounting to GEL 4,929.9 million. Compared to June 2010, the volume of deposits rose 40.4%.

DIAGRAM 3.13

Deposits in Domestic and Foreign Currency



The above-mentioned growth in the reporting period was mainly due to an increase in lari denominated deposits: the latter rose by GEL 153.9 million to GEL 1,482.9 million. The foreign currency deposits grew by USD 54.4 million to equal GEL 3,447 million, largely fueled by a 7.3% increase in time deposits. The overall deposit dollarization fell 2.2 pps to 69.9% at end-June.

The individuals' deposits contributed 58.3% to the overall deposit growth and 18.3% to the growth of lari deposits. The volume of individuals' deposits current-





DIAGRAM 3.14 Composition of Lari Deposits



DIAGRAM 3.15 Composition of Foreign Currency Deposits



DIAGRAM 3.16

Interest Rates on Loans and Deposits (%)



ly stands at GEL 2,422 million. The lari denominated time deposits also grew from GEL 410 million to GEL 500 million.

In the reporting period the non-residents' deposits rose 5.8%, totaling GEL 587.7 million by end-June. The growth was conditioned by an increase in foreign currency denominated deposits from GEL 537.2 million to GEL 561.1 million. The share of non-residents' deposits in total deposits grew by 1.1 pps to 11.9%.

Similar to overall deposits, the dollarization of individuals' deposits also declined from 87.5% to 86.5%. Besides, at the end of the reporting period the foreign currency deposits accounted for 83.5% of total time deposits, pointing to a higher trust in foreign currency relative to the lari, both on the part of depositors and banks.

In the reporting period the interest rates on attracted deposits fell by 0.2 pps to 8.6%. The interest rates declined for both lari denominated deposits (from 11.9% to 11.7%) and foreign currency deposits (from 8.2% to 8.1%). It should also be pointed out that the interest rate differential for the domestic and foreign currency remains large, equaling 3.6 pps. This fact should probably provide incentives for partial deposit dedollarization.

In the reporting period the interest rate on legal persons' deposits denominated in lari declined by 0.5% to 11.2%, while the interest on individuals' deposits (in lari) rose from 12.2% to 12.3%.

Comparison of interest rates on non-banking deposits in year-on-year terms reveals a 2.2 pp increase for domestic currency deposits and a 0.1 pp increase for foreign currency deposits. Overall, the market weighted interest rate rose by 0.4 pps. In Q2 2011 the banking sector's profit totaled GEL 75.2 million, up GEL 53.2 million year-on-year. Relative to March 2011, the ROE rose by 3.3 pps to 13.3%, while the ROA grew from 1.6% to 2.2%. In the reporting period the regulatory capital adequacy ratio fell from 17.3% to 16.5%.

3.5. FACTORS INFLUENCING EXCHANGE RATE DYNAMIC

As it is well-known, the primary goal of the NBG consists in price stability. Therefore, it is important to monitor and thoroughly analyze all factors affecting price stability. It is generally agreed that in small open economies there exists a strong relation between exchange rate and inflation. On the one hand, the exchange rate determines prices on imported goods with the latter having a large share in the Georgian consumer basket, while, on the other hand, a variation in the exchange rate, by means of changing terms of trade, causes demand shift from the domestic market to imports and vice versa. The exchange rate risk is of great importance for the banking sector. In a partially dollarized economy borrowers are not fully hedged, thus being exposed to currency induced credit risk⁴.

In Q2 2011 the lari's exchange rate tended upwards, with slight fluctuations. The lari's nominal exchange rate against the US dollar averaged 1.6654, appreciating 2.3% (See: Diagram 3.17). The lari's exchange rate against the euro did not change, averaging 2.3974. An initial depreciation occurred with respect to the pound sterling, followed by a gradual appreciation, resulting in a 2.5% appreciation in the GBP/GEL exchange rate, ultimately settling at 2.6726. In the reporting period the lari's nominal effective exchange rates cumulatively appreciated 3.0% while the real effective exchange rate depreciated 1.6%. The REER's appreciation in contrast to NEER was largely due to a considerable decline in the level of consumer prices in Georgia relative to the trading partners.

The lari's exchange rate against the US dollar is determined through interaction of demand and supply in the FX market. In general, demand for foreign currency is driven by imports, with the latter being financed through exports and foreign capital inflows. In Q2 2011 the lari's exchange rate appreciation was conditioned by a number of factors. Those included: inflows of FDI, revenues from tourism, money remittances from abroad, a higher growth rate of foreign currency bank loans relative to that of lari denominated loans. Besides, in the reporting period the depreciating tendencies of the US dollar in the international markets were maintained, creating expectations of lari's appreciation.

