

Central Bank in Georgia was first established in 1919

FINANCIAL STABILITY REPORT

2010

NATIONAL BANK OF GEORGIA

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INTRODUCTION

The global crisis unfolded in 2008 turned out particularly painful for developing countries where economic recovery was slower, compared with the developed countries. Despite this fact, the accounting period manifested positive tendencies: according to the IMF estimates, a 0.6 percent contraction of the world economy in 2009 will be followed by a 4.8 percent growth in 2010. In the accounting period credit, market and liquidity risk in the global financial system also decreased. The scope of the financial crisis and its consequences put the necessity of reforming the global financial architecture on the agenda. In this regard one should note the Restoring American Financial Stability Act of 2010 adopted by the US Congress in May 2010 as well as two consultative documents presented by the Basel Supervisory Committee in December 2009 - "Strengthening the resilience of the banking sector" and "International framework for liquidity risk measurement, standards, and monitoring", comprising main principles of Basel III. In the new US legislation the emphasis is made on protecting consumers and eradicating the necessity of bailing out large financial institutions by the government, while the Basel III aims at improving quality of the banking capital, promoting countercyclical buffers in the financial system and introducing global liquidity standards.

The impact of the 2008 military hostilities and the global financial crisis on the Georgian economy was the most severe in the last decade. In Q1 and Q2 2009 the contraction of GDP amounted to 5.1% and 10.1%, respectively. However, in the second half of 2009 the economic situation somewhat stabilized, as the respective real GDP growth rates in Q3 and Q4 equaled -1.2% and -0.4%. The overall contraction of the Georgian economy in 2009 was 3.9%. Lowered loan interest rates and improved crediting of the economy led to a tangible revival of economic activity in the first half of 2010. The real GDP growth in Q1 equaled 4.5%, while the Q2 real growth projections stand at 7.7%. According

to the existing forecasts, the real economy is expected to grow at 6% in 2010. Along with increased economic activity, the inflation upturn is also expected. According to the National Statistics Office (NSO) of Georgia, the increase in consumer prices at end-June of 2009 equaled 3.7%, while the average annual inflation was 2.8%. The analogous figures in 2009 stood at 2.3% and 5.4%, respectively. The NBG projections of the annual inflation at end-year stand at 8.8%.

The situation in the real estate market is particularly important for the country's financial stability, since a large part of loans extended by commercial banks are related to this sector. Starting from 2010 prices in the real estate market stabilized; the price index of residential and commercial housing increased by annual 10% at end-January of 2010, while the rent index of residential housing remained practically unchanged. On the other hand, such an increase of the price index on residential and commercial housing was preceded by a 25% drop in the previous year. In near future, against the backdrop of improved macroeconomic environment it is expected that the real estate market will overcome the difficulties emerged in the second half of 2008 without significant repercussions.

As a result of active fiscal stimulus policies of the government of Georgia, the role of government finances in the country's economy significantly increased. The current forecasts hold the ratio of the consolidated budget to GDP in 2010 at 35%, reversing the trends of the recent years for the first time. The 2009 tax revenues dropped 7.7%, while the consolidated budget revenues fell 10% due to the lowered income tax rate and slackened economic activity. In line with the economic growth projections, the 2010 tax revenues are expected to grow 9.4% year-on-year. In 2010 the ratio of the consolidated budget deficit to the GDP decreased year-on-year from 9.3% to 6.8%. The primary sources of deficit financing remained external liabilities and privatization. However, the

downturn in privatization proceeds should be pointed out. In 2009 with the purpose of financing budget expenditures and developing the securities market the Ministry of Finance of Georgia resumed issuance of short-term Treasury bills. In 2010 the ratio of the government debt to the GDP is expected to rise from 34.7% to 39.2%.

Along with slackened demand in the external markets in 2009, a sharp decline in prices narrowed the current account deficit. The latter fell 56.8% in 2009 year-on-year, equaling USD 1,259 million. The current forecasts show insignificant deterioration of the current account deficit in 2010. The export/import coverage ratio improved by 5.3 pps in 2009, amounting to 44.1%. According to the NBG forecasts, the international reserves-to-import ratio will increase to 4.2 months by end-2010. In Q1 2010 the ratio of external assets to short term external debt rose to 145.3%.

In the accounting period the Georgian banking sector mainly manifested positive trends. At end-June 2010 the consolidated assets of the banking sector grew 19.2% year-on-year, equaling GEL 9,215 million. This increase was primarily financed by a 23.3% growth of cosolidated liabilities in the same period. In the accounting period the non-banking sector's deposits grew considerably, posting an annual growth of 45.7% by end-June 2010. In the first half of 2010 the revival of crediting conditioned a 6.9% increase in the volume of consolidated loans of the banking sector in the accounting period. Total banking losses of GEL 65.3 million in 2009 were reversed in 2010, with the banking sector posting a net profit of GEL 37.3 million in 6 months of 2010. In the latter period the return on assets stood at 0.9%, while the return on equity was 4.8%. In the accounting period the supervisory capital adequacy ratio of the banking sector decreased insignificantly, equaling 17.4% as of end-June.

As of end-June 2010, the volume of the commercial banks' loan portfolio totaled GEL 5,735 million, up 6.9% in annual terms, fueled by more active lending in

domestic currency. The volume of loans extended in domestic currency in the accounting period grew 24%, while foreign currency denominated loans dropped 8.4%. In the accounting period the share of large loans tended to grow. The share of loans of more than GEL 100,000 grew by 3.4 pps year-on-year, amounting to 65.8% by end-June 2010. In the accounting period the quality of the banking sector credit portfolio slightly improved. As of end-June 2009, the rate of loan loss provisions equaled 11.7%, or GEL 670 million, while the share of bad debts was 16.3%, or GEL 935 million.

In the accounting period the loan dollarization rate dropped by 3.6 pps, standing at 73.7% at end-June 2010. This decrease was due to lowered dollarization of short-term loans. Despite such decrease, the loan dollarization still remains high requiring particular attention, since under high dollarization the currency mismatch risk increases considerably for commercial banks. The deposit dollarization ratio fell 1.7 pps in the accounting period, equaling 67.1% at end-June.

In the accounting period the ratio of liquid assets to total assets in the banking sector increased considerably, equaling 24.9% as of end-June 2010. The same ratio a year ago stood at 18%. The expansion of liquid assets was mainly due to the growth of short-term investment securities and liquid assets placed in non-resident banks. The average liquidity ratio of the banking sector was 37.5% at end-June 2010, pointing to the existence of excess liquidity in the system. The medium-term liquidity position in the banking sector is positive, as the assets with maturity of 1-12 months exceed the respective liabilities by GEL 337 million. Deterioration of this position is not expected in the medium-term perspective, since liabilities to be repaid by end-2011 only slightly exceed expected financing.

Finally, it could be asserted that the Georgian financial sector is improving and continues to operate without difficulties. In the medium-term perspective the country's financial stability is not facing threats.

INTERNATIONAL ENVIRONMENT AND BANKING SUPERVISION REFORM

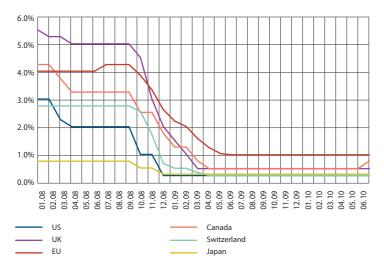
The global economy continued a post-crisis recovery in the second half of 2009 and the first half of 2010. Although the recovery was uneven across the world – slower in the developed countries and more rapid in the developing economies – the overall recovery of the world economy was faster than

TABLE 1.1
Countries with Highest and Lowest Economic Growth Rates in 2009

| Country | Economic growth rate (%) |
|----------------|--------------------------|
| Latvia | -17.9 |
| Ukraine | -15.1 |
| Lithuania | -14.8 |
| Armenia | -14.1 |
| Estonia | -13.9 |
| Russia | -7.9 |
| Mexico | -6.5 |
| Japan | -5.3 |
| Germany | -5.0 |
| United Kingdom | -4.8 |
| Italy | -4.8 |
| Azerbaijan | 9.3 |
| China | 9.1 |
| India | 5.7 |
| Indonesia | 4.5 |

Source: IMF. WEO 2010

GRAPH 1.1 Dynamics of Key Policy Interest Rates in Leading Economies, 2008-2010



expected. This was reflected in the IMF projections, according to which the 2010 world economic growth was expected to equal 4.8%. However, it should also be noted that the world economy posted a negative growth rate for the first time after World War II – the annual GDP contraction by various estimates was between 0.8% and 2.3%.

The global recession was reflected in other economic indicators as well. The 2008 unemployment level rose from 7.2% in 2008 to 8.7% in 2009; the level of investments declined from 23.7% to 21.6%; the total public debt constituted 56% of GDP in 2009 (48.9% in 2008). According to the World Trade Organization, the contraction of global trade in 2010 is estimated to equal 12.2% in real terms and 22.6% in the US dollar terms, mainly owing to price decreases for oil and other commodities of primary importance.

In the accounting period the risks faced by the global financial system decreased, but stability is not yet achieved. Positive tendencies are also reflected in the fact that the IMF decreased the total write-offs of debt accumulated during 2007-2010 in the banking sector to USD 2.3 trillion from USD 2.8 trillion (estimated as of October 2009). In addition, according to the IMF, a number of risks - in particular, credit, macroeconomic, market, and liquidity risk - decreased, compared to April 2009 and October 2009 estimates. This was also reflected in loosened monetary and financial policies and increased risks. Growth of more risky investments was shown in the Merryl Lynch survey conducted in April 2010 among investment fund managers. In particular, investors believed that post-crisis recovery was sustainable and the number of investors assuming higher than "normal" risks in their portfolio was the highest after 2006.

The global financial crisis significantly affected the post-Soviet countries. On average, the post-Soviet economy (excluding Georgia and Baltic states) contracted 2.4%. The deepest decline was posted in Ukraine (15.9%) and Armenia (14.4%), while Azerbaijan and Uzbekistan registered high positive growth rates – 9.3% and 8.1%, respectively (Source – CIS Statistical Committee).

The crisis also affected Turkey, Georgia's largest trading partner. In 2009 Turkey's real GDP contracted 5.8%, while inflation dropped to 5.4%, a 34-year low. During 2010 the economic situation significantly improved, fueled by export growth, with the GDP growth projections standing at 6.8% (OECD).

Starting from 2010 the depreciating tendencies of the US dollar were reversed, indicating increased trust of the US currency.

In December 2009 the Basel Supervisory Committee presented for public discussion two consultative documents – "Strengthening the resilience of the banking sector" and "International framework for liquidity risk measurement, standards, and monitoring", comprising main principles of Basel III. The differences with respect to Basel III are as follows:

- ▶ Quality of capital base, consistency and improved transparency;
 - ▶ Improved capital framework risk coverage;
- ► Introduction of leverage ratio, as an additional parameter to Basel II risk-based framework;
- ▶ Decrease in procyclicality and stimulation of counter-cyclical buffers;
- ▶ Introduction of global standards on minimum liquidity for internationally active banks.

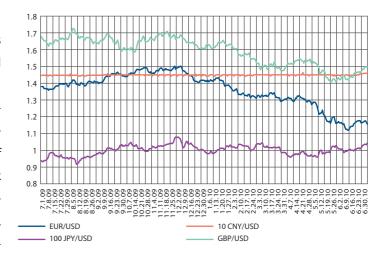
Introduction of Basel III is planned to take place gradually, during 2013-2019.

Based on grave consequences of the financial crisis, the US authorities decided to introduce a

Table 1.2 GDP Growth and Inflation in Post-Soviet Countries

| | Inflation(H1 2010/H1 2009, %) | GDP Growth (%) |
|------------|-------------------------------|----------------|
| Azerbaijan | 4,9 | 9.30 |
| Armenia | 7,3 | -14.1 |
| Belarus | 6,6 | 0.20 |
| Kazakhstan | 7,1 | 1.2 |
| Kyrgyzstan | 2,9 | 2.30 |
| Moldova | 6,9 | -6.5 |
| Russia | 6,6 | -7.90 |
| Tajikistan | 5,3 | 3.40 |
| Uzbekistan | | 8.10 |
| Ukraine | 9,8 | -15.1 |

GRAPH 1.2 Dynamics of US Dollar Exchange Rate against Leading Currencies



new regulating instrument to strengthen the financial system and ensure protection of the system as well as of the consumers from analogous crises. For this purpose the Consumer Financial Protection Bureau has been created, whose main competence will be to protect the American consumers from fraudulent financial instruments and products and to ensure provision of correct information to consumers from credit card companies, banks, mortgage agencies, and similar organizations. The Bureau will be financially and organizationally independent with the right to control/inspect large banks and

credit unions, large non-banking financial companies and any mortgage-related activities.

In addition, the Financial Stability Board has been created with the purpose of monitoring and regulating systemic risks caused by large financial companies. In practice, the primary and sole function of the Board will consist in identifying and promptly responding to systemic financial risks.

In the first half of 2010 the European Banking Supervision Committee has conducted stress-testing of banks across the EU. 91 EU banks were examined accounting for 65% of the total EU banking activities. Stress-tests were primarily focused on credit and market risk, including exposures to European sovereign debt. The stress-test results are as follows:

- ▶ Under an adverse scenario and with an additional sovereign shock, extra losses in 2010-11 amount to EUR 566 billion;
- ▶ Under an adverse scenario Tier 1 capital falls from 10.3% in 2009 to 9.2% at end-2011 (the regulatory minimum is 4%, the marginal level for the stress-test was 6%);
- ▶ Under an adverse scenario and as a result of a sovereign shock the Tier 1 capital drops below 6% for 7 banks; relevant national regulatory authorities will discuss the above results and their importance with these banks.

2. GROSS DOMESTIC PRODUCT AND INFLATION

The year of 2009 in Georgia had the most adverse consequences in terms of dynamics of the real GDP. As a result of global economic recession and the 2008 military hostilities the 2009 GDP contracted 3.9%.¹

Economic recession triggered in the second half of 2008 was exacerbated in the beginning of 2009. In Q1 and Q2 the GDP contraction in annual terms equaled 5.1% and 10.1%. The overall GDP decline in the first half of 2009 was 7.8%.

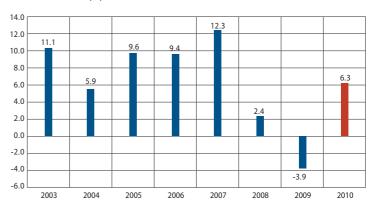
In the second half of the year the downtrend of the Georgian economy was halted and signs of stabilization emerged. However, the impact of the global financial crisis prevailed – the GDP growth in the second half of 2009 was still negative at -0.4%.

The second half of the year saw a certain decline in interest rates on loans extended by the commercial banks. As a result, crediting activity was somewhat revitalized, but this did not ensure a positive economic growth. In Q3 and Q4 we had the following picture: the country's economy posted a 1.2% decline in Q3 and a 0.4% growth in Q4.

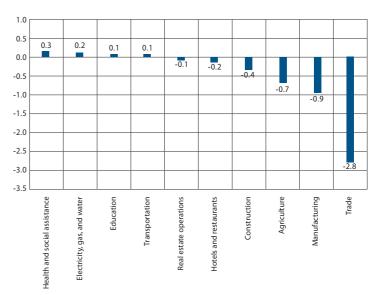
Essential downfall in a number of sectors (trade, manufacturing) considerably reshaped the structure of the Georgian economy, compared to the previous year.

Compared with the previous year, the shares of trade and manufacturing in the real GDP declined in 2009 to 13.5% and 9.7%, respectively. The share of health and social assistance sector significantly expanded, standing at 4.7% in 2009.

GRAPH 2.1 Real GDP Growth (%)



GRAPH 2.2 Sectoral Impacts on Real GDP Growth (%)



The sectors with increased shares of real GDP in 2009 included education, financial intermediation, transport, and public administration.

As already mentioned, trade sector had the largest impact on the 3.9% GDP contraction in 2009, accounting for -2.8%, followed by manu-

^{1 2010} growth rate in the diagram is a forecast

facturing (-0.9%) and agriculture (-0.7%). Positive growth rates were posted by the sectors which largely benefit from budget financing (health and social assistance, education, public administration). Further GDP contraction was slowed down by small gains in production and distribution of electricity, gas, and water and transportation.