In Q1 2011 the foreign direct investments to Georgia equaled USD 173.6 million, exceeding the corresponding figure of 2010 2.3 times. The investment inflows in turn led to an increase in supply of foreign currency. Demand for the domestic currency was boosted by tourism revenues, driving the exchange rate upwards. In Q2 2011, the volume of money remittances from abroad also increased. During April-June the remittances from abroad equaled USD 282.1 million, up 26.1% year-on-year and 24.0% quarteron-quarter. In the same period the remittances from Georgia to abroad stood at USD 19.9 million, up 2.3% year-on-year. In the reporting period the growth rate of foreign currency loans extended by commercial banks exceeded that of lari denominated loans. In

⁴ See: 2009 Financial Stability Report.

140.0 130.0 120.0 110.0 100.0 90.0 80.0 70.0 03.2010 09.2010 12.2010 03.2011 06.2011 06.2009 06.2010 09.2009 12.2009 EUR - USD - GBP

DIAGRAM 3.17 Lari's Nominate Exchange Rate, 2009-2011

DIAGRAM 3.18

Lari's Nominal Effective Exchange Rate Index (2007-2011)



DIAGRAM 3.19



DIAGRAM 3.20. Dynamics of Georgia's Current Account and Trade Balances



April-June 2011 the increase in foreign currency loans equaled USD 255.8 million, while the volume of lari denominated loans amounted to GEL 227.9 million. Such a proportion of extended loans by the banking sector pushed the lari's exchange rate upwards relative to the US dollar. Appreciation expectations of the lari were strengthened by the US dollar's depreciation tendencies with respect to the euro, influencing demand for foreign currency.

It should also be noted that the FX auctions introduced by the NBG play an important role in smoothing exchange rate fluctuations caused by temporary imbalances between supply and demand. In Q2 2011, the net purchases of foreign currency by the NBG at the FX auctions equaled USD 35 million.

22 NATIONAL BANK OF GEORGIA

Important determinants of demand for foreign currency also include dollarization level of the economy and speculative capital brought about by certain expectations in the market. In Q2 2011, the downtrend in the dollar's exchange rate against the euro also influenced demand for lari.

In the reporting period both loan and deposit dollarization rates decreased, shedding 1.9 pps and 1.2 pps, respectively, in quarter-on-quarter terms. High level of deposit dollarization is in turn conditioned by economic agents' expectations with respect to the lari's possible depreciation in the future. A general psychological factor related to political risks should be also mentioned, conducing to population's mistrust of the lari and giving the US dollar a status of a risk-free currency.

3.6. PRODUCTION AND DEMAND

In Q1 2011 the real gross domestic product manifested a 5.8% increase in annual terms. The nominal GDP grew 20%. Accordingly, the GDP deflator stood at 13.4%.

The largest contribution to the quarterly real GDP was made by the value-added created in the manufacturing, transport, and financial supervision sectors. A considerable impact on the real GDP growth was also produced by "production and distribution of electricity, natural gas, and water", "trade", "communication", and "real estate operations, renting and business activities".

Relatively smaller contributions to the real GDP were made by "hotels and restaurants", "public administration", and "education". A real decline in valueadded was registered in "processing of products by households", and "construction". Changes in valueadded produced in other sectors insignificantly affected the annual GDP growth.



DIAGRAM 3.22 Loan and Deposit Dollarization Rates



Loan dollarization

Deposit dollarization

TABLE 3.3

Sectoral Contributions to Real GDP Growth, Q1 2011 (%)

	Nominal weights (Q1 2010)	Real growth	Contribution
	2.5	2.8	2.4
Agriculture, hunting and forestry; fishing	7.9%	1.7%	0.1%
Mining and quarrying	0.8%	1.6%	0.0%
Manufacturing	8.3%	8.6%	0.7%
Electricity, gas and water supply	3.1%	12.4%	0.4%
Processing of products by households	2.2%	-5.5%	-0.1%
Construction	3.9%	-3.3%	-0.1%
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	14.3%	2.5%	0.4%
Hotels and restaurants	2.0%	8.6%	0.2%
Transport	7.4%	9.1%	0.7%
Communication	3.5%	7.6%	0.3%
Financial intermediation	2.7%	24.0%	0.6%
Real estate, renting and business activities	2.9%	9.5%	0.3%
Imputed rent of own occupied dwellings	3.3%	2.8%	0.1%
Public administration	9.7%	1.9%	0.2%
Education	5.0%	3.8%	0.2%
Health and social work	6.7%	1.1%	0.1%
Other community, social and personal service activities	3.8%	1.6%	0.1%
Private households employing domestic staff and undifferentiated production activities of households for own use	0.1%	16.8%	0.0%
FISIM adjustment	-1.4%	27.4%	-0.4%
GDP at basic prices	86.2%	4.2%	
Taxes on products	14.4%	16.6%	2.4%
Subsidies on products	0.6%	31.4%	-0.2%
GDP at market prices	100.0%	5.8%	5.8%

In the post-crisis period (2010-2011) only the "manufacturing industry" displayed high and stable growth rates. Despite high growth rates posted in the recent quarter, other sectors did not manifest sustainable growth tendencies.