Sectoral analysis of the GDP in current prices yields interesting results. Public administration remained the largest GDP component in 2009, accounting for 13.7%. Other large sectors in the 2009 GDP traditionally included trade and agriculture (12.4% and 8.3%, respectively).

In the first half of 2010 economic recovery was mainly powered by value-added growth in manufacturing, trade, and transportation sectors.

Economic growth resumed at the end of 2009 turned into a pronounced tendency in the first half of 2010. The real GDP growth equaled 4.5%in Q1. The Q2 economic growth is currently forecasted at about 7.7%. It is likely that in 2010 the economy will not only fully rebound from the previous year's downfall, but will exceed the 2008 level in terms of produced value-added.

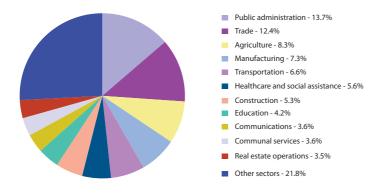
According to the current forecasts, the 2010 real economic growth in Georgia is projected to be 6%. Similar to the beginning of the year, the

growth will be fueled by trade, manufacturing, and transportation sectors.

According to the NSO of Georgia, the annual inflation rose by 1.4 pps during last year. At end-June 2009 the inflation equaled 2.3%, while at end-June 2010 it was 3.7%. The average annual inflation dropped from 5.4% to 2.8%. In June 2009 the high level of average annual inflation was due to high inflation in the second half of 2008. As a result, the existence of base effect conditioned a 2.6 percentage point decline in average inflation.

In the accounting period the price increases were affected by the depreciating tendencies of the lari against the US dollar as well as the post-crisis price gains in the world market. As a result, prices on certain imported medicaments and cereals increased. It should be noted that in September 2009 there was a one-time increase in prices on education by approximately 50%, which affected the annual inflation rate during one year (in June 2010 its effect equaled 1.7 pps). The effect will cease to have an impact on the annual inflation in September. In addition, the growth of consumer prices was significantly affected by fluctuations in prices on fruits and vegetables. Between June 2009 and July 2010 the world markets experience price gains on petroleum products (30%), essentially affecting the dynamics of oil prices in Georgia. Within one year the price of crude oil in the world market grew approximately 14%, which was accordingly reflected in the motor fuel prices in the Georgian market. Price increases on fuel throughout the year were also influenced by the lari exchange rate changes against the US dollar. The fuel price increases accounted for 1 pp in the overall annual inflation rate. Price increases for sunflower oil and wheat also made a significant impact on consumer pri-

GRAPH 2.3 Sectoral Shares in 2009 Nominal GDP (%)



ces, similarly reflecting price dynamics in the international markets.

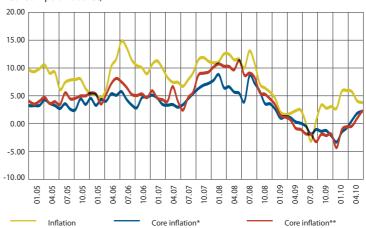
During the second half of 2009 the downtrend in core inflation was manifested. However, in the first half of 2010 the core inflation tended to grow. In June 2009 the core inflation rates equaled -1.1% and 0% for the products within one and two standard deviations, respectively. In the analogous period of 2010 the respective core inflation rates stood at 2.2% and 2.1%.

As it was already mentioned, in June 2010 the consumer basket prices grew 3.7% year-on-year. Prices on clothing and footwear dropped 8.4%. Prices on commodity groups "recreation and culture" and "furnishings, household equipment and routine house maintenance" fell 0.6% and 1.3%. respectively. Healthcare and transportation³ prices grew 5.3% and 11.8%, while prices on "housing, water, electricity, and other fuels" increased 1.8%. Prices on communication rose 0.3%, while prices of "food and non-alcoholic drinks" and "alcoholic drinks and tobacco" increased 1.0% and 5.7%, respectively. There was an essential growth of prices on education (51.0%) due to the abovementioned one-time increase in education fees in September 2009.

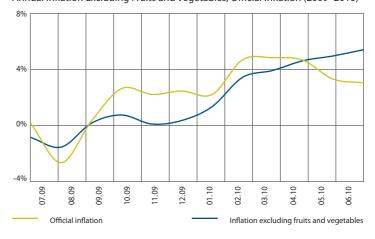
In the accounting period the seasonal effects on agricultural production were significant. Thus observation of price dynamics of the consumer basket excluding fruits and vegetables yields interesting results. The deflationary pressure of fruits and vegetables in late spring and autumn should be emphasized. This effect amounted to 2.8 pps in June.

Starting from June 2009 the annual inflation rate on imported goods tended to grow, prima-

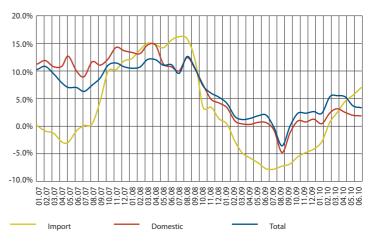
GRAPH 2.4 Annual CPI and Core Inflation (by 266 Components of the December 2009 Consumption Basket)2



GRAPH 2.5 Annual Inflation Excluding Fruits and Vegetables, Official Inflation (2009–2010)



GRAPH 2.6 Annual Inflation by Production Location



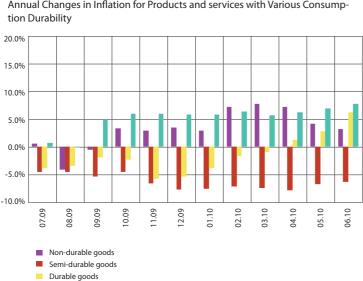
^{2 *} For products within one standard deviation.
** For products within two standard deviations.

³ Here not only transportation prices on intracity buses and underground trains are taken into account, but the average price increase on transportation in general. This also includes other types of transportation, such as intracity taxi, microbuses, suburban and intercity transportation, etc.

rily caused by price increases in the international commodity markets. At end-June 2010 the import inflation stood at 7.3%, up by 14.5 pps yearon-year. Domestic inflation grew throughout the year as well.

The analysis in terms of consumption durability shows that in June 2010 inflation of non-durables decreased to 2.9% from 3.9% year-on-year. Similar trends were observed for semi-durable goods (inflation fell from -4.5% to -6.1%). On the other hand, prices on durable goods and services increased by 9.4% and 6.8%, with the respective inflation rates amounting to 5.9% and 7.4%.

In the second half of 2010 the inflation is expected to rise. Due to unfavorable wheat harvest the international wheat price increased, which will be presumably reflected in the Georgian prices on bread and bakery products, cereals and wheat-related products such as meat products, dairy, eggs, and sunflower oil. Taking this into account, the NBG forecasts show the increase in annual inflation to 10.6% by end-year.



GRAPH 2.7 Annual Changes in Inflation for Products and services with Various Consump-

Services

3. REAL ESTATE MARKET

High growth rates of prices in the real estate market until the second half of 2008 as well as the construction boom turned the real estate sector into one of the important segments of the country's economy. Prices on real estate are also important for financial stability reasons. Since investments in real estate represent an alternative to investments in financial assets, the real estate market assumes an additional function of the financial market. Accordingly, price changes in this market follow price dynamics of other financial assets, thus being a crucial factor of the country's business cycle. Therefore, drastic price decreases on real estate may seriously affect stability of the financial market. Real estate price decreases augment riskiness of loans on commercial banks' balance sheets, since in case of loan default the borrower's losses increase. Price decreases simultaneously bring down the value of the collateral. This in turn further deteriorates the ability of developing companies to finance ongoing projects. All of the above-mentioned raises default risks.

Drastic price decreases on real estate have an adverse impact on households as well. In particular, this negatively affects the borrowers' ability as well as their willingness⁴ to repay outstanding loans.

According to the available data⁵, real estate prices have been stable since January 2010. In June 2010 the price index for residential and commercial housing posted an annual 10% growth⁶, while residential rent remained unchanged (See graph 3.1). However, such growth of prices on residential and commercial housing was preceded by a 25% price

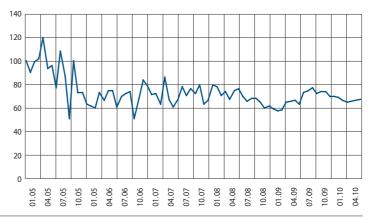
slump a year before.

The above-mentioned difference in price and rent changes led to an 8.7% decrease in the rent-to-price ratio (See graph 3.2). In general, it is assumed that dynamics of the rent-to-price ratio may point to the existence of the price bubble. When the increase in residential housing prices is not caused by fundamental factors, the rent grows slower than the price resulting in a ratio decrease. However, in this situa-

GRAPH 3.1 Real Estate Price Index (2004=100)



GRAPH 3.2 Rent-to-Price Ratio

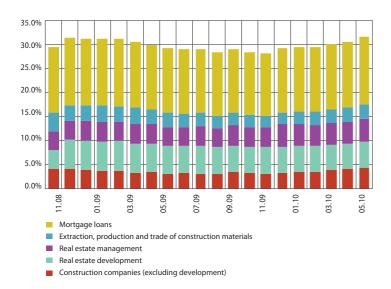


⁴ This particularly concerns those persons who have received a loan a short time ago and have repaid only a small amount. These people have increased incentives to default on their loans and refuse purchasing already less expensive property at a high price.

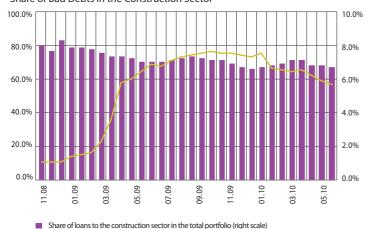
⁵ The source of information represents advertisements in press on suppliers' prices on flats, rent, unfinished residential housing and plots of land.

⁶ It should be pointed out that in Georgia real estate prices are mainly indicated in the US dollars. Thus, index growth shows the increase in US dollar prices. In order to observe prices in the lari, one should pay attention to the exchange rate dynamics.

GRAPH 3.3 Share of Real Estate Loans in Total Portfolio



GRAPH 3.4
Share of Bad Debts in the Construction Sector



Share of had debte in the construction sector

Share of bad debts in the construction sector

GRAPH 3.5 LLPs on Mortgage Loans



tion it would not be correct to attribute the decrease of the rent-to-price ratio to creation of a new price bubble.

Loans extended to the real estate sector account for a large portion of the total banking portfolio. It should be pointed out that the real estate sector is larger than the construction sector. The former could be divided into the following categories: real estate development, mortgage loans, real estate management, construction companies excluding development, and extraction, production and trade of construction materials. In line with these categories, the share of the real estate sector in the total loan portfolio currently exceeds 31%.

Starting from Q2 2008, along with exacerbation of the financial crisis, the risks related to real estate market augmented, which was significant in terms of financial stability. The most risky loans extended to the above-mentioned categories of the real estate sector belong to the real estate development. At present 57% of loans in this category represent bad loans. Such a high level of bad debts in the construction sector remains stable since September 2008. However, in the recent months this level tends to diminish.

The mortgage loans belong to the least risky category. As of June 2010, loan loss provisions on mortgage loans grew 48%, although at present this figure does not exceed 10%.

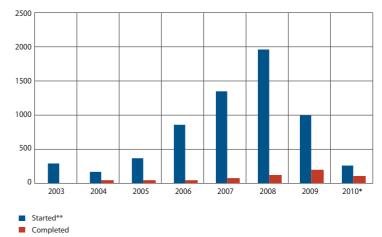
High riskiness of loans extended to the construction sector represents the result of deteriorated financial situation in the real estate sector. Developers use highly leveraged funds for project financing, becoming dependent on bank credits and advance sales. Deficit of available resources in the banking sector imposes constraints on both of the abovementioned primary sources of current project financing. Due to a tightened credit policy in the banking sector, developers found it difficult to obtain credits.

At the same time, availability of mortgage loans dropped, shrinking advance sales and leading to further deterioration of fund raising activities for developers. Drop in advance sales is also conditioned by information asymmetry between sellers and buyers harming development companies. Financial difficulties of development companies are manifested in the difference of started and completed construction. However, it should be pointed out that according to the NSO data, in 2009 the volume of completed residential housing in Tbilisi increased 52%, while the volume of started construction decreased 49%. compared to 2008. This tendency is quite consistent, taking into account the fact that construction activities halted in Q3 and Q4 of 2010 were completed in 2009, while a much smaller number of construction projects were started in 2009 against the backdrop of deepened economic crisis, as the primary goal consisted in completing the existing construction projects.

Government assistance measures with respect to the real estate sector included the initiative of the Tbilisi City Hall. The City Hall provided guarantees for development companies to help them in obtaining bank credits. By means of these credits the companies were supposed to finance the projects aimed at rehabilitation of the Old Tbilisi districts.

In the near future, along with improved macroeconomic environment it is expected that the situation in the real estate market will stabilize.

GRAPH 3.6 Residential Housing in Tbilisi (thousands of m²)



^{*} Six-month data

^{**} Construction is considered to be started when the construction permit is issued

4. GOVERNMENT FINANCES

In 2009 against the backdrop of economic contraction the government pursued active fiscal stimulus policies, resulting in the fact that the consolidated budget expenditures decreased to a lesser extent than the GDP. Accordingly, the role of government finances in the country's economy grew even further. The share of public administration in the GDP had been growing in the recent years, but in 2009 it slightly decreased and this downtrend is likely to continue in the current year. Against the backdrop of increasing role of government finances, a smaller share of public administration is explained by the fact that administrative expenses of the government decreased more rapidly than the GDP. On the other hand, expenditures on social assistance

GRAPH 4.1 Budget-to-GDP Ratio

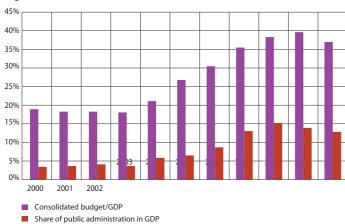


Table 4.1.1 Consolidated Budget Revenues

| | 2006 | 2007 | 2008 | 2009 | 2010 plan | 2010 –first half |
|---------------------------|-------|-------|-------|-------|--------------|---------------------|
| Revenues (lari, millions) | 3,832 | 4,973 | 5,854 | 5,265 | 5,778 | 2,490 |
| Taxes | 3,149 | 4,391 | 4,753 | 4,389 | 4,800 | 2,203 |
| Grants | 168 | 102 | 617 | 389 | 538 | 124 |
| Other revenues | 378 | 480 | 484 | 487 | 440 | 163 |

grew, capital expenditures decreased slower than the GDP, partially offsetting the contraction of administrative expenses and increasing the ratio of consolidated budget to GDP. In the current year the role of government finances is expected to decrease due to a relatively higher expected growth rate of GDP.

Along with the increased role of fiscal and budgetary policies in the Georgian economy, it becomes crucial to analyze risks in terms of government finances, with the latter capable of exerting an adverse impact on economic and financial stability of the country. We examine government finances by its main components, such as government debt, budget revenues and expenditures, budget deficit.

4.1. REVENUES AND EXPENDITURES

In 2009 the consolidated budget revenues fell 10% due to a decrease in grants and tax revenues. The tax revenues dropped 7.7% last year. In 2008 the growth rate of tax revenues equaled 8.2%. Contraction of tax revenues as a result of exacerbation of the economic crisis was caused by a slowdown in economic activity as well as lowering of the income tax rate. In 2009 the tax burden slightly decreased – the tax-to-GDP ratio fell from 24.9% to 24.5% year-on-year.

In the budget of the current year a 9.4% increase in tax revenues is envisaged, in line with the economic growth projections. The real GDP growth is forecasted to be 6% in 2010. Besides, lowering of tax burden by 0.9 pps down to 23.6% is expected in 2010. The tax revenues received in the first half of the year are 3.2% higher year-on-year. It is projected that by end-2010 the total revenues will amount to approximately GEL 5.8 billion.

Against the background of essential revenue downfall the 2009 expenditures decreased insignificantly (by GEL 75 million), owing to necessity of fiscal stimulus measures. The largest decline was in the goods and services category shrinking by approximately GEL 500 million. It should be noted that expenditures on goods and services represented the largest budget category in the recent years. Such an abrupt contraction of this expenditure item was due to reduction in defense budget spending. Growth was present in the categories of social and other types of expenditures. In 2009 the issuance of (shortterm) Treasury bills was resumed, aiming not only at securities market development but also at budget expenditure financing. The volume of placed T-bills last year totaled GEL 270 million.

According to the budget plan, the consolidated budget expenditures grow by GEL 200 million in 2010, amounting to GEL 7.17 billion. The largest category in the 2010 budget represents social assistance (GEL 1.6 billion) and capital expenditures (GEL 1.7 billion). One of the important sources of government expenditure financing still remain concessional⁶ loans from international donor organizations. At the same time, in order to finance the 2010 expenditures, issuance of T-bills (including long-term bills) will continue. In this regard, the 2010 budget envisages a 15% increase in debt service expenditures. Although the current level of government debt is sustainable, debt servicing and management risks are in a medium level. This means that large increases in domestic and external debt in the following years will lead to an increase in debt service expenditures and deficit growth. Subsequently, an additional increase in debt level may be unsustainable, being conducive to fiscal problems in the future.

Table 4.1.2 Consolidated Budget Expenditures

| | 2006 | 2007 | 2008 | 2009 | 2010 (plan) | first half of 2010 |
|--------------------------------------|-------|-------|-------|-------|----------------|-----------------------|
| Expenditures (lari, millions) | 4,115 | 5,778 | 7,033 | 6,968 | 7,166 | 2,903 |
| Current Expenditures | 3,068 | 4,254 | 5,388 | 5,389 | 5,493 | 2,469 |
| Wages and salaries | 565 | 676 | 1,008 | 1,044 | 1,153 | 509 |
| Goods and services | 767 | 1,581 | 1,607 | 1,097 | 1,090 | 480 |
| Interest | 104 | 97 | 121 | 170 | 233 | 82 |
| Subsidies | 336 | 399 | 512 | 420 | 392 | 243 |
| Grants | 7 | 14 | 12 | 14 | 14 | 8 |
| Social assistance | 762 | 851 | 1,379 | 1,502 | 1,617 | 728 |
| Other expenditures | 527 | 636 | 750 | 1142 | 994 | 419 |
| Capital expenditures and net lending | 1,046 | 1,524 | 1,645 | 1,578 | 1,673 | 435 |

4.2. DEFICIT

In 2009 the consolidated budget deficit totaled GEL 1,673 million, or 9.3% of GDP. It should be noted that the ratio of the budget deficit to GDP tends to increase over the years. In 2010 it is envisaged to bring the deficit down to 6.8% of GDP. Until 2008 the primary source of deficit financing represented privatizations proceeds. However, from 2008 this type of revenues is on a downtrend. Last year the share of external liabilities in deficit financing increased due to absorption of credit resources allocated by international donors to Georgia in the aftermath of 2008 August developments and the global financial crisis.

In 2010 the consolidated budget deficit will be reduced to GEL 1.39 billion. The primary source of deficit financing will represent external liabilities – GEL 1.01 billion. Domestic liabilities will increase by GEL 137 million. Deficit financing through proceeds from privatization will equal GEL 210 million. In the current year the government will continue to issue T-bills. The existence of the T-bill market will promote development of financial markets and improve effi-

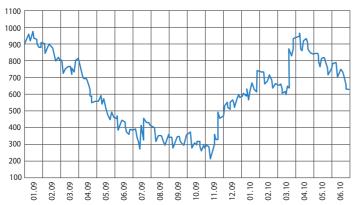
⁶ Concessional loans which are extended for a long period, at a lower interest, compared with the commercial banks, and with grace period (during which the principal is not repaid).

ciency of the monetary policy. However, issuance of large volumes of T-bills is conducive to certain risks as well. In particular, debt service expenditures increase in that situation, which may create necessity to borrow more, thus raising debt to an unsustainable level. Reduction in budget deficit is important, since, on the one hand, large deficit leads to deterioration of trade balance and, on the other hand, crowds out private investments. Last year, the trade deficit declined significantly, but this decline was primarily the result of slackened economic activity. In 2009 the ratio of consolidated budget deficit to GDP exceeded 9%, thus exerting a significant impact on the trade balance. In 2010, along with the economic recovery, the trade deficit is likely to widen. Thus, reduction in

Table 4.2.1 Consolidated Budget Deficit

| | 2006 | 2007 | 2008 | 2009 | 2010 |
|--------------------------|------|------|-------|-------|-------|
| Deficit (lari, millions) | 266 | 892 | 1,259 | 1,673 | 1,360 |
| Privatization | 565 | 888 | 698 | 358 | 210 |
| Decrease in deposits | 415 | -159 | 265 | 368 | 0 |
| Increase in liabilities | -713 | 162 | 296 | 947 | 1,150 |
| External | -125 | 12 | 952 | 683 | 1,013 |
| Domestic | -588 | 150 | -656 | 264 | 137 |
| Of which: T-bills | | | | 270 | 200 |
| Deficit/GDP (%) | 1.9% | 5.2% | 6.6% | 9.3% | 6.9% |
| Primary deficit/GDP (%) | 1.2% | 4.7% | 6.0% | 8.4% | 5.7% |

GRAPH 4.3.1 Dynamics of Government Deposits, 2009-2010 (Lari, million)



the budget deficit becomes an important bulwark against further deterioration of the trade balance.

4.3. PRIVATIZATION

Revenues from privatization have been a primary source of state budget deficit financing over the years. This was particularly important in 2006 and 2007, when privatization proceeds accounted for 17% and 15% of budget expenditures, respectively. It was obvious that such tendency would not last long, and since 2008 this budget item has been on a downtrend. In 2009 the receipts from privatization amounted to approximately GEL 358 million, or 5.6% of the total budget expenditures. In future it is expected that privatization proceeds will gradually decrease and no longer represent an important source of budget financing. In the current year the government plans to receive GEL 210 million from sale of non-financial assets in public property, or 41% less than the actual level of the previous year. In the first six months receipts from privatization equaled approximately GEL 36 million, or 17% of the annual plan.

4.4. PUBLIC DEBT

In 2009 the public debt continued to grow. After the global financial crisis the monetary transmission mechanisms in most countries of the world weakened, creating the necessity for fiscal stimulus measures. This required additional borrowing, and Georgia was no exception. In order to eradicate the war consequences Georgia received donors' assistance: some in the form of grants, and some as concessional loans. The GDP decline in the crisis year of 2009 significantly deteriorated the burden of external and domestic debt, compared with the preceding year.

In 2008 the Asian Development Bank joined the list of the government's creditors. As a result, the volume of concessional loans increased. In the same year the government issued Eurobonds with a 5-year

maturity (USD 500 million), at a market interest rate and with one-time redemption at maturity. At the time of redemption it is possible to re-issue the Eurobonds, i.e. to roll-over the debt. However, a roll-over contains certain threats: in particular, if the interest increases at the moment of Eurobonds issuance, then the threat of a debt pyramid will arise, further augmenting the debt burden.

A loan is considered to be concessional if its grant element exceeds 35%. Grant element is the difference between the face value of the loan and its net present value (NPV) divided by the loan's face value. The grant element (of debt's NPV stock) at end-2009 equaled almost 50%, which means that a significant part of the country's borrowings was received on very concessional terms. A significant share of loans with high grant element primarily falls on the World Bank.

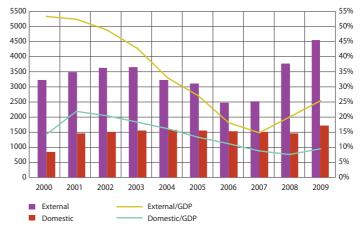
Starting from August 2009, the government resumed issuance of T-bills with the purpose of establishing additional sources for budget financing, developing the Georgian securities market and replacing external debt with domestic one. Domestic debt is denominated in domestic currency, which allows the country to avoid an exchange rate risk; in addition, by means of increasing the share of domestic debt the Georgian government becomes less dependent on external borrowings.

During 2009 the government issued only short-term T-bills. Against the backdrop of post-crisis environment, T-bills aroused keen interest of commercial banks. The main reason for the banks' interest was their excess liquidity, which in turn emerged as the result of increased risks and significant slackening of economy crediting.

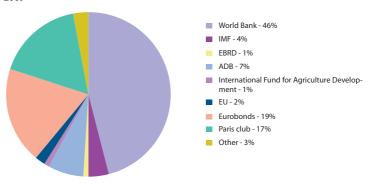
4.5. GOVERNMENT DEBT SUSTAINABILITY ANALY-SIS (DSA)

Debt is sustainable, if a country (government) is in a position to service it without extraordinary fi-

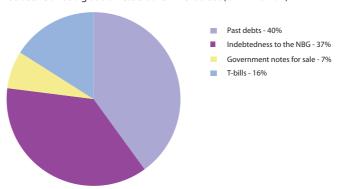
GRAPH 4.4.1 Government Debt (Lari, millions) and Debt-to-GDP Ratio



GRAPH 4.4.2 Structure of Georgia's External Government Debt (GEL 4.5 billion) by Creditors, 2009



GRAPH 4.4.3 Structure of Georgia's Domestic Government Debt (GEL 1.7 billion)



nancing (such as debt relief, significant adjustment of future revenues and expenditures, etc.). The goal of DSA is to evaluate the debt sustainability level; to show to which level certain shocks may increase debt and to reveal possible risks (and factors) which may raise the debt burden to an unsustainable level.

Risk levels related to debt service and debt management are defined as follows:

- · Low risk: all debt burden indicators are significantly lower than maximum limits for both baseline and alternative scenarios;
- · Medium risk: debt burden indicators are lower than maximum limits for a baseline scenario, but alternative scenarios show significant growth of indicators (over the accounting period), due to which the debt service indicator approaches the maximum value, while the debt stock indicators exceed the permissible limits;
- · High risk: debt burden indicators exceed the maximum limits for a baseline scenario, while alternative scenarios further deteriorate the situation;
- Debt stress:current debt stock and debt service indicators significantly exceed the limits.

In 2006 Georgia entered the ranks of countries with strong effective policies (among low-income countries).9 In 2006-2008 (2009 data has not been re-

Table 4.5.1 **Debt Sustainability Indicators**

| | Revei | nues | CPIA Limits | | | |
|------------------|-------|----------------------------|-------------|--------|--------|--|
| | 2009 | 2010- 2020 ⁷ | Weak | Medium | Strong | |
| Debt NPV (%) | | | | | | |
| GDP | 22,2 | 27,88 | 30 | 40 | 50 | |
| Revenues | 75,7 | 102,8 | 200 | 250 | 300 | |
| Debt service (%) | | | | | | |
| Revenues | 5,8 | 10,2 | 25 | 30 | 35 | |

leased yet) Georgia's CPIA equaled on average 4.3.10

DSA considers scenarios and stress tests which take into account the following: shocks to GDP growth and budget deficit, fixing budget deficit at a certain level, permanent, slowed down growth of GDP, and exchange rate depreciation.

Baseline scenario:

This analysis projects the debt status in Georgia under unchanged policies and absence of exogenous shocks. The analysis requires certain assumptions to be made with respect to main macroeconomic variables (See below) affecting debt sustainability. The baseline scenario shows how sustainable is government debt if no deviations from our assumptions take place¹¹.

The real GDP growth is projected at 5% between 2012 and 2018, 4% in 2019-2026, and 3.5% further ahead. At present the Georgian economy is in the recovery process, thus the growth rate should be relatively high until 2012. Obviously high growth rates will not be sustained in the long term, gradually decreasing after a certain period of time.

The CPI inflation is projected at 6%, in line with the NBG's inflation target, gradually decreasing to 3% thereafter. In advanced countries the inflation target is 2%, however, the CPI has certain drawbacks which are more clearly manifested in the case of Georgia. In addition, the inflation rate in the developing countries is generally higher than in the advanced countries. Thus, at the present stage the optimum inflation rate for Georgia is in the range of 4-6 percent. Accordingly, the baseline scenario includes a 6% inflation rate, but along with the economic growth the inflation target will be gradually decreased to 3%.

The exchange rate of lari against the US dollar re-

⁷ Arithmetic mean.

⁸ According to baseline scenario.

⁹ Defined by CPIA (Country Policy and Institutional Assesment), released by the World Bank: <3.25weak, 3.25-3.75-medium, >3.75 strong.

¹⁰ To evaluate effectiveness of the DSA policies the last 3-year average is taken.

¹¹ In the next subsection alternative scenarios (deviations from the baseline) are considered.

mains unchanged. The assumption is made in order to show the ceteris paribus effect for different scenarios and stress tests. The analysis will also consider the simultaneous effect of different scenarios.

With regard to the fiscal policy, in line with the Economic Freedom Act initiated by the President of Georgia, the government assumes the responsibility that the budget expenditures will not exceed 30% of GDP, and the budget deficit will not exceed 3% of GDP. Accordingly, the baseline scenario projects budget revenues at 27% of GDP. The analysis includes the assumption that the budget deficit will be financed by means of new loans largely borrowed at market interest rate. The baseline scenario also assumes that starting from 2015¹² 60% of borrowings will come from new loans received from external sources, 20% will be long-term T-bills, and 20% - short-term T-bills.

The baseline scenario assumes that redemption of the Eurobonds issued in 2008 (for DSA purposes) will be made through roll-over. Our assumption is that roll-over will be permanent (in the accounting period). Other ways of redeeming debt are also possible, but those would also require contraction of new liabilities; thus, for simplicity we make the assumption of roll-over.

In the event of baseline scenario (absence of shocks) the debt burden has an upward trend, but remains at a sustainable level. All three sustainability indicators remain quite far from the limit.

Alternative scenarios:

The baseline scenario takes into account the existing situation. However, due to the obvious fact that an economy sometimes faces exogenous shocks, the analysis includes alternative scenarios showing changes in debt sustainability as a result of one or

Table 4.5.2 Debt Sustainability Indicators: Baseline Scenario

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22,9% | 28,2% | 31,1% | 34,8% | 38,6% |
| Debt (NPV)/Revenues | 300% | 81,6% | 104,3% | 115,2% | 128,8% | 143,1% |
| Debt service/Revenues | 35% | 6,3% | 10,8% | 13,1% | 13,2% | 14,0% |

several shocks affecting the baseline scenario conditions.

According to the debt service schedule, the debt service will peak in 2013 as the Eurobond redemption will be due. Since particular difficulties are expected in 2013, all scenarios assume a shock in 2013.

Budget deficit shock:

In 2008-2009 the consolidated budget deficit was quite high (6.2% and 9.3% of GDP, respectively), which is not sustainable and its recurrence is not expected. In addition, through the Economic Freedom Act the government commits to a 3% budget deficit with respect to GDP. This scenario considers a shock due to which the budget deficit will be permanently at 3.5%, i.e. higher than the EFA-stipulated 3%. Increase in budget deficit means additional contraction of debt augmenting debt stock and increasing debt service expenditure in the future, which affects debt sustainability.

As we can see, all indicators tend to grow: debt service indicator reaches the limit, while the debt-to-GDP ratio becomes much higher. Debt-to-revenues ratio remains lower than the limit, but gradually approaches it. All the above indicates that if the budget deficit even slightly deviates from the baseline scenario, the debt sustainability will be jeopardized (See Table 4.5.3).