In the last year moderate growth tendencies are registered in "financial intermediation", "education", and "public administration". In the reporting period the value-added created in these sectors, adjusted for seasonality, was clearly on the uptrend. The same analysis shows that the value-added produced in construction has a significant tendency to contract.

During the recent years, the real growth in the largest economic sectors displayed certain variations. In 2010 the majority of these sectors expanded significantly (See: Diagram 3.23). However, in Q1 2011 the growth rates deccelerated, largely owing to monetary policy tightening and slow employment growth.

3.6.1. PRIVATE AND GOVERNMENT CONSUMPTION

As it was already mentioned, in Q1 2011 the nominal GDP grew 20.0% in annual terms. Adjusting for seasonality, the same indicator increased 5.2% quarter-on-quarter.

In the reporting period such high growth of the nominal GDP was due to expansion in every category of use. In particular, in Q1 the annual growth rates stood at 16% for final consumption expenditures, 80% for gross capital formation, and 31% for exports and imports.

The largest component of total final consumption, final household consumption, posted a significant growth rate (20% year-on-year) in Q1 2011. Excluding

DIAGRAM 3.23 Dynamics of Value-Added Growth in the Leading Economic Sectors (2005 – Q1 2011)



the consumer price effect, the real final consumption of households⁵ grew at approximately 5.7% in annual terms.

Relative to Q1 2010, the public administration expenditures remained practically unchanged, implying that in real terms (adjusting for growth of consumer prices) the government expenditures manifested annual contraction.

Overall, in Q1 2011 the real growth of consumption expenditures considerably fell behind the real GDP growth (5.8%). The real growth of final consumption expenditures, adjusted for the CPI, amounted to only 2.2%.

Relative to Q1 2010, the exports and imports of goods and services grew almost by one-third (31%). However, it should be noted that such expansion of foreign trade was largely due to annual price increases for tradable goods.

⁵ The share of households in the total final consumption expenditures equaled 82.3%.

3.6.2. INVESTMENTS

In Q1 2011 the annual growth of investment in fixed capital amounted to 81.3%. The impact of domestic and foreign investment on this growth was approximately equal. In the reporting period the "changes in enterprise inventories" soared growing 70% per annum, but still slightly falling behind the pre-crisis nominal level.

Overall, in Q1 2011 the "gross capital formation" grew 79.5% in nominal terms. Despite this fact the volume of "gross capital formation" in Q1 2011 was still lower in nominal terms than its pre-crisis level. At the same time, a strong upswing in investments relative to 2009-2010 points to a stable growth of production capacity in the economy.



DIAGRAM 3.24 Real GDP Growth, 2003-2011⁶ (%)

3.6.3. 2011 FORECAST

It is remarkable that the 5.8% real GDP forecast projected in Q1 2011 was equal to the actual growth rate released by the Geostat in June.

Based on analysis of the existing sectoral and aggregated data, the real GDP is projected to reach 3.5% in Q2 2011. This forecast, along with sectoral data analysis, takes into account VAT taxpayers' turnover in Q2 (a 17.5% growth year-on-year) as well as the dynamics of PPI and CPI.

The primary contributions to the 3.5% real GDP growth in Q2 2011 are expected to be produced by trade (1.3 pps), manufacturing (0.8%), financial intermediation (0.5%), transport (0.4%), agriculture (0.2%), and communication (0.2%). Due to quite large expansion positive impact on GDP will be made by "hotels and restaurants" and "real estate operations, renting and business activities".

In terms of categories of use, in Q2 2011 the nominal GDP is expected to increase at 14%, largely fueled by "final consumption" (approx. 12% growth) conditioned in turn by expansion of nominal household expenditures. Overall, in 2011 the real GDP forecast stands at 5.5%.

⁶ NBG's projections are used for the 2011 growth rate.

BOX 1. NEW KEYNESIAN MODEL OF THE GEORGIAN ECONOMY

In June 2010, the IMF technical mission started a project with the NBG with the view to improve macroeconomic modeling. The main objective of the mission was to create a macroeconomic model of the Georgian economy and use the latter in monetary policy-making.

During one-year implementation of the project the following activities were performed: familiarization with the theoretical fundamentals of dynamic stochastic modeling, preparation of the database for modeling purposes, design of a model taking into account peculiarities of the Georgian economy, and development of skills for practical use of the model.