One of the scenarios considers a one-time shock to budget deficit: in 2013 due to a shock budget expenditures (and, accordingly, the deficit) increase by 2 pps with respect to GDP and return to the normal

Table 453 Recurrent Budget Deficit Shock

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|-------|--------|--------|
| Debt (NPV)/GDP | 50% | 22.9% | 33.9% | 45.9% | 59.6% | 75% |
| Debt (NPV)/Revenues | 300% | 81.6% | 125.6% | 170% | 220.6% | 277.9% |
| Debt service/Revenues | 35% | 6.3% | 11.7% | 20.0% | 27.1% | 36% |

Table 4.5.4 One-Time Budget Deficit Shock

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22,9% | 35,6% | 38,9% | 42,0% | 45,6% |
| Debt (NPV)/Revenues | 300% | 81,6% | 131,9% | 144,2% | 155,4% | 168,8% |
| Debt service/Revenues | 35% | 6,3% | 14,4% | 18,1% | 18,2% | 19,1% |

Table 4.5.5 One-Time Shock to GDP Growth Rate

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22,9% | 34,6% | 50% | 65,2% | 81,4% |
| Debt (NPV)/Revenues | 300% | 81,6% | 128,3% | 185,1% | 241,7% | 301,5% |
| Debt service/Revenues | 35% | 6,3% | 13,3% | 21,7% | 30,2% | 39,5% |

Table 4.5.6 Permanent Shock to GDP Growth Rate

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22,9% | 29,8% | 39,2% | 54,4% | 75,6% |
| Debt (NPV)/Revenues | 300% | 81,6% | 110,4% | 145,2% | 201,4% | 280,1% |
| Debt service/Revenues | 35% | 6,3% | 11,4% | 16,6% | 22,9% | 33,9% |

Table 4.5.7 One-Time (Significant) Depreciation of Lari's Exchange Rate

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|-------|--------|
| Debt (NPV)/GDP | 50% | 22,9% | 34,2% | 37,3% | 42,1% | 47,9% |
| Debt (NPV)/Revenues | 300% | 81,6% | 126,5% | 138,2% | 156% | 177,2% |
| Debt service/Revenues | 35% | 6,3% | 12,4% | 15,8% | 17,5% | 20,3% |

Table 4.5.8 Permanent (Small-Pace) Depreciation of Lari's Exchange Rate

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|-------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22,9% | 32,1% | 41,1% | 55,6% | 79% |
| Debt (NPV)/Revenues | 300% | 81,6% | 119% | 152,1% | 206,1% | 292,5% |
| Debt service/Revenues | 35% | 6,3% | 11,7% | 16,5% | 21,9% | 33,2% |

(baseline scenario) level after 5 years.

As we can see, in the event of one-time shock debt burden indicators are lower than the limits (See Table 4.5.4), i.e. one-time shock does not threat debt sustainability. Obviously, a much stronger shock (for example, if the deviation reaches 10 pps) could bring debt to an unsustainable level, but the probability of such a shock is very low.

GDP growth shock:

Slowdown in GDP growth will adversely affect the country's economy, it may hinder external investments, etc. This would make debt service more difficult, thus leading to contraction of new debt. For DSA purposes we consider a negative shock to GDP. The scenario assumes a slowdown in GDP growth by 3 pps (compared with the baseline scenario), with a gradual return to a normal level after 5 years.

The ratios of debt (stock and servicing) to revenues slightly exceed the limit, while the debt-to-GDP ratio is significantly above the limit. This indicates the fact that a GDP shock may bring the government debt to an unsustainable level (See Table 4.5.5).

We can also consider a scenario when a GDP growth rate is permanently lower than the baseline scenario rate by 0.7 pps.

As we can see, the debt-to-revenue ratios converge to the limits, while the debt-to-GDP ratio significantly exceeds its limit (See Table 4.5.6). If the deviation is higher by additional 0.1-0.2 pps, the government debt will reach an unsustainable level. Thus even a slight permanent slowdown in GDP growth rates can significantly increase the government debt burden and possibly bring it to an unsustainable level.

Exchange rate depreciation:

Exchange rate depreciation is considered as one of the shocks affecting external debt sustainability. The government contracts external debt mainly in US dollars, and its redemption is effected in the same currency. Thus, the lari depreciation (against the US dollar) will make debt service more expensive, increasing the debt stock in lari terms. The analysis considers a onetime (significant) and yearly (small-pace) depreciation.

A one-time 30% depreciation (in 2013) (See Table 4.5.7):

As we can see, all indicators are below the limits, but the debt-to-GDP ratio is very close to the limit. Overall, we can say that a one-time sharp depreciation of lari does not jeopardize debt sustainability.

Permanent depreciation at annual 5% (See Table 4.5.8).

Compared with a one-time depreciation, the indicators are at a higher level, whereas the debt-to-GDP ratio is much higher than the limit. This means that a permanent depreciation (even at a very slow pace) contains larger risks than a one-time sharp depreciation. Neither this scenario creates big threats to debt sustainability. If the annual rate of depreciation is higher than 5%, then the threat to debt sustainability will be effective. However, the probability of such developments is less likely.

Simultaneous effect of several scenarios

The above scenarios assess the impacts of different shocks to debt sustainability. It will be more realistic to consider a combination of these scenarios. Let us consider a shock to the GDP growth rate, followed by a deficit growth through automatic fiscal stabilizers; these two shocks in turn will affect the lari exchange rate.

By this scenario in 2013 the GDP growth rate falls by 2 pps and returns to the normal level after 5 years. As a result, the budget deficit increases by 2 pps and also returns to normal 5 years later. The exchange rate depreciates during the five years (initially by 20% and subsequently at slower rates, since the GDP and the deficit levels return to normal) and then remains constant.

Table 459 Combination of One-Time Shocks

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22% | 44,8% | 59,5% | 71,5% | 85,5% |
| Debt (NPV)/Revenues | 300% | 78,6% | 166,1% | 220,4% | 264,8% | 316,7% |
| Debt service/Revenues | 35% | 6,2% | 16,1% | 26,9% | 34,3% | 43,5% |

Table 4.5.10 Combination of Permanent Shocks

| Indicator | Limit | 2010 | 2015 | 2020 | 2025 | 2030 |
|-----------------------|-------|-------|--------|--------|--------|--------|
| Debt (NPV)/GDP | 50% | 22% | 33,1% | 46,8% | 64,9% | 88,8% |
| Debt (NPV)/Revenues | 300% | 78,6% | 122,7% | 173,5% | 240,3% | 328,8% |
| Debt service/Revenues | 35% | 6,2% | 12,7% | 20,1% | 29% | 42,2% |

As we can see, such developments create big threats to government debt sustainability. In the accounting period all three indicators of debt sustainability significantly exceed the limits (See Table 4.5.9).

We can also consider a scenario where the GDP growth rate and the budget deficit permanently deviate from the baseline level (by 2 pps), resulting in a yearly depreciation of the exchange rate by 2 pps.

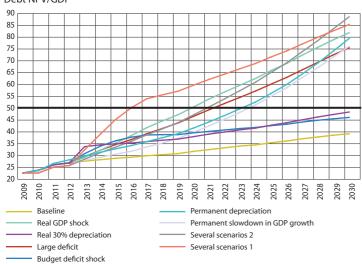
As we can see, the results are analogous to the preceding scenario, with big threats to debt sustainbility (See Table 4.5.10).

Summary:

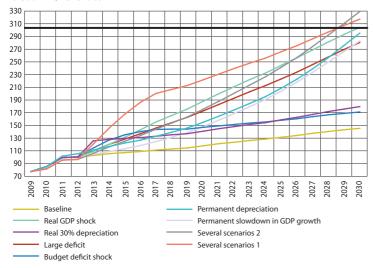
The results of the analysis are presented in the diagrams and tables below. As we can see, the worst deterioration of debt sustainability can be caused by GDP shocks, while the smallest deviations from the baseline scenario are conditioned by one-time shocks to budget deficit and exchange rate depreciation.

The diagrams show that in the event of permanent deficits or other expected problems the debt burden keeps deteriorating. By 2030 two out of three World Bank indicators (debt-service-to-revenues and debtto-revenues ratios) are in the allowed limits (except for simultaneous scenarios), while the GDP shocks bring the indicators close to the limits.

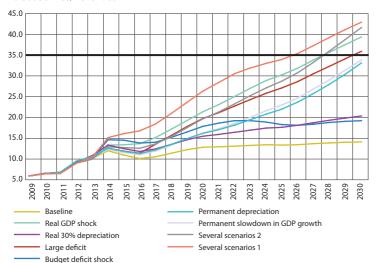




GRAPH 4.5.2 Debt NPV/Revenues



GRAPH 4.5.3 Debt Service/Revenues



The third indicator (debt-to-GDP ratio) indicates potential problems in terms of debt sustainability. By 2024 out of eight alternative scenarios, in six of them this indicator exceeds the allowed limit. Four out of these six cases are related to GDP shocks, the remaining two cases being permanent exchange rate depreciation and permanently high budget deficit.

Additional scenario was considered when the share of external debt in total debt did not change. It turned out that the more dependent the government becomes on external sources of financing, the more threatening is the lari's exchange rate depreciation (one-time/yearly) to the government debt sustainability. Thus, it becomes crucial that the government manages to partially replace external liabilities with the financing attracted from domestic sources.

At present, according to the baseline scenario, the government debt sustainability indicators are below the limits in the accounting period, but for some alternative scenarios one of the indicators (debt-to-GDP ratio) exceeds the limit in the accounting period, while the debt service indicator approaches its limit. Thus, debt service and debt management risks in Georgia are on a medium level.

5. EXTERNAL SECTOR

In 2009 the Georgian economy showed significant volatility caused by both external and domestic factors. Dry-up of foreign capital inflows due to the global financial crisis put to test countries dependent on external financing. Tightened credit resources had a largely negative impact on international financial markets deteriorating demand and significantly contracting international trade. Starting from Q4 2008 international price drops on almost all types of commodities, along with worsening of domestic and external demand, reduced the necessity of external financing in the country. In 2009 the current account deficit was not only fully financed, but a significant growth of reserve assets occurred as well.

Constantly growing current account deficit over the preceding period was gradually improving in the first three quarters of 2009, although some worsening tendencies reemerged in Q4. Overall, the current account deficit totaled USD 1,259.0 million in 2009, down 56.8% year-on-year, constituting 11.7% of GDP. The downtrend continued in 2010. In Q1 the current account deficit dropped to record low in recent years, equaling USD 181.2 million. According to the current forecasts, a certain widening of the current account deficit is expected in 2010.

Improvement of the current account deficit is conditioned by changes in the trade deficit. The latter accounted for 26.0% of GDP in Q1 2009, or USD 604.6 million, subsequently falling to 21.0% of GDP in Q1 2010, or USD 510.9 million. As we already indicated, adverse effect of the financial crisis lingered throughout 2009 as well. Contraction of domestic demand and price drops in the world markets led to a decrease in expenditures on imports of goods. In parallel, there was a deterioration of the Georgian exports as well, albeit at a lower rate. In particular, in

the first half of 2009 year-on-year declines in exports and imports equaled 19.2% and 27.0%, respectively. Even smaller decline took place in the second half of the year, when the export revenues fell 8.5% yearon-year, while the import expenditures dropped 24.5%. The slowdown in the rate of export decline was the result of a 24.0% increase in O4 2009. However, it should be noted here that such an abrupt growth rate was due to the fact that in O4 2008 the level of exports plummeted. The annual export/import coverage ratio amounted to 44.1%, or 5.3 pps higher in annual terms. In 2010 further expansion of exports and imports is expected, with the growth rate of exports likely to exceed the growth rate of imports. Despite this, widening of trade deficit is

The balance of services in Georgia is traditionally positive, partially offsetting trade deficit. Compared

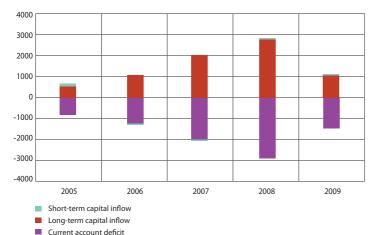
Table 5.1 Balance of Payments (USD, millions), 2009-Q1 2010

| | Q1 2009 | Q2 2009 | Q3 2009 | Q4 2009 | Q1 2010 |
|-------------------------------|---------|----------|----------|----------|----------|
| Current account | -395.8 | -250.7 | -221.2 | -391.3 | -181.2 |
| Goods | -604.6 | -512.3 | -572.7 | -709.7 | -510.9 |
| Exports | 362.5 | 488.6 | 516.0 | 526.1 | 540.0 |
| Imports | -967.1 | -1,001.0 | -1,088.7 | -1,235.8 | -1,050.9 |
| Coverage ratio (%) | 37.5 | 48.8 | 47.4 | 42.6 | 44.1 |
| Services | 38.3 | 78.3 | 128.6 | 87.0 | 87.4 |
| Income | -10.4 | -3.6 | -37.7 | -98.3 | -38.5 |
| Current transfers | 180.8 | 186.9 | 260.7 | 329.7 | 280.9 |
| Capital and Financing Account | 387.3 | 264.5 | 211.9 | 341.5 | 178.9 |
| Capital Account | 31.8 | 35.5 | 43.7 | 69.4 | 26.2 |
| Financial Account | 355.5 | 229.0 | 168.2 | 272.1 | 152.6 |
| Foreign direct investments | 130.2 | 153.2 | 228.6 | 253.3 | 75.9 |
| Portfolio investments | 6.6 | -2.1 | 13.6 | -6.0 | 10.0 |
| Financial derivatives | -0.1 | 1.4 | -0.3 | -0.4 | -0.1 |
| Other investments | 278.6 | 56.8 | 393.9 | 134.1 | 205.8 |
| Reserve assets | -59.8 | 19.7 | -467.5 | -108.8 | -138.9 |
| Net errors and omissions | 8.5 | -13.8 | 9.3 | 49.8 | 2.3 |

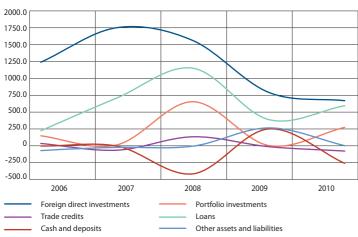
with the preceding year, in 2009 the balance of services grew 15.8 times to equal USD 332.2 million, fueled by tourism receipts and increased transportation services. In Q1 2010 the balance of services continued to grow, amounting to USD 87.4 million, or 2.3 times more in annual terms.

The historically positive income account grew negative since 2008. This is explained by a sharp uptrend in foreign investments during 2007-2008. Along with increased volume of liabilities in the form of foreign capital, expenditures on capital service grew as well. Accordingly, the negative component

GRAPH 5.1 Current Account Deficit and Inflow of Funds (US dollars, millions), 2005-2009



GRAPH 5.2 Main Financing Sources of Current Account Deficit (US dollars, millions), 2006-2010



* NBG forecast

of the income account, investment revenues (expenditures), exceeded the positive component -labor income. However, the negative income account was largely conditioned by reinvestment of profits by foreign investors, which in turn does not require additional sources of funding. In 2009 the negative income account improved by 6.5% year-on-year. However, in Q1 2010 the uptrend was halted, as the deficit of income account widened. In annual terms, the income account deficit deteriorated 3.7 times.

In the accounting period the current transfers, composed of government grants and money transfers to other sectors, decreased after a sharp rise in the second half of 2008. Despite this fact in nine months of 2009 the volume of received transfers was steadily growing, while the abrupt downfall in the last quarter led to a 9.6% decrease in the annual level. Namely, in Q4 2009 the volume of received transfers plunged 34.0% year-on-year. However, it should be pointed out that such a significant drop was the result of large volumes of transfers received by the country at end-2008 in the aftermath of 2008 August developments. The overall balance of current transfers in 2009 totaled USD 958.1 million. The uptrend was continued in Q1 2010 as well. It is expected that throughout 2010 the high level of current transfers will be maintained.

The capital account is not large, mainly consisting of credit entries. The uptrend in capital transfers continued throughout 2009. Particularly high growth rates were posted in the second half of the year. The annual growth rate of capital transfers amounted to 60.6%. As a result, the sum of credit entries of the capital transfers equaled USD 180.4 million. The increase was also positive in Q1 2010, constituting USD 26.2 million.

In 2009 financing of the current account deficit again took place at the expense of long-term capital inflows, of which a significant portion traditionally constituted foreign direct investments (FDIs). However, it should be pointed out that the share of net FDIs in total capital inflows significantly diminished. Against the backdrop of more rapid relative growth of other financing sources, the shares of portfolio investments and loans decreased as well.

Due to the global financial crisis and the August 2008 war, starting from the second half of 2008 the volume of FDIs in Georgian plummeted. The inflow of FDIs in 2009 dropped 51.2% in annual terms, amounting to only USD 763.7 million. The downtrend was maintained in 2010 as well: in Q1 the volume of FDIs fell to USD 75.7 million, or 41.7% less year-on-year. It is likely that the level of FDI inflows will remain low until the end of the year.

As it was expected, against the backdrop of financial crisis there were no inflows of portfolio investments in 2009. The 2010 projections for portfolio investments equal USD 267.2 million, mainly conditioned by the mobilization of USD 250 million in the form of eurobonds issued by the railway company.

The share of other investments in capital inflows, as the financing source of Georgia's current account deficit, significantly increased in 2008 and the uptrend was maintained in the following year. Overall, in 2009 the volume of other investments grew 3.0%, amounting to USD 863.4 million. It should be pointed out that the structure of other investments drastically changed starting from the second half of 2008. In Q1 and Q2 2008 commercial banks attracted USD 481.6 million from abroad in the form of loans; however, in the second half the volume of external loans fell almost 4 times, whereas in 2009 there was a USD 410.9 million reduction in commercial banks' stock of external borrowings. On the contrary, starting from the second half of 2008, the external liabilities of the NBG and the government started to rise; in this period an increase totaled USD 1,061.2 million. These funds were largely received from the

IMF. In particular, during 2008 the amount of funds provided by the IMF equaled USD 256.8 million, while in 2009 - USD 562.5 million. Apart from that, by the decision of the IMF in August-September of 2009 there was a new redistribution of Special Drawing Rights (SDRs) among the member-countries. As a result, Georgia received a significantly increased amount of SDRs, which was reflected in reserve assets, on the one hand, and in other long-term liabilities of other investments, on the other (the IMF decided to include the above-mentioned redistribution as a balance-of-payments operation). Thus, in 2009 the NBG's other long-term liabilities of other investments grew by USD 225.6 million, becoming another important source for deficit financing. In the accounting period there was a decrease in trade credits of the non-government sector. It should be pointed out that in 2009 a significant part of current account deficit financing was made at the expense of cash and deposits (USD 201.0 million). Theses tendencies continued in Q1 2010; net borrowing of the government sector equaled USD 228.9 million, while, on the contrary, net payments of commercial banks and other sectors amounted to USD 49.4 million and USD 13.5 million, respectively. According to the NBG's forecasts, the increase in the government's external liabilities will be maintained until the end of 2010.

Overall, in 2006-2008 financing of Georgia's current account deficit was primarily made at the expense of long-term funds mobilized by the private sector, resulting in a general balance-of-payments surplus (balance of payments excluding funds mobilized by the government). However, starting from the second half of 2008 the share of the government sector and the NBG in deficit financing soared. The total share of funds mobilized by the government sector grew from 26% in Q1 2008 to 62% in Q1 2010.

Based on the above, in 2009 Georgia's general balance of payments ended in a deficit, amounting to

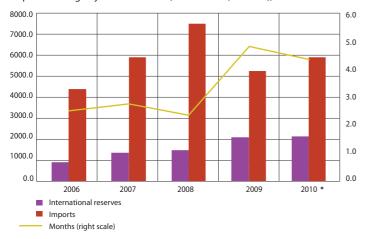
Table 5.2 Financing of Current Account Deficit (USD, millions), 2006 - Q1 2010

| | 2006 | 2007 | 2008 | 2009 | 2010 I Q. |
|---|----------|----------|----------|----------|--------------|
| Current Account | -1,175.3 | -2,010.0 | -2,912.3 | -1,259.0 | -181.2 |
| Capital Account | 171.2 | 127.6 | 112.3 | 180.4 | 26.2 |
| Financial Account | 1,068.7 | 1,917.1 | 2,836.1 | 1,024.9 | 152.6 |
| Government Sector (NBG and NBG Reserves) | -549.1 | -393.8 | 759.4 | 324.4 | 95.3 |
| Private Sector (including Banks) | 1,617.8 | 2,310.9 | 2,076.7 | 700.5 | 57.4 |
| Net errors and omissions | -64.6 | -35.1 | -36.1 | 53.7 | 2.3 |

Table 5.3 Balance of Payments (USD, millions), 2009-Q1 2010

| | 2009 I Q. | 2009 II Q. | 2009 III Q. | 2009 IV Q. | 2010 I Q. |
|----------------------------|--------------|---------------|----------------|---------------|--------------|
| Current Account | -407.7 | -255.5 | -246.0 | -457.4 | -223.1 |
| Capital Account | 31.8 | 35.5 | 43.7 | 69.4 | 26.2 |
| Financial Account | 248.1 | 249.0 | 30.9 | 306.5 | 30.9 |
| Net errors and omissions | 8.5 | -13.8 | 9.3 | 49.8 | 2.3 |
| Overall Balance | -119.3 | 15.2 | -162.2 | -31.8 | -163.7 |
| Reserves and Related Items | 119.3 | -15.2 | 162.2 | 31.8 | 163.7 |
| Reserve Assets | -59.8 | 19.7 | -467.5 | -108.8 | -138.9 |
| Use of IMF Funds and Loans | 179.9 | -1.3 | 137.7 | -3.6 | 216.1 |
| SDR Redistribution | 0.0 | 0.0 | 225.5 | 0.0 | 0.0 |
| Exceptional Financing | -0.8 | -33.6 | 266.5 | 144.2 | 86.4 |

GRAPH 53 Import Coverage by Reserve Assets (USD millions, months), 2006-2010



* NBG forecast

USD -298.1 million. In O1 2010 the deficit was still in place, equaling USD -163.7 million. The above tendency is likely to continue until end-2010. Financing of the general balance of payments, as it was already mentioned in the overview of the Report, was largely made by means of the IMF loans.

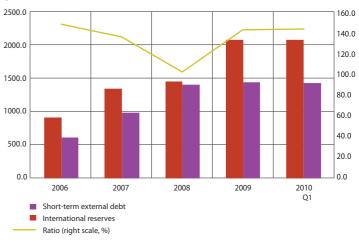
Due to large inflows in the government sector, the reserve assets grew by USD 616.4 million in 2009. This included, as mentioned above, a large increase in the SDR account. As a result, the international reserves of the NBG totaled USD 2,110.4 million, as of December 31, 2009. Growth of the international reserves continued in Q1 2010, reaching a record high at end-Q1. According to the existing forecasts, the volume of international reserves will decrease in 2010, although at a slow rate. The expected annual decrease is largely conditioned by a significant reduction in Q2 2010, equaling USD 250.7 million. Coverage of total imports by international reserves - the ratio which manifests a country's ability to satisfy its requirements in the international markets without additional external financing - is projected at the level of 4.2 months by end-2010.

The ratio of reserve assets to short-term debt, one of the main indicators of a country's ability to service external debt, after a significant decrease in 2008 posted a 40 percentage point increase, amounting to 145.3% in Q1 2010.

By end-Q1 2010 the total volume of Georgia's external debt approached USD 8.8 billion, of which the debt of the NBG and the government constituted 43.1%. Liabilities to direct investors account for 25.4% of the total debt. With respect to maturity terms, 83.5% of total external debt is long-term; accordingly, the short-term debt accounts for 16.5%. In the remaining period of 2010 an exact amount of loans to be repaid is not determined. By the NBG's estimates, this amount equals approximately USD 1,280.5 million. This includes private sector loans of USD 1,121.2 million (banks' share - USD 400.5 million, non-financial organizations' share - USD 720.7 million). A large part of external loans to be repaid by non-financial organizations - 53.0% - represent intercompany loans. The amount of liabilities to be repaid by the government sector and the NBG in 2010 equals USD 159.3 million.

Taking into account a considerable narrowing of the current account deficit and a favorable structure of external liabilities, the emergence of problems related to repayment of external liabilities has a low short-term probability.

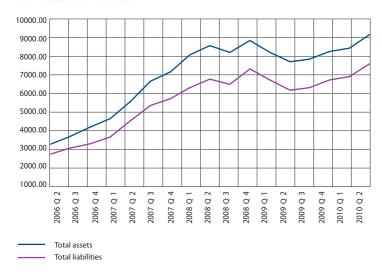
GRAPH 5.4 Short-Term External Debt and International Reserves (USD millions, percentage), 2006-Q1 2010



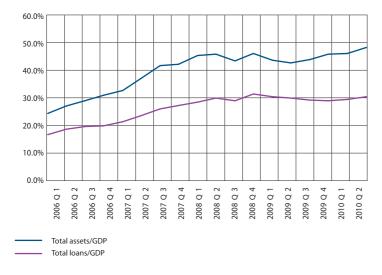
BANKING SECTOR

As of June 2010 the Georgian banking system comprises 19 banks, of which 17 are resident banks and the remaining 2 are branch establishments of non-resident banks. The total number of service centers and branches of the commercial banks in Georgia equals 632, or 26 units less than a year before (presumably, the reduction was due to cost

GRAPH 6.1 Total Assets and Liabilities



GRAPH 62 The Ratio of Total Assets and Liabilities to GDP



minimization policies). The share of commercial banks with foreign capital participation equals 89% in total assets and 88.3% in equity capital. 78.7% of paid-in capital represents investments, a 2 percentage point increase in annual terms (it should also be noted that in June 2008 this figure was 81.2%). In terms of flows between June 2009 and June 2010 the Georgian banking sector received investments in the total amount of GEL 58.14 million.

The total assets of the banking system at the end of Q2 2010 stood at GEL 9,215 million, or 19.2% more year-on-year. In this regard one should note the growth of funds placed in other banks and investment in securities, accounting for 35.1% and 29.8% of total asset growth, respectively. With regard to total liabilities, face value equals GEL 7,638 million, or 23.3% more than in June 2009.

If we consider the ratios of total banking assets and loans with respect to GDP, these parameters were subject to certain fluctuations in the accounting period. At present, the assets-to-GDP ratio equals 48.7%, up by 6 pps year-on-year. Meanwhile, the loans-to-GDP ratio stood at 30.3% in June 2010, posting an insignificant change in annual terms.

In terms of assets, in Q3 and Q4 2009 the volume of total loans (including interbank loans) was diminishing every month, falling to GEL 5,185 million by end-year. However, starting from January 2010 a permanent uptrend has been manifested showing the signs of revitalization of the economy. As of June 2010, the volume of loans totals GEL 5,737 million. In particular, the loans to legal entities grew 10.9% year-on-year, while loans to individuals increased only slightly at 0.6%. Overall, the real growth of the credit portfolio of the banking sector equaled 3.1% in the accounting period. Strong growth of loans

in the first half of 2010 should be noted – the real growth amounted to 8.43% in the period.

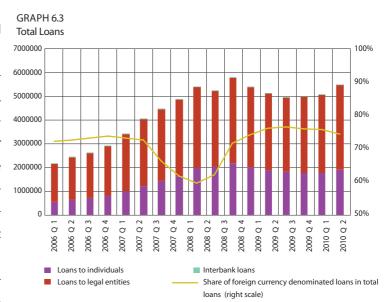
The level of loan dollarization remains high, despite a visible downtrend in the accounting period. As of June 2010, the share of foreign currency denominated loans in total loans equaled 71.6%, or 5.8 pps less in annual terms. It should be noted the dollarization level was decreasing for loans extended to both individuals and legal entities. At present, the respective dollarization levels stand at 66.9% and 74.8%.

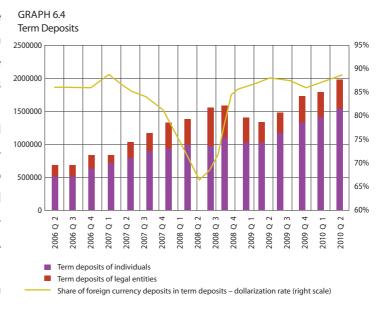
In the accounting period the volume of non-performing loans (NPL) decreased by GEL 144.6 million, standing at GEL 935 million. The decline was also present for NPLs denominated in foreign currency, shedding 14.1 pps. At present, the share of NPLs in total loans equals 16.3%, or 2.5 pps less than a year before.

As it was noted above, in the accounting period a 23.3% increase in total liabilities was posted. Almost half (46.6%) of the growth is attributed to term deposits of individuals. It should be noted that, unlike deposits, banks' borrowings slightly decreased in the accounting period, standing at GEL 2.656 million.

The volume of non-banking deposits has been steadily increasing since June 2009, reaching GEL 4,415 million in June 2010, which is 45.7% higher in annual terms. In parallel to increases in total volumes, the dollarization rate of non-banking deposits was on a downtrend, posting a 4.1 percentage point decline and standing at 64.7% (excluding the exchange rate effect). The value of term deposits of individuals grew by GEL 509.8 million in the accounting period, but this did not affect much the dollarization rate, with the latter standing at 89.7% (excluding the exchange rate effect).

The ratio of banking sector assets to capital equals 5.85 as of end-June 2010, compared with



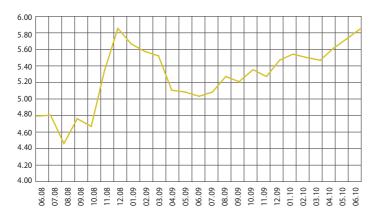


5.04 a year before. Such an increase in the ratio over the accounting period indicates a relative growth of assets with respect to capital pointing to an increased sectoral leverage.

6.1. CAPITAL ADEQUACY

According to the "Regulation on Capital Adequacy Requirements for Commercial Banks", weighting of banking assets is made relative to credit and market risk. The Regulation considers only the FX risk (risk of assets in foreign currency) as the ma-

GRAPH 6.5 Assets/Capital



GRAPH 6.6 Dynamics of Market Risk Weighted Assets (Actual Data and Alternative Scena-





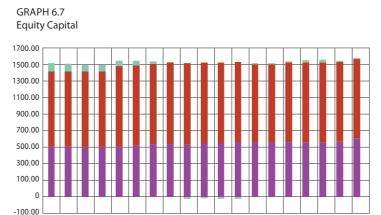
rket risk, but the respective weighting factors have been decreased over the last two years. In particular, before September 2008 the factor equaled 100%; thereafter, by the decision of the Financial Supervision Agency it was reduced first to 75% and in August 2009 to 50%. These changes affected the volume of market-risk-weighted assets: the latter decreased by GEL 1,008 million. In the accounting period the reduction in market-risk-weighted assets amounted to GEL 940 million, which was primarily explained by the above-mentioned weighting factor (in case of retaining the 75% factor, this would result in a 10.6 million increase). In the same period credit risk weighted assets increased by GEL 756 million. Ultimately, the risk-weighted assets currently stand at GEL 9,115 million, which is GEL 177 million less than a year before.

A decrease in the market risk factor exerted an obvious impact on the capital adequacy ratio. In August 2009 it increased by 2 pps, remaining at a high level until end-year. Starting from January 2010, the ratio was on a gradual downtrend, ultimately settling at 17.4%, as of June 2010. It should be noted here that the capital adequacy ratio in Georgia equals 12%. The diagram shows the dynamics of the actual adequacy ratio along with two additional scenarios, if the factors were retained at 100% and 75%.

In general, reduction in the market (exchange rate) risk factor, on the one hand, creates the possibility to expand economy crediting in foreign currency; however, the effect may not immediately materialize due to the existence of other factors influencing credit policies of the commercial banks. On the other hand, there is room for decreasing regulatory capital and using freed resources for current needs. It should be noted the regulatory capital in the banking sector fell by 3 pps (GEL 48.9 million), currently standing at GEL 1,583 million. The above difference is mainly determined by growth of components subject to deductions (in particular, nonconsolidated investments in equity capital of banks' subsidiary companies). With regard to the primary source of the regulatory capital, tier 1 capital, the latter decreased by GEL 39.1 million, equaling GEL 1,317 million in June 2010. The decline was conditioned by a sharp contraction of retained earnings. In the same period the funds received through equity issuance equaled GEL 11.5 million. Tier 2 capital grew by GEL 246.6 million in the accounting period, owing to the increase in subordinated debt.