This type of models represent a new generation based on the New Keynesian approach, which has recently found an extensive use in different central banks. The difference of the New Keynesian approach from the preceding models consists in the underlying assumptions. The following assumptions are included in the New Keynesian model:

There exists monopolistic competition – prices of goods and means of production are determined by private economic agents pursuing profit maximization and not being price-takers;

A second assumption is related to nominal rigidity. In particular, firms are limited in terms of frequently changing prices for goods and services, or frequent price changes are related to certain costs;

A third assumption rejects short-term neutrality of monetary policy. The assumption is based on the existence of interest rate transmission mechanism, implying that a change of a short-term nominal interest rate by a central bank does not cause a commensurate change in expected inflation and, therefore, affects the real interest rate. A change in the latter in turn lead to changes in consumption and investments, ultimately affecting output and employment.

The model, on the one hand, has desired empirical properties and, on the other hand, uses a dynamic stochastic general equilibrium (DSGE) approach, taking into account macroeconomic fundamentals and market expectations, which make the model futureoriented and provides for observing monetary policy experiments. The model equations are structural and each of them has economic meaning.

This kind of structural models are important, since they lay the foundation for analyzing different economic spheres and studying their interdependence. In addition, the structure of such a model allows researchers to use various economic concepts in forecasting and to compare results obtained under different assumptions. It also helps central bank staff to formulate their opinions, judgments, and forecasts in a structural way and to incorporate them in the model.

The importance of this type of macroeconomic models is particularly high for central banks using inflation targeting, since implementation of successful monetary policy necessarily requires communication with public in order to provide well-founded explanation of monetary policy decisions with the view to form adequate expectations for obtaining desired results.

The main economic part of the model consists of the following equations:

I. Aggregate demand equation which relates real aggregate output gap to past and expected values, real interest rate, and real exchange rate:

$$ygap_{t} = \beta_{ld} ygap_{t+1} + \beta_{lag} ygap_{t-1} - \beta_{RR} RRgap_{t-1} + \beta_{zgap} zgap_{t-1} + \beta_{y}^{ROW} ygap_{t}^{ROW} + \varepsilon_{ygap_{t}}$$

II. Phillips equation which describes price formation and shows how inflation is related to past and expected inflation, exchange rate, and output gap:

$$\pi_{t} = \alpha_{\pi ld} \pi 4_{t+4} + (1 - \alpha_{\pi ld}) \pi 4_{t-1}$$
$$+ \alpha_{ygap} ygap_{t-1} + \alpha_{z} (z_{t} - z_{t-1})$$
$$+ \alpha_{0} \pi RPoil_{t} + \alpha_{1} \pi RPoil_{t-1} + \varepsilon_{\pi t}$$

III. Taylor Rule expresses the monetary policy reaction function and represents a rule defining a monetary policy rate as a function of output gap and expected inflation:

$$\begin{split} i_t^{NBG} &= \gamma_{lag} i_{t-1}^{NBG} \\ &+ (1 - \gamma_{lag}) \left(RR_t^* + \pi 4_t - spr_t + \gamma_{\pi} \left[\pi 4_{t+4} - \pi^*_{t+4} \right] \\ &+ \gamma_{ygap} ygap_t + \gamma_{fx} dfx_t \right) + \varepsilon_{RS} \end{split}$$

IV. Uncovered interest rate parity which relates expected dynamics of exchange rate to interest rate differential and country risk premium:

$$z_t = \delta_z z_{t+1} + (1 - \delta_z) z_{t-1} - (RR_t - RRdep_t^{ROW} - \rho_t^*)/4 + \varepsilon_{z_t}$$

where y is GDP, RR – real interest rate, *z* – real exchange rate; π – annualized quarterly change in inflation, π 4 – 4-quarter CPI change, π RPoil – oil price inflation. i ^{NBG} – NBG's refinancing rate, RR* – equilibrium real interest rate level, spr – difference between a short-term nominal interest rate and the NBG's refinancing rate, dfx – nominal depreciation, RRdep, ^{ROW} – offshore-based real interest rate, ρ^* – equilibrium risk premium level. ϵ represents shocks related to relevant variables. α , β , γ , δ are coefficients determined through calibrations and estimations.

Apart from the Georgia economy the model also includes the world related to Georgian through trade relationships. The inclusion of the external sector into the model aims at studying the impact of global economic processes on the Georgian economy.

By means of using this model the NBG will improve macroeconomic modeling and forecasting, which will enhance more efficient and comprehensive formulation of monetary policy. In addition to general forecasting, the model also allows for review and analysis of baseline and alternative scenarios, examination of an impact of different exogenous and endogenous shocks on the model results, analysis of various risks, etc. It should also be pointed out that the model structure provides for its permanent updating and improvement.