6.2. PROFITABILITY

In the accounting period the banking sector's revenues equaled GEL 1,493 milion, which are almost equally distributed over the second half of 2009 and the first half of 2010. However, it should be pointed out that in Q3 and Q4 2009 the monthly nominal decreases in revenues occurred, while the first two quarters of 2010, on the contrary, posted increases in revenues. In addition, in the last four months of the accounting period the non-interest revenues have been growing steadily: the increases are mainly due to currency conversion operations and nominal gains from revaluation of funds in foreign currency against the backdrop of an existing uptrend in the exchange rate. With regard to interest revenues, their dynamics followed the fluctuations in exchange rates on extended loans (loans accounting for almost 70% in interest-bearing assets of the banking sector). Compared with June 2009, by end-2009 the interest rate on loans extended in lari fell by 0.5 pps, while the interest on foreign currency denominated loans dropped by 1.6 pps. The downtrend continued in the first half of 2010, settling at the following levels as of June 2010: 21.5% on lari denominated loans and 17.6% on foreign currency denominated loans. It should be noted that the interest rates on deposits also tended to decrease: the respective interest rates on deposits in lari and foreign currency decreased from 11.4% and 10.2% in June 2009 to 10.7% and 9.3% at end-year, and 9.5% and 8.0% at end-June 2010. In the end, the net interest spread¹³ decreased by 1 percentage point in the accounting period, standing at 8.0%. With regard to net interest margin, the latter fell by 1.2 pps, equaling 8.4% at end-period. 42.5% of the interest income of the banking sector came from loans to individuals, and



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33.

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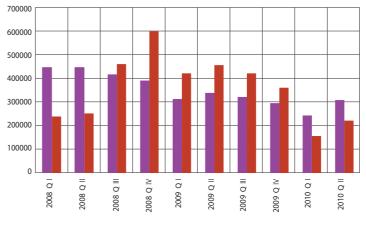
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Paid-in equity capital Capital provisions Retained earnings

2.08 01.09 60 03.09 04.09 05.09 00.90 07.09 08.09 60.60

05.0

GRAPH 6.8 Annualized Profits before Provisioning and Reserves



 Annualized profits before provisioning Annualized reserves

55% - from loans to legal entities. If we compare the interest income to the respective interest expenses, the net interest margin equaled 14.7% for households and 12.1% for legal entities.

In the accounting period the banking system incurred expenses in the amount of GEL 1,332 million, of which GEL 680.1 million in 2010. Average monthly expenses were roughly even, at the exception of the last 2 months, when provisions for

¹³ The net interest spread is the difference A/B – C/D, where A denotes interest income, B – interest-earning assets, C- interest expenses, and D – interestbearing liabilities

GRAPH 6.9 Monthly Profits/Losses of the Banking Sector (Lari, millions)

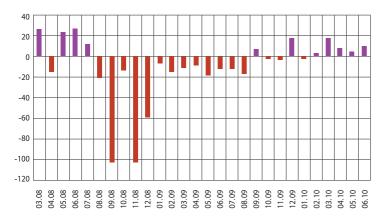


Table 6.1 **Profitability Ratios in Other Ccountries**

| | ROE | ROA | Reference date |
|---------|-------|-----|----------------|
| Armenia | 3.4 | 0.7 | Dec 2009 |
| Belarus | 8.9 | 1.4 | Dec 2009 |
| Moldova | 1.0 | 0.2 | Nov 2009 |
| Russia | 4.9 | 0.7 | Dec 2009 |
| Ukraine | -23.8 | 3.2 | Sep 2009 |
| Turkey | 18.8 | 2.6 | Dec 2009 |

asset losses (primarily loans) were increased. Along with the growth of non-banking deposits, the relevant interest expenses were steadily increasing as well: in the first two quarters of 2010 the incurred expenses on non-banking deposits were 13.2% higher than in the last two quarters of 2009. The ratio of expenses on personnel to total operational expenses at present equals 39.0%, or 5 pps less than at end-2009.

In terms of profitability of the banking sector, the second half of 2009 was characterized by downward dynamics of the operational profit. However, in the last quarter the growth tendency emerged and was maintained in 2010. Since operational profit represents profit before provisioning, it is interesting to consider the dynamics of asset provisioning with the purpose of assessing the provisioning effect on equity. In the accounting period the annualized¹⁴ provisioning was decreasing, but in Q2 2010 it posted a positive growth. However, it should be pointed out that, unlike in 2009, the difference between the operational profit and asset provisioning in 2010 is positive, indicating the fact that in Q1 and Q2 2010 relatively smaller amounts of resources were used for provisioning. In addition, the above-mentioned had an appropriate effect on net profit of the banking sector, which amounted to GEL 37.3 million (as of first half of 2010). To compare, at end-Q2 2009 total losses equaled GEL 63.6 million.

Return on assets and return on equity in June 2009 were negative at -1.6% and -8.4%, respectively, compared with 1.9% and 8.9% in 2008. In 2010 ROA and ROE turned positive again, equaling 0.9% and 4.8%.

¹⁴ Annualized time series data with monthly dynamics is calculated by the following formula: (X/N) *12, where X is data, N – number of months from the beginning of the year.

7 NON-BANKING SECTOR

The Georgian non-banking financial sector consisted of 17 credit unions, 39 microfinance organizations (MFOs), 1 stock exchange, 16 insurance companies and 6 non-government funds, as of June 2010.

In the accounting period the consolidated assets of MFOs grew by GEL 96 million in nominal terms, currently standing at GEL 244.2 million. The increase in assets was largely conditioned by a GEL 62.2 million increase in loans, with the latter equaling GEL 171.9 milion at end-June 2010. It should be noted that contrary to the previous accounting period (second half of 2008 – first half of 2009) the uptrend in net loans was steady, confirming sound credit policies of MFOs. Funds on bank accounts almost doubled with their volume now standing at GEL 38.9 million.

A 33.7% share of trade and services should be singled out in extended loans. Crediting of transport, agriculture and forestry sectors is also significant. The relatively risky construction sector continues to hold an insignificant share of 0.4%.

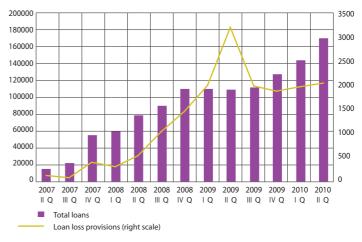
In terms of liabilities, the funds borrowed by MFOs from individuals and legal entities increased by GEL 56.9 million, equaling GEL 145.7 million by end-June 2010. In the accounting period the growth of own debt securities and subordinated debt should also be pointed out, currently standing at GEL 7.6 million and GEL 9.9 million, respectively. Overall, the consolidated MFO liabilities equal GEL 177.8 million, while the consolidated equity capital stands at GEL 66.4 million.

Similar to the previous accounting period, the growth of retained earnings was maintained (even at a higher rate), standing at GEL 22.9 million by endperiod.

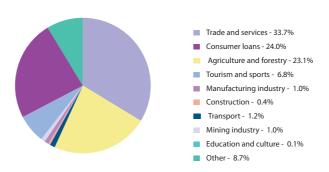
By end-June 2010 the total assets of credit unions

operating in Georgia increased 27% year-on-year, amounting to GEL 2.1 million. A large share of assets is in the form of extended loans to clients – GEL 1.7 million, with the respective LLPs standing at GEL 60.2 thousand. In terms of total liabilities, the volume of placed term deposits at the credit unions grew 15.9% in the accounting period, currently standing at GEL 1.0 million. Borrowings from MFOs also increased, standing at GEL 322.3 thousand in June 2010. At the same period the equity of credit unions totaled GEL 558.6 thousand.

GRAPH 7.1 Dynamics of MFO Loans in Q2 2007-Q2 2010 (lari, thousands).



GRAPH 7.2 MFO Loans by Sectors, June 2010



By end-2009 the total assets of insurance companies operating in Georgia equaled GEL 331.4 million, of which net insurance and reinsurance claims equaled GEL 154.7 million. In this regard, there were no significant changes with respect to Q2 2009. The total liabilities by end-year stood at GEL 276.3 million, or approximately GEL 10 million less than in Q2 2009, which was mainly due to a decrease of technical insurance reserves.

In 2009 the insurance sector posted a positive net profit of GEL 17.9 million. During the last two quarters of 2009 the volume of mobilized insurance premiums totaled GEL 162.0 million, whereas the earned (net) premiums stood at 147.9 million. The respective figures for reinsurance companies equaled GEL 5.2 million and GEL 2.6 million.

Similar to the previous accounting period, the medical (health) insurance continued to dominate the insurance market, accounting for 84.9%.

The number of participants in the non-government pension schemes in Georgia slightly decreased from Q2 2009 to end-2009, finally standing at 14,175 persons. In Q3 and Q4 2009 the volume of pension installments totaled GEL 1.0 million, while pension reserves as of end-year stood at GEL 6.3 million. Revenues from investment of reserves in the last two quarters of 2009 equaled GEL 1.6 million, which is considerably higher than in the first half of the year.

In 2009 the securities market was not active. which was reflected in a smaller number of transactions, compared with 2008. However, the number of transactions throughout the year grew considerably: as of December 31, 2009 the Georgian Stock Exchange admitted securities of 146 issuers, as the total value of securities transactions equaled GEL 98.8 million. The value of transactions concluded at the stock exchange trading sessions equaled GEL 3.1 million, while the value of transactions outside the stock exchange amounted to GEL 95.7 million. At present the Georgian securities market is in the development stage, so far failing to represent an important source of raising capital for the companies.

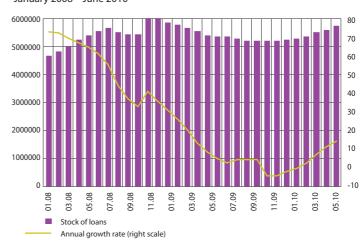
8. CREDIT RISK

By end-June 2010 the total volume of economy crediting by the commercial banks equaled GEL 5,735 million. The volume of crediting was continuously declining in the second half of 2008 and during 2009, although already in the second half of 2009 the decline gradually slowed down. In January 2010 the stock of loans rose for the first time, totaling GEL 5,237 million, while later in May the annual growth rate grew positive. The reversal of the downtrend in loans indicates stabilization of the economic situation in the country, and should be doubtlessly considered as a positive event. However, the increase in the loan stock was partly caused by the exchange rate depreciation of lari. By end-June 2010, the annual growth rate of total loans amounted to 6.9%, but if we exclude the exchange rate effect, the same indicator equaled -0.8%. The stock of loans denominated in foreign currency decreased 8.4% in the accounting period, while the lari-denominated loans grew 24% in the same period.

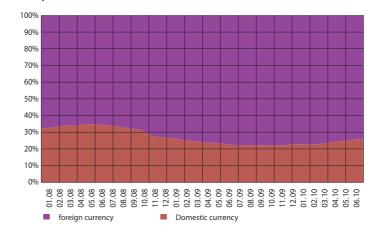
Along with recovery of positive growth rates of crediting, the banking sector actively started extending loans in domestic currency. By end-June 2010 the share of loans denominated in domestic currency equals 26.3%, or 3.6 pps higher year-on-year. However, if we take into account the exchange rate change, the share of lari-denominated loans in the accounting period rose by 5.9 pps. Despite this positive tendency, the share of loans in lari still remains low relative to the pre-crisis level, for comparison, the above share equaled 34.4% by end-June 2008.

The dynamics of extended loans (flows) looks optimistic in 2010. In the first half of the year the volume of extended loans grew considerably. During this period the value of extended loans totaled GEL 3,664 million, or 44.5% more year-on-year. However, on

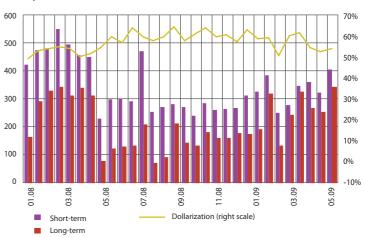
GRAPH 8.1 Stock of Loans and Annual Growth Rate January 2008 – June 2010



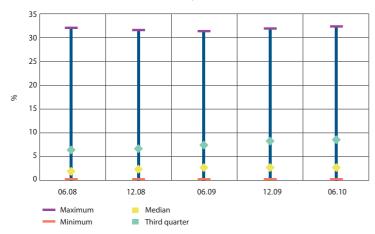
GRAPH 8.2 Loan Stock by Currency January 2008 - June 2010



GRAPH 8.3 Extended Loans January 2008 – June 2010, Lari, millions



GRAPH 8.4 Shares of Individual Banks in Total Loans, June 2008 - June 2009



GRAPH 8.1.1 Flows of Extended Loans by Amounts January 2008 – June 2010, Lari, millions

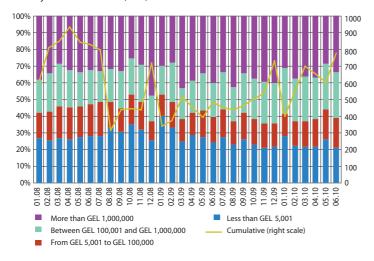


Table 8.1.1 Total Loans by Volumes, January 2009 – June 2010

| | Total I | oans (lari, m | illions) | | 20.3 19 | | |
|-------------------|---------|---------------|----------|-------|---------|-------|--|
| | 06.09 | 12.09 | 06.10 | 06.09 | 12.09 | 06.10 | |
| Less than 20,000 | 1,176 | 1,053 | 1090 | 21.9 | 20.3 | 19 | |
| 20,001-50,000 | 462 | 412 | 435 | 8.6 | 7.9 | 7.6 | |
| 50,001-100,000 | 380 | 395 | 435 | 7.1 | 7.6 | 7.6 | |
| More than 100,000 | 3,349 | 3,325 | 3,774 | 62.4 | 64.1 | 65.8 | |

the other hand, in the first half of 2008 the volume of extended loans amounted to GEL 4,841 million. The average monthly volume of extended loans equaled GEL 610.6 million in 2010, GEL 471 million in 2009, and GEL 665 million in 2008. A remarkable

increase in the share of long-term loans has been registered. During 2009 the share of long-term loans in total loans equaled 37.2%, while in the first half of 2010 the same share grew up to 44.3%. However, it should also be pointed out that data on extended loans takes into account restructured and refinanced loans, which means that the data may not fully reflect current credit policies of the commercial banks.

In the accounting period no significant changes have been manifested with respect to the shares of individual banks in total loans. Compared with June 2008, the total share of the five largest commercial banks in total loans remained unchanged at 81.9% in end-June 2009. In terms of extended loans the share of the largest bank increased by 1.5 pps, accounting for 33%.

8.1. CREDIT PORTFOLIO

In the accounting period the total volume of loans extended by the commercial banks equaled GEL 5,803.6 million. The largest part of extended loans included loans in the amount of more than GEL 100,000. The loans in the range of GEL 100,000 and GEL 1 million accounted for 25.1%, while the share of loans of more than 1 million stood at 36.1%. In the accounting period the share of small loans in the extended loans decreased, as the share of loans of less than GEL 100,000 dropped to 38.8% at end-June 2009 from 44.8% a year before.

Despite certain growth of credit portfolio in the accounting period, the share of small loans in the portfolio tended to decrease. The share of loans of less than GEL 20,000 in total portfolio equaled 23.2% at end-June 2008, 21.9% at end-June 2009, and 19% at end-June 2010. On the other hand, the share of loans of more than GEL 100,000 grew from 62.4% to 65.8% during the accounting period. In general, the increase in the share of large loans indicates concentration of credit risk, and the latter may be amplified. The share of small loans is diminished in loan flows and stock of credit portfolio, which is likely to be the result of banks' conservative credit policies. Small loans are frequently extended without collateral, thus, in case of default losses on such loans are larger, compared with bigger loans extended against collateral. On the other hand, in the case of solvency problems it is more likely to restructure bigger loans. Accordingly, it is clear that decrease of small loans and restructuring of big loans takes place.

In the accounting period the share of short-term loans has increased relative to long-term loans. At end-June 2010 the share of short-term loans equaled GEL 1,410 million, or 24.6% of total loans. The increase in the share of short-term loans is explained by the fact that only 33.3% of total loans extended in the previous accounting period were long-term loans. At end-June 2009 this share rose to 42.1%. Along with economic stabilization and decrease in uncertainty it is likely that time to maturity will increase. This is corroborated throughout 2010 by declining interest rates on loans with maturity of more than 12 months. In January 2010 the interest rate on long-term loans extended in domestic currency stood at 23.3%, while the interest rate on loans in foreign currency equaled 18.5%. In June 2010 the respective interest rates stood at 19.8% and 15.7%. The interest rates on short-term loans fluctuated throughout 2010 and no pronounced downtrend has been yet manifested.