3.7. EXTERNAL TRADE

In Q2 2011 the external trade turnover totaled USD 2,214.2 million, up 39.3% year-on-year. The registered exports and imports of goods equaled USD 572.3 million and USD 1,641.9 million, up 51.0% and 35.6% year-on-year, respectively. As a result, in Q2 201 the trade deficit widened to USD 1,069.5 million, exceeding the corresponding level in 2010 by 28.7%.

Compared to the preceding quarter, the registered exports of goods increased 23.0%, while the registered imports of goods and trade deficit grew 14.2% and 10.0%, respectively.

In the reporting period the top export item represented re-export of motor cars, rising 3.1 times yearon-year and 58.7% guarter-on-guarter. The largest part of motor car re-export (62.0%) was destined for Kazakhstan, with the remaining part primarily went to the neighboring Azerbaijan and Armenia. The export of ferroalloys, traditionally one of the top export items, occupied the second position in Q2 2011, declining 5.4% year-on-year and rising 25.0% quarteron-quarter. The export of ferroalloys primarily went to the United States, Turkey, and Ukraine. The export of nitrogenous fertilizers grew significantly at 68.1% year-on-year, also posting a 19.7% increase quarteron-quarter. The growth was the result of both price and volume effects, with the former being much more important. The largest part of export of nitrogenous fertilizers went to the United States, India, and Turkey. The export of gold occupying the fifth position rose 75% year-on-year and 5.6% quarter-on-quarter. In the reporting period the export of ferrous and nonferrous metals also increased. Starting from Q2 2010 a new industrial commodity, rods and bars of non-alloy steel, entered the list of top ten export items, generating USD 19.6 million of export revenues in the reporting period and settling at the seventh position. The

DIAGRAM 3.25 Exports, Imports, Trade Deficit and Trade Turnover (USD thousands)



export of this commodity went to Azerbaijan, Armenia, Lebanon, and Iran. The export of mineral water grew 65.4% year-on-year, reaching USD 16.5 million. Ukraine accounted for almost half of export of mineral water, being followed by Kazakhstan (19.5%). The export of wine grew 36.6% year-on-year to USD 13.7 million. Similarly, half of wine export went to Ukraine, the second largest importer being Kazakhstan (21.1%). The export of electricity rose 11.2% to USD 14.4 million.

In Q2 2011 the top ten export items included: motor cars, ferroalloys, ferrous metal scrap, mineral fertilizers, gold, copper ores, rods and bars of non-alloyed steel, mineral water, copper scrap, and electricity. Investment goods accounted for 2.2%, intermediate consumption goods for 54.1%, and consumer goods for 43.5% of total exports.

With regard to imports, in the reporting period petroleum products traditionally occupied the first position with a 17.6% annual growth rate, fully owing to the price effect. The import of motor cars followed in the list, rising 15.2% year-on-year. The annual growth



DIAGRAM 3.26 Top Export Commodities in Q2 2010 and Q2 2011 (USD thousands)

rate of import of petroleum gases equaled 34.3%, amounting to USD 27.3 million. In Q2 2011 the import of structures and construction materials made from ferrous metals totaled USD 31.6 million. These products were mainly used for railway construction.

In Q2 2011 food products accounted for 13.6% of total imports, of which 18.2% (2.5% of total registered imports) represented wheat and other grains.

The following positions in food imports were occupied by import of vegetables (11.7% of food imports) and meat products (11.4% of food imports), the latter posting an annual 58.9% growth rate. Sugar and sugar confectionery held 8.1% of food imports, increasing 70.6% year-on-year. The import of tobacco and alcohol products accounted for 2.4% of total registered imports, up 21.3% per annum.

In Q2 2011 investment goods accounted for 14.7%, intermediate consumption goods for 38.1%, and consumer goods for 46.5% of total imports.

Georgia's top ten trading partners for exports were ranked as follows: Kazakhstan (owing to motor car export), Azerbaijan, Turkey, Armenia, the United States, Ukraine, Canada, Bulgaria, Russia, and France. These countries accounted for 80.9% of total registered exports.

In terms of imports, the top ten trading partners included Turkey, Ukraine, Azerbaijan, China, Germany, United Arab Emirates, Russia, the United States, Bulgaria, and Romania, accounting for 70.5% of total registered imports.