In the accounting period the volume of loans extended to individuals posted a slight increase of 0.3%. Accordingly, the share of these loans in the total credit portfolio decreased, amounting to 38.9% at end-June 2010, or 2.6 pps less than a year before. It is a welcoming fact that the volume of lari-denominated loans extended to individuals grew 8.6% in the accounting period, since individuals often do not receive income in foreign currency, and the banks assume the currency mismatch risk upon themselves.

GRAPH 8.1.2 Changes in Loans by Amounts 2009-June 2010

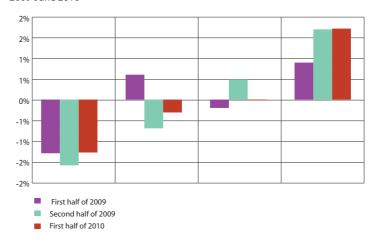


Table 8.1.2
Total Loans by Maturity Terms, January 2009 – June 2010

| | Total Lo | oans (Lari, m | nillions) | | Share (%) | |
|----------------------------|----------|---------------|-----------|-------|-----------|-------|
| | 06.09 | 12.09 | 06.10 | 06.09 | 12.09 | 06.10 |
| Short-term loans, of which | | | | | | |
| Less than 1 month | 118 | 105 | 114 | 2.2 | 2.0 | 2.0 |
| Between 1 and 3 months | 124 | 136 | 158 | 2.3 | 2.6 | 2.8 |
| Between 3 and 6 months | 185 | 226 | 277 | 3.5 | 4.4 | 4.8 |
| Between 16 and 12 months | 835 | 731 | 861 | 15.5 | 14.1 | 15.0 |
| Total short-term loans | 1,262 | 1,198 | 1,410 | 23.5 | 23.1 | 24.6 |
| Long-term loans | 4,105 | 3,987 | 4,324 | 76.5 | 76.9 | 75.4 |

GRAPH 8.1.3 Average Maturity Period of Loans January 2008 – June 2010

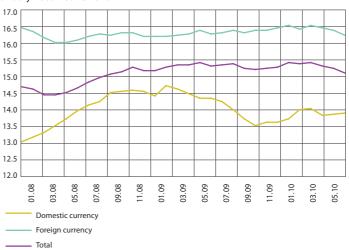
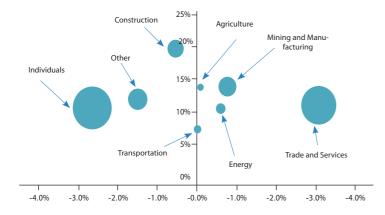


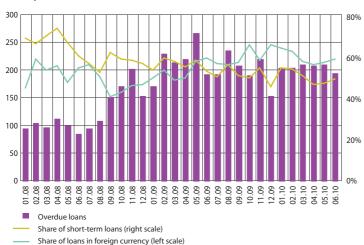
Table 8.1.3 Loans by Sectors

| | 06.09 | 12.09 | 06.10 |
|-----------------------------------|-------|-------|-------|
| Trade and Services | 1,529 | 1,543 | 1,809 |
| Energy | 94 | 109 | 135 |
| Agriculture and Forestry | 51 | 48 | 61 |
| Construction | 391 | 359 | 388 |
| Mining and Manufacturing Industry | 401 | 418 | 472 |
| Transportation and Communication | 76 | 69 | 82 |
| Individuals | 2,224 | 2,084 | 2,230 |
| Other | 595 | 551 | 553 |

GRAPH 8.1.4 Changes in Sectoral Shares of Credit Portfolio



GRAPH 8.1.5 Dynamics of Overdue Loans January 2008 – June 2010, Lari, millions



Meanwhile, the volume of loans extended to individuals in foreign currency fell 3.5%.

No significant changes took place in the accounting period with respect to loans extended to sectoral business entities. A 3 percentage point increase in the share of trade and services was posted, while the share of construction fell by 0.5 pps. On the diagram below, changes in the sectoral shares of the total credit portfolio are depicted on X axis, while Y axis shows the shares of loan loss provisions for loans extended to the respective sectors, while the size of bubbles is proportional to sectoral shares in the total credit portfolio as of June 2010. Along with loans extended to the energy, and transportation and communication sectors, loans to individuals can be considered as one of the three least risky categories, since only 9.9%, 6.2% and 10.3% of the respective sectoral loans are classified as non-performing. The share of non-performing loans in trade sector is also low, accounting for 10.6%. It is precisely this sector at the expense of which the commercial banks expanded their portfolio, whereas the volume of loans extended to other business sectors and individuals did not alter significantly.

In the accounting period despite improvement in the quality of loans extended to the construction sector, the latter still remains to be the most problematic sector. The loan loss provisions in the construction sector stand at 20.6%, which is the highest sectoral share.

In the accounting period both the volume and the share of overdue loans fluctuated; in the first half of 2010 the volume of overdue loans stabilized, standing at GEL 201.2 million by end-June, or 3.5% of the total credit portfolio. In June 2009 this share equaled 3.7%. On average, the share of overdue loans in the credit portfolio equaled 3.9% in the accounting period. The growth of overdue loans is partly explained by an increase in the share of overdue loans exten-

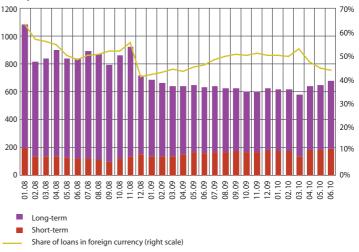
ded in foreign currency. The latter share increased in average terms from 51.5% in June 2009 to 61.2% in end-June 2010. The share of short-term loans in overdue loans equaled 50.8% by end-June 2010 and 52.3% on average in the accounting period. In the previous accounting period the same share in average terms stood at 58.3%, pointing to the fact that along with deterioration of loan quality overdue loans increased in long-term loans and remain at a high level.

In the accounting period the stock of consumer loans grew 6.4%, amounting to GEL 714.5 million by end-June 2010. It should be pointed out that in Q2 2010 the share of foreign currency denominated consumer loans decreased to 45.7% at end-June from 48.1% a year before. With regard to loans secured with real estate, the value of such loans extended in the accounting period totaled GEL 2,329 million. This is 58.6% higher than the same parameter in the previous accounting period (July 2008 – June 2009). In the accounting period there was also a gradual decline in the share of foreign currency denominated loans - in average terms the share equaled 73.8%, while in June 2010 it stood at 70.1%. In the previous accounting period, the average share of loans extended in foreign currency was 82.3%.

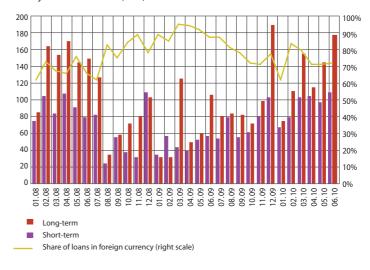
The table 8.1.4. shows the loan structure by sectoral risk categories.

The real estate development sector, mainly represented by residential housing developers, is one of the most risky areas. According to the existing information, the share of residential housing under construction equals 83%, of which development projects in the initial and medium phase account for 86%. Overall, it should be noted that the projects which were implemented by means of bank loans were halted not due to solvency but rather liquidity problems. However, there are cases where such problems were resolved. This includes those developing

GRAPH 8.1.6 Consumer Loans (Stock) January 2008 – June 2009, Lari, millions



GRAPH 8.1.7 Loans Secured with Real Estate (Flows) January 2008 – June 2010, Lari, millions



companies which participated in the "New life of Old Tbilisi" project innitiated by the Tbilisi City Hall.

Credit risk is also high in the commercial real estate market, but it is relatively lower than in the residential housing segment. This was conditioned by the pre-crisis situation when the rent/price ratio exceeded the interest rate on deposits and the leverage level was relatively low. In this regard, the risk related to loans extended to the commercial real estate sector is lower, which is reflected in the respec-

Table 8.1.4 Extended Loans by Risk Sectors in the Banking System (Lari, millions)

| | | As of June 30, 200 | 9 | |
|--|--|--------------------|--------------------|-----------------------------|
| | Share of Loans by Risk Sectors in Total Portfolio | Loan Stock | Loan Re- serves | Loan Reserves/ Portfolio |
| Public Entities | 1.0% | 58.1 | 1.9 | 3.3% |
| Financial Institutions | 1.6% | 91.0 | 2.3 | 2.5% |
| Pawn Loans | 3.0% | 169.1 | 3.4 | 2.0% |
| Real Estate Development | 5.4% | 311.5 | 77.3 | 24.8% |
| Real Estate Management | 4.7% | 268.2 | 32.4 | 12.1% |
| Construction Companies (excluding Developers) | 4.1% | 233.7 | 37.6 | 16.1% |
| Extraction, Production and Trade of Construction Materials | 3.0% | 169.5 | 26.0 | 15.3% |
| Trade of Consumption Goods | 5.9% | 339.4 | 34.1 | 10.1% |
| Production of Consumption Goods | 4.9% | 278.7 | 42.6 | 15.3% |
| Production and Trade of Durable Goods | 1.8% | 104.5 | 14.0 | 13.4% |
| Production and Trade of Footwear, Clothing, and Textile | 1.0% | 57.0 | 3.8 | 6.7% |
| Trade (other) | 5.3% | 303.1 | 23.1 | 7.6% |
| Production (other) | 2.4% | 136.8 | 14.4 | 10.5% |
| Hotels and Tourism | 2.6% | 148.2 | 24.3 | 16.4% |
| Restaurants, Bars, Cafes and Fast Food Outlets | 1.3% | 74.8 | 7.9 | 10.6% |
| Heavy Industry | 1.6% | 91.2 | 4.0 | 4.4% |
| Energy | 3.2% | 181.1 | 22.5 | 12.4% |
| Car Dealers | 2.3% | 130.1 | 13.6 | 10.4% |
| Health | 1.1% | 64.8 | 8.3 | 12.9% |
| Pharmaceuticals | 1.0% | 60.0 | 2.6 | 4.3% |
| Restaurants, Bars, Cafes and Fast Food Outlets | 0.9% | 52.3 | 3.1 | 5.9% |
| Telecommunications | 1.3% | 72.1 | 5.5 | 7.6% |
| Service | 4.3% | 248.8 | 25.4 | 10.2% |
| Agriculture | 2.0% | 112.4 | 11.7 | 10.4% |
| Other (including Scrap Businesses) | 3.3% | 186.2 | 18.8 | 10.1% |
| Retail Products | 31.2% | 1,785.7 | 209.2 | 11.7% |
| Car Loans | 1.7% | 99.4 | 9.8 | 9.8% |
| Consumer Loans | 9.3% | 535.2 | 44.6 | 8.3% |
| Instant Installment Loans | 0.5% | 27.5 | 5.3 | 19.2% |
| Overdrafts | 1.0% | 55.5 | 6.1 | 10.9% |
| Credit Cards | 4.5% | 260.3 | 64.6 | 24.8% |
| Loans for Apartment Refurbishments | 1.9% | 109.2 | 7.7 | 7.1% |
| Mortgage Loans | 12.2% | 698.7 | 71.1 | 10.2% |
| Total | 100.0% | 5,728.4 | 669.7 | 11.7% |

tive loan loss provisions. Loans to construction companies excluding developers also represent carriers of high credit risk, although there exists a risk-containing factor in the form of large current/planned expenditures from state budget on infrastructure development.

It is also remarkable that, similar to the international practice, the pawn shop sector in Georgia is counter-cyclical. The reasons is that against the backdrop of slackened credit activity with high liquidity and credit risk there arises increased demand for pawn loans as well as higher gold price. On the other hand, after recovery of economic activity and in the event of decreases of gold prices this sector might carry significant risks.

8.2. NON-PERFORMING LOANS AND RESERVES

The volume of NPLs reached record high in June 2009, equaling GEL 1,007.9 million, or 18.8% of total loans. In the beginning of the accounting period the uptrend in the volume of NPLs was halted, and by end-June 2010 the volume of NPLs decreased to GEL 935 million, or 16.3% of total loans. Despite the trend reversal, the volume of NPLs still remains high indicating the existence of significant credit risk in commercial banks' credit portfolio. The volume of LLPs did not change significantly in the accounting period, standing at GEL 670 million at end-June 2010. However, the coverage of NPLs through LLPs increased to 71.7%, compared with 64.8% a year before. With regard to distribution of NPLs into risk categories, 48% of NPLs are classified as substandard. 24.6% - as doubtful, and 26.8% of loans are bad.

Along with deterioration of asset quality in the banking system the volume of repossessed property and its share in total loans increased. By end-June 2010 the volume of repossessed property equaled GEL 202.4 million, or 325% higher in annual terms. Accumulation of repossessed property on banks' balance sheets represents a significant risk for the real estate sector and, therefore, for loans extended to this sector. The reason is that attempts to sell this property in the market could drive real estate prices down.

If we consider all problem assets managed by the banking sector, such as repossessed property, watch, non-performing and written-off loans, their volume totaled GEL 1,705 million by end-June 2010, whereas their share in consolidated assets increased in the accounting period from 17.1% to 17.6%.

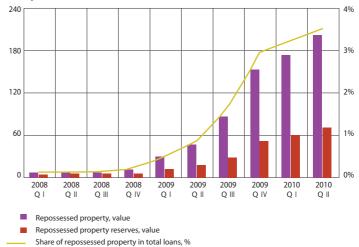
In the accounting period the dynamics of recovering written-off loans improved and the volume of new loan write-offs decreased. Overall in this period the banks recovered loans in the amount of GEL 81 million, compared with GEL 52 million recovered from July 2008 to June 2009. The volume of written-

GRAPH 8.2.1
NPLs and LLPs
January 2008 – June 2010, Lari, millions
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1000
800
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400
5%

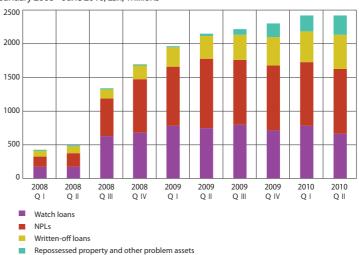
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LLPs
Share of NPLs in credit portfolio (right scale)

GRAPH 8.2.2 Repossessed Property January 2008 – June 2010, Lari, millions

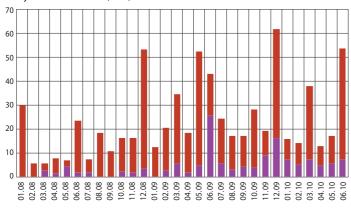


GRAPH 8.2.3 Problem Assets Managed by the Banking Sector January 2008 – June 2010, Lari, millions

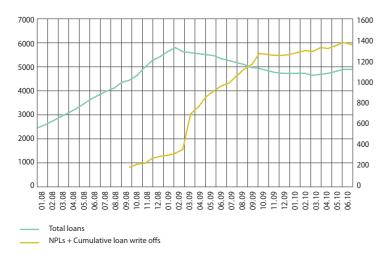


GRAPH 8.2.3 Loan Write Offs January 2008 - June 2010, Lari, millions

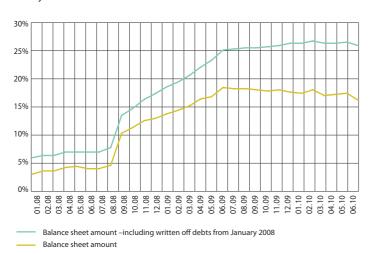
Recovery Write Offs



GRAPH 8.2.4 Exchange Rate Adjusted Total Loans, NPLs and Cumulative Loan Write-Offs January 2008 - June 2010



GRAPH 8.2.5 Dynamics of Share of NPLs in Credit Portfolio January 2008 - June 2010



off loans in the accounting period amounted to GEL 254 million, or GEL 12 million less year-on-year. The increase in loan write offs is explained by the difficult situation in the Georgian as well as the global financial markets; however, on the other hand, this process has a positive effect as well, since writing off bad loans and recognition of losses contributes to improvement of commercial banks' balance sheets.

In the second half of 2009 despite initial decreases in NPLs, the total amount of NPLs and cumulative write-offs continued to rise by end-year. In the accounting period this amount grew 7.3%, and the sum of written off loans from January 2008 and the existing stock of NPLs as of end-June 2010 totaled GEL 1,434.3 million. In other words, the decrease in the share of NPLs from 18.8% to 16.3% in the accounting period does not represent a quality improvement indicator and is largely due to expansion of credit portfolio and writing off of bad loans. If we take into account loan write-offs from January 2008, in the accounting period the share of NPLs in the credit portfolio grew 0.8 pps and amounted to 26.7%.

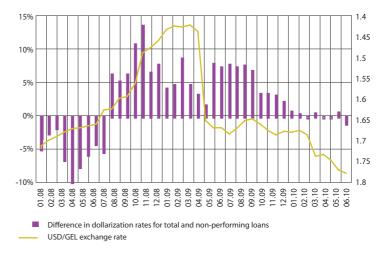
In order to compare the riskiness of loans denomianted in foreign and domestic currency it is interesting to pay attention to the dollarization rate of total and non-performing loans. Holding other things constant, if the dollarization rate of total and nonperforming loans is the same, then loans extended in foreign and domestic currency are equally risky. If the dollarization rate of NPLs is higher than than of total loans, the loans extended in foreign currency must be more risky and vice versa. If we compare the dollarization of total and non-performing loans in 2008, the first exceeded the second indicating lower risk level for foreign currency denominated loans. This is quite logical since before the August 2008 war the exchange rate had been appreciating, while in the second half of 2009 against the backdrop of lari depreciaton the above-mentioned difference in dollarization rates

was narrowing due to the increase in dollarization of NPLs; at end-Q2 2010 further depreciation of the exchange rate led to the dollarization of NPLs already exceeding that of total loans. Between June 2008 – June 2010 the dollarization rate of total loans grew from 67.4% to 70.6%, while the dollarization rate of NPLs increased from 62.8% to 73.2%, pointing to higher risks with respect to loans extended in foreign currency. Calculations of dollarization rates for total as well as non-performing loans exclude the exchange rate effect, thus changes in dollarization are not caused by revaluations of loans. Under exchange rate depreciation conditions higher dollarization of NPLs relative to total loans reemphasizes currency-induced credit risk.

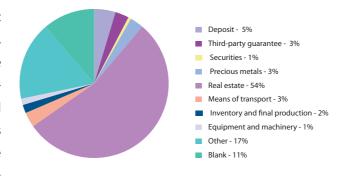
In the accounting period the share of non-performing loans decreased in all sectors, excluding mining. Essential decline in the share of NPLs occurred in the construction sector, with the share equaling 36.4% at end-June 2010, compared with 51.9% a year before. This decline was the result of a decrease in the volume of negatively classified loans extended to the construction sector, while the total volume of loans remained practically the same. Overall, the largest share in NPLs is attributed to trade and services (30.6%), although the latter accounted for 31.6% in total loans extended. The least risky category may be considered loans extended to individuals, accounting for 38.9% in total loans and for 25.4% in NPLs. The share of NPLs in the construction sector is disproportionately high, standing at 15.1%, whereas the sector accounts for only 6.8% in total loans extended, pointing to high sectoral risks.

In the accounting period the share of blank loans shed 1.5 pps, falling to 12.7%. On the other hand, the share of secured loans grew 6.1%, amounting to 54.1%. It is remarkable that 49.9% of loans extended in the energy sector are blank, representing the highest sectoral share. The second highest sectoral share of blank loans represents loans to individuals –

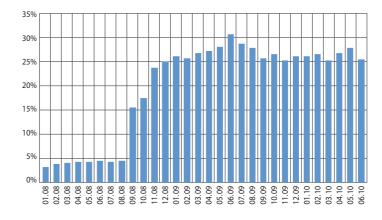
GRAPH 8.2.6
Dollarization of Total and Non-Performing Loans, Exchange Rate Adjusted January 2008 – June 2010



GRAPH 8.2.7 Types of Loan Collaterals 2010 June



GRAPH 8.2.8 Capacity of Loss Absorption, January 2008 - June 2010

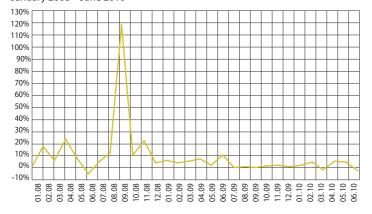


20.3%; on the other hand, all loans extended in the agricultural sector are secured.

In the accounting period the ratio of difference between NPLs and reserves to capital also decreased, indicating improved capacity of banks to absorb risks, should they materialize. Decrease in this ratio means that banks' capital will contract to a smaller extent in case of losses. As of end-June 2010 the above-ratio stood at 27.1%, compared to a record high level of 32.7% in June 2009. Improvement of this ratio is mainly explained by commercial banks' capitalization and growth of provisioning in the accounting period.

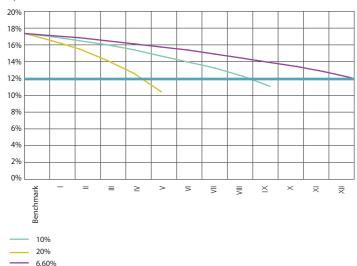
Credit risk is gradually accumulated and it materializeswhen a certain period of time passes after exten-

GRAPH 8.2.9 Dynamics of NPL Growth Rates January 2008 - June 2010



GRAPH 8.2.10 Impact of NPL Growth on CAR

Supervisory minimum



sion of a loan. Therefore, in analyzing sustainability of the banking sector it is crucial to consider the possibilities of gradual deterioration in loan quality. After a 533.7% soaring of NPLs in 2008, the growh rate of NPLs slowed down in 2009, amounting to 21% per annum. The volume of NPLs in the second half of 2009 started to decline, whereas in the accounting period between end-June 2009 and end-June 2010 the NPLs fell 7.2%. Monthly growth rates of NPLs in the last 12 months did not exceed 4%, but financial stability implies such a situation in the financial sector, when the latter, despite adverse shocks, continues to efficiently play a mediator's role in the economy. With the purpose of assessing credit risk in the banking sector the potential impact of gradual NPL increase on capital adequacy ratio was analyzed. Scenarios with monthly NPL growth of 10% and 20% were considered, which are very improbable and serve only to theoretical purposes of sustainability analysis. The benchmark was set as June 2010; it was further assumed that banks' credit portfolio remains unchanged, while loan risk classification remains proportional to the initial one.

In case of a 10% monthly NPL growth, the banking sector violates the 12% CAR after 9 months, whereas at a 20% growth rate the CAR reaches 10.2% in 5 months. In order that CAR would not exceed the Tier 1 level in one year without adding new capital, the monthly growth rate of NPLs should not be higher than 6.6%. In other words, banks have sufficient stock of capital in order to meet the Tier 1 requirement during one year under a 6.6% monthly increase in NPLs. The result of this scenario is analogous to the results presented in the previous report, indicating that the banks' situation has not altered much and the volume of NPLs still remains high. It should be stressed again that the above scenarios are very conservative and do not attempt at forecasting probable developments. Moreover, the decline in NPLs in the recent period gives reason for moderate optimism.

9. MARKET RISK

9.1. DOMESTIC FOREIGN EXCHANGE MARKET

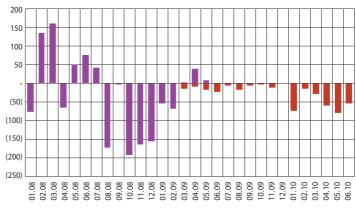
The domestic foreign currency market represents an important segment of the Georgian financial market, as the developments in the former largely influence the country's economy. The exchange rate dynamics is also very important in terms of financial stability, since under large exchange rate volatility the currency induced credit risk increases adversely affecting quality of commercial banks' credit portfolio. For small open economies, such as Georgia, the exchange rate of domestic currency affects prices of imported goods in the domestic market, ultimately having an impact on inflation. Along with halting of trading sessions at the Tbilisi Interbank Foreign Exchange and introduction of foreign exchange auctions the determination of exchange rate is currently more in line with market economy principles. According to the IMF classification of exchange rate regimes the latter is described in Georgia as "managed floating with no predetermined path". In other words, the NBG's interventions in the foreign exchange market serve only to avoiding short-term exchange rate fluctuations and do not aim at maintaining the exchange rate at a certain level or at reversing an exchange rate trend. Thus, the exchange rate is in conformity with its long-term dynamics.

Along with introduction of foreign exchange auctions, in the second half of 2009 the volume of NBG's interventions significantly declined, amounting to only USD 46 million, while in the first half of 2009 the volume of interventions totaled GEL 455 million.

Due to the crisis in the developing countries the inflow of foreign currency into the private sector remained limited. As a result, the volume of Geor-

gian exports as well as money remittances to Georgia plunged. A drastic decline in FDIs should be emphasized. Accordingly, the private sector faced a deficit of balance of payments, which was counterbalanced by a positive net foreign currency flow in the government sector. Foreign currency conversion in the government sector is made at the NBG, bypassing the FX market. Accordingly, the NBG uses interventions in the amount necessary for covering such a deficit. For this purpose the NBG increased the volume of FX auctions, and

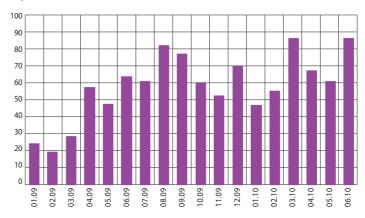
GRAPH 9.1.1 Net Purchases of the NBG in the FX Market January 2008 – June 2010, Lari, millions



Foreign exchange market

Auction

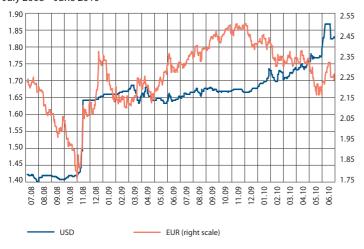
GRAPH 9.1.2 Dynamics of US Dollar Trade Turnover in the Interbank FX Market January 2009 – June 2010 USD, millions



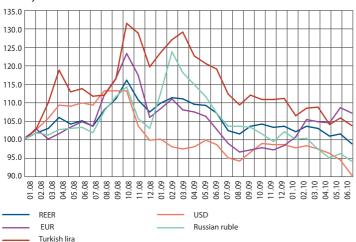
GRAPH 9.1.3 Lari's NER Index July 2008 - June 2010



GRAPH 9.1.4 Dynamics of Lari's NER July 2008 - June 2010



GRAPH 9.1.5 Dynamics of Lari's Exchange Rate January 2008 - June 2010



in the first half of 2010 the interventions totaled USD 331.2 million. In the accounting period the total value of transactions concluded in the interbank FX market equaled USD 805.4 million, up 42% year-on-year.

In the accounting period the nominal exchange rate of lari depreciated 11.2% against the US dollar, 1.4% against the UK pound sterling, and 8.1% against the Turkish lira. With respect to the euro the lari appreciated 3.5%, mainly due to euro's depreciation in the international markets.

On June 30, 2010, one US dollar appreciated from GEL 1.66 to GEL 1.84 in annual terms, whereas the price of one euro declined from GEL 2.33 to GEL 2.25.

The lari's real effective exchange rate depreciated 7.7% in the accounting period. The lari's real exchange rate depreciated 8.7% against the US dollar, 13.0% against the Turkish lira and 12.3% against the Russian ruble, while it appreciated 4.5% against the euro.

9.2. DOLLARIZATION

Dollarization is generally defined as the use of a foreign country's currency, although in the present report attention will be focused on the use of foreign currency by the financial sector - financial dollarization. Under the floating exchange rate regime a central bank is in a position to conduct an optimal counter-cyclical monetary policy, but a high level of financial dollarization weakens the monetary policy transmission mechanism and, accordingly, limits the impact of monetary policy on inflation. The level of financial dollarization also has a vital importance for financial stability, since against the backdrop of high dollarization sharp changes in the exchange rate level pose big threats to the banking sector. In order to avoid the exchange rate risk commercial banks use funds

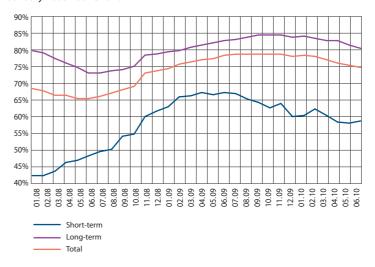
mobilized in foreign currency by extending loans in the same foreign currency. By doing so banks try to transfer the exchange rate risk to borrowers, but the latter have their income mainly in domestic currency. Therefore, banks assume the currency induced credit risk, which in the event of domestic currency depreciation is caused by the decreased solvency of the borrower. Accordingly, dollarization increases systemic risks in the banking sector due to mismatch of currencies in which the borrower's revenues and liabilities are denominated. Thus, a low level of financial dollarization reduces the systemic risk in the banking sector promoting efficiency of the monetary policy interest rate.

In 2009 the dollarization rate of the loan stock tended to increase, although in the last two months the dollarization growth rate turned negative. The decrease in the dollarization rate continued in 2010, declining to 73.7% as of end-June 2009. For comparison, at end-June 2008 the dollarization level was at 77.3%. Decline in loan dollarization occurred mainly at the expense of short-term loans: in the accounting period the dollarization rate of short-term loans dropped by 8.3 pps, amounting to 58.0% at end-June 2010. Despite a 2.1 percentage point decrease, the dollarization of long-term loans still remains high at 79.5% at end-June 2010.

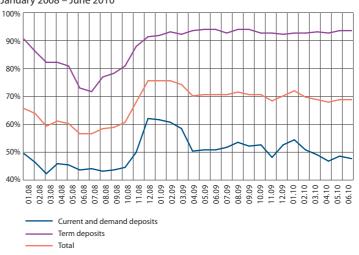
In the accounting period the dynamics of deposit dollarization was stable, although a slight dollarization decrease for current, demand, and term deposits occurred. The overall deposit dollarization declined from 68.8% to 67.1% in the accounting period. The dollarization rate of current and demand deposits shed 2.8 pps, standing at 48.8%, while the term deposit dollarization decreased by only 0.6 pps, constituting 88.8%.

The dollarization rate of loan and deposit stocks often may not clearly reflect the current situation,

GRAPH 9.2.1 Term Loan Dollarization (Stock) January 2008 – June 2010

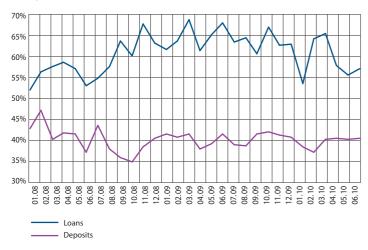


GRAPH 9.2.2 Deposit Dollarization (Stocks) January 2008 – June 2010



since this indicator does not envisage different terms of loans and takes into account long-term loans extended in the past. At the same time, the dollarization rate is related to economic agents' expectations with respect to exchange rate changes as well as to confidence in domestic currency. Accordingly, in assessing trends of changes in dollarization it is important to observe loan and deposit dollarization rates in terms of flows. In Q4 2009 the average dollarization rate of deposit

GRAPH 9.2.3 Dollarization of Loan and Deposit Flows January 2008 - June 2010



flows equaled 41.5%, while in Q1 and Q2 2010 the same rate equaled 39% and 40.6%, respectively. The dollarization rate of loan flows in Q4 2009 equals 62.8%, declining to 59.9% and 56% in Q1 and Q2 2010, respectively. The described changes are insignificant and do not indicate fundamental changes in terms of currency preference.

High level of long-term loans and term deposits should be stressed, indicating the existing status of the US dollar as the riskless currency and the lack of confidence with respect to domestic currency in the long-term. This occurs despite the fact that lari denominated deposits are more profitable and less risky relative to foreign currency deposits, since they are not dependent on changes in the exchange rate. If we consider the value of deposits denominated in lari and in foreign currency between January 2007 and June 2010, it turns out that lari denominated deposits are more profitable. The return on lari deposits equals 65.3%, while that on US dollar denominated deposits stood at 62%. It is remarkable that in the above-mentioned period there were periods of both appreciation and depreciation of lari, and despite significant depreciation of lari return on lari deposits still turned out higher compared to deposits in US dollars.

In order to assess loan and deposit dollarization in more precise terms, it is important to exclude the exchange rate effect, since the latter has an accounting effect with respect to volumes of foreign currency denominated loans and deposits. Such a change in volumes does not reflect economic agents' attitude to domestic currency, whereas in the long-term it is this attitude which represents the primary determinant of dollarization level. In the accounting period the exchange-rate-adjusted loan