BOX 2. INTERNATIONAL RESERVE MANAGEMENT SYSTEM (WALL STREET SYSTEMS)

An active phase of systemic reforms in the NBG started in 2008. In 2009 the USAID allocated a USD 3.29 million grant to the NBG for systemic and institutional development. Simultaneous implementation of a few large-scale projects was initiated, completely changing management systems in the areas of accounting, payment, securities, and international reserves. In 2011 by putting into operation a new international reserve management system the process of systemic and infrastructure reforms in the NBG was completed. The system is fully integrated with the other systems in the NBG. The reserve management system represents a single product, providing for real-time investment activities with analytical and forecasting capabilities. In particular, the system is equipped with:

- Automated and "rule-based" processes for activities of the NBG and external managers;
- Module for trading new financial instruments equipped with methods for portfolio manage-

ment evaluation and risk analysis;

- Business processes for providing services related to corresponding accounts, as well as conducting foreign currency, letter of credit, and cash operations;
- Module for internal foreign currency operations;
- Extended capabilities for accounting and reporting;
- Tools for scenario analysis and limit control;
- Module for automated settlement in real-time regime and automated accounting system;

By implementing the system, the NBG obtained a permanently developing reserve management system, which represents a certain standard for central banks in the leading European countries. The system plays an important role in this market segment, with the primary area of its manufacturer being reserve management system. The system allows for real-time reserve management in a single environment, from front office to back office including the accounting department. It comprises all operations related to reserve management of a central bank. The system provides the possibility to introduce new instruments, which increases diversification of the investment portfolio and revenues.

Analogous system is put into operation at the central banks of 30 countries, including Germany, France, the Netherlands, Italy, Israel, Poland, and the number of its users is permanently rising.

A US Treasury expert, the World Bank, as well as the central banks of the Netherlands, Finland, Israel, Germany, and Croatia assisted the implementation of the international reserve system at the NBG.

3.8. GOVERNMENT OPERATIONS

In Q2 2011 the consolidated budget revenues and grants totaled GEL 1621,9million. The grants equaled GEL 64.4 million, while tax and non-tax revenues stood at GEL 1557,5 million. The revenue-to-GDP ratio was 27.3%, down 5.6 pps quarter-on-quarter and no change year-on-year. The tax burden (tax-to-GDP ratio) amounted to 25%, down 5.4 pps quarter-on-quarter and up 0.6 pps year-on-year. The ratio of grants to GDP equaled 1.1%.

TABLE 3.4

Consolidated Budget Indicators (GEL millions)

	Q2 2011	Ratio to GDP (Q2 2011)
Total revenues and grants	1622	28,4%
Revenues	1557	27,3%
Tax revenues	1426	25,0%
Non-tax revenues	131	2,3%
Grants	64	1,1%
Total expenditures	1793	31,4%
Current expenditures	1456	25,5%
Capital expenditures and net lending	337	5,9%
Deficit	-171	-3,0%
Deficit Financing	171	3,0%
Privatization	52	0,9%
Use of free circulating funds	-64	-1,1%
Net increase in domestic liabilities	31	0,5%
Net increase in foreign liabilities	152	2.7%

8000 32% 7000 28% 24% 6000 5000 20% 4000 16% 3000 12% 2000 8% 1000 4% 0% 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 || Total expenditures (GEL millions, left scale) Capital expenditures and net lending (ratio to GDP, right scale) Current expenditures (ratio to GDP, right scale)

DIAGRAM 3.27

Dynamics of Budget Expenditures

The total expenditures of the consolidated budget amounted to GEL 1, 859 million in Q2 2011, up GEL 293 million quarter-on-quarter and 5.8% more yearon-year. The current and capital expenses amounted to GEL 1,467 million and GEL 392 million, respectively. Capital expenses increased 16% relative to Q1 2011 and 18% with respect to Q2 2010. The ratio of total expenditures of the consolidated budget to GDP stood at 32.6%, up 2 pps quarter-on-quarter and down 2.2 pps year-on-year.

In Q2 2011 the consolidated budget deficit amounted to GEL 171 million, constituting 3% of GDP. The primary source of deficit financing represented an increase in liabilities: a net growth of external liabilities equaled GEL 152.1 million. The issuance of T-bills financed deficit in the amount of GEL 54.7 million, and proceeds from privatization equaled GEL 51.5 million. As a result the government deposits at the NBG rose by GEL 12.5 million.

The NBG's reserve money grew 8.5% (GEL 130.4 million). The contribution of government operations to the change in reserve money was 0.23 pps. Thus, in

Q2 the fiscal policy did not produce a significant impact on reserve money.

In the reporting period the largest share of state budget expenditures (25%) was allocated for general government services (GEL 410.7 million) which included activities of different executive and representative organs, provision of financial and fiscal operations, and servicing state debt.

The second largest category of government expenditures represented social assistance expenditures, amounting to GEL 340.2 million (20.8%). A large share of these expenditures was used for social protection of elderly persons, social protection of households and children, social alienation problems, and social protection of sick and disabled persons.

The expenditures on state order and security amounted to GEL 212.2 million (13%). The main activities in this category included financing expenditures of police and state protection services, corrections administration, courts, and public prosecutor's offices.

As of end-June 2011, the state external debt grew by USD 109 million year-on-year, totaling USD 4.5 billion (due to the lari's appreciation the external debt increased insignificantly in lari terms). On April 8 the government of Georgia placed 10-year Eurobonds at the London Stock Exchange in the amount of USD 500 million, using these funds to roll-over the Eurobonds issued in April 2008. Therefore, placement of Eurobonds did not significantly change the debt stock. The domestic liabilities rose by GEL 33 million in the reporting period. At the end of Q2 the total state debt constituted 39.5% of the GDP forecast for 2011, slightly (by 0.1 pp) rising in quarterly terms. It should be noted that the indicator remains far from the critical level (60% of GDP).

BOX 3. ISSUANCE OF 10-YEAR EUROBONDS

On April 7, 2011 the government of Georgia issued 10-year Eurobonds with the face value of USD 500 million. In general, the Eurobonds represent international bonds denominated in a foreign currency for an issuer and are widely used by governments, companies, international organizations and other institutions for fund raising purposes in the international markets. In case of Georgia the Eurobonds were denominated in the US dollars and placed at the London Stock Exchange using financial services of Goldman Sachs and J.P. Morgan. The redemption date of these bonds is due on April 12, 2021.

The first issuance of the Eurobonds by the government of Georgia in the amount of USD 500 million took place in 2008 for the duration of 5 years. In 2011 the new Eurobonds were used for roll-over purposes. By means of the new bonds the 2008 Eurobonds were redeemed in the amount of USD 435.25 million, reducing the outstanding volume to be repaid in 2013 down to USD 64.75 million.

Issuance of the Eurobonds in advance was important due to a number of reasons. First of all, it should be pointed out that extension of the redemption period until 2021 allowed for allocation of liabilities over a long-term period. Starting from the end of 2012 Georgia starts to repay the IMF's Stand-By Arrangement (SBA) allocated with the view to overcome the double crisis and enhance recovery of sustainable economic growth. In 2013 the repayment of the SBA will reach a maximum level. Along with the SBA repayment, redemption of the Eurobonds would exert a large burden on the country in 2013. Issuance of new bonds provided for prolongation of investors' debt by 8 years.

It is remarkable that placement of the Eurobonds took place against the backdrop of improved credit rating. In January-March 2011 the international rating agencies Fitch and S&P raised Georgia's credit rating from "stable" to "positive", favorably affecting the country's investment potential and contributing to reduction in risk premium and, consequently, the interest rate. The latter was lower for the new Eurobonds relative to 2008, thus reducing interest expenses. The yield of the 2011 Eurobonds equaled 7.125%, the coupon rate – 6.875%, while in 2008 the coupon rate of the Eurobonds stood at 7.5%. This means that the country will annually pay a 6.875% coupon for the new Eurobond debt instead of 7.5%. In addition, a reduction in the interest rates has other important implications as well. This indicates increased interest and trust on the part of investors.

The successful placement of the 2011 Eurobonds is manifested in a lower interest rate and a higher activity of investors. It should be noted that the yield spread for Georgia's Eurobonds relative to mid-swaps (median of market bid/offer rate) slightly exceeded emerging market spreads of sovereign transactions for such countries as Lithuania, Hungary, and Croatia, while being lower than that for Montenegro and Ukraine. Low interest rate for Georgia's sovereign bonds allows for reducing costs related to attraction of investments and debt contraction.

Demand for Georgia's 10-year Eurobonds exceeded the issuance volume 5.3 times. A large part of investors swapped the 5-year Eurobonds issued in 2008 for the new issue. Georgia also had the opportunity of expanding the investors' base, largely at the expense

7.5 5.5 7.0 5 Spread to mid-swaps, % 6.5 4.5 6.0 4 % Xield, 2.5 3.5 5.0 3 4.5 2.5 28/06/11 21/06/11 19/04/11 03/05/11 10/05/11 17/05/11 07/06/11 14/06/11 12/04/11 26/04/11 24/05/11 31/05/11 Yield

DIAGRAM 3.28

Eurobond Yield and Mid-Swap Spreads

of the US investors. It is remarkable that in terms of primary market sales, the UK investors purchased 52% of Georgia's bonds, the US investors – 41%, while the remaining 7% was allocated among the European investors. In terms of types of investors, asset managers accounted for 98% of total bonds, while the rest was placed in bank assets.

— Mid-swap spreads

4 Inflation Forecast

In forecasting inflation the NBG uses two approaches. On the one hand, the NBG monitors indices for each product making part to the consumer 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 price trends for different commodity groups. In order to project price dynamics for individual commodity groups of the consumer basket, the available information on price determinants of individual products is used (seasonality, expected changes in international prices, changes in regulated prices, etc.).

In the first half of 2011 the inflation dynamics was influenced by food prices, including fruits and vegetables. In June and July new agricultural crops appeared in the market, leading to price decreases for fruits and vegetables. The annual inflation rate in June dropped essentially, and it is likely that the downtrend will continue in the following months. Price decreases in the recent months conditioned a bigger-than-expected drop in inflation, reducing the end-year inflation target. The latter is expected to settle at 5.6% by the end of 2011, further declining in early 2012. The forecast takes into account the fact that the inflation has a considerable base effect (starting from August 2010 the inflation rate sharply increased), conditioning a drop in inflation. The forecast also includes the effects of increased transport fares and garbage collection fees. Price dynamics in the international commodity markets are important for inflation forecasting. In the recent period the international oil prices tend to decline, accompanied with a drop in wheat prices due to

lifting of export ban by Russia, Ukraine, and Kazakhstan. The decline in international wheat prices is likely to reduce prices for bread and bakery products in the Georgian market. The forecast uses an assumption that regulated prices will remain unchanged in the coming year. Forecasts for other commodity groups of the consumer basket are based on the respective sectoral trends. High level of annual inflation is largely determined by food price increases, and since the latter are of one-time temporary nature, it is expected that these effects will be nullified in the annual inflation. The demand pressure on prices is currently insignificant. Accordingly, the inflation forecast shows that at end-O3 2011 the annual inflation rate will stand at approximately 5.4% and at end-year – at approximately 5.6% while further declining in the first half of 2012.







35

It is remarkable that inflation forecasts based on this method are useful in a 6-month time horizon, losing its precision for a longer period.

An updated inflation forecasting model is determined as follows:

 $\delta p = 0,080 \delta p_{-1} + 0,037 \delta m_{-1} + 0,033 \delta m_{-2} + 0,034 \delta m_{-6} - 0,078 \delta e - 0,049 \delta e_{-2} + 0,09 \delta p^{food}_{-1} - 0,003 e c m;$

where:

P is CPI;

m is money mass;

e is GEL/USD exchange rate;

 P^{oil} is an average world price on oil;

P^{food} are prices on fruits and vegetables;

ecm is a long-term equilibrium variable having the following form:

$$ecm = p_{-1} + 0.5e_{-1} - 1.5m_{-1} + 4.8y_{-1} - 28.4$$

y – GDP.





The equation also includes seasonal and dummy variables to account for seasonality and structural breaks.

The following assumptions were made with respect to forecasted values of the explanatory variables within the model:

- Broad money will grow 8.85% by end-July 2011 and 17.2% by end-2011. The annual growth rate in 2012 will equal 22%;
- Prices on fruits and vegetables are assumed to increase via an autoregressive process;
- The real GDP growth rate will equal 5.5%;
- The nominal effective exchange rate will remain unchanged;

As a result of model estimations, the annual inflation forecast has the following form:

According to the obtained results, the annual inflation will oscillate in the range of 4.2% and 4.8% at end-September, settling within 4.3%-5.5% by end-2011.

5. Decisions of the Monetary Policy Committee

In Q2 2011, the NBG's Monetary Policy Committee held three meetings. At these meetings, the monetary policy rate was left unchanged. However, during the July 20 meeting the Committee decided to cut the policy rate by 25 basis points, signaling a start of monetary policy easing by the NBG.

High inflation rate was preserved during Q2. The price effects for food and fuels were determinant for the annual inflation. The contribution of food prices to the overall equation reached approximately 90%. The core inflation indicator showed clear downward tendencies in Q2, as the inflation excluding food and fuels equaled 1.7% in May and 0.3% in June. Similarly, low annual inflation was manifested in services, oscillating around 1%. Accordingly, the high level of annual inflation was regarded by the NBG as a temporary event, set to decline after a certain period. The NBG's forecasts indicated a decline in inflation to the targeted level. As a result, the MPC decided at its April-June meetings to keep the policy rate unchanged.

In May and June 2011 tendencies of economic growth slowdown were manifested, further reducing demand pressure on prices. In June consumer prices

dropped at a bigger-than-expected rate, implying downward revisions of target indicators and displaying the possibility that the inflation rate will fall below the target level early in 2012. Thus, the MPC decided to start monetary policy loosening with the view to keep medium-term inflation at the targeted level. Initially, at the July 20 meeting the policy rate was cut by 25 basis points. In the event that weakening of aggregate demand leads to further decline in inflation in the following months, the NBG will continue monetary easing.

Meanwhie, with the purpose of stimulating longterm financing of commercial banks, the MPC took the decision to decrease reserve requirements for long-term borrowings. Calculated in terms of residual value, funds borrowed in the domestic and foreign currency for more than 1- and 2-year maturity periods, respectively, are exempt from reserve requirements, while the reserve requirements for foreign currency funds with 1-to-2-year maturity period were cut to 5%. This change will allow commercial banks to make a larger emphasis on long-term funds, which contain smaller systemic risks.

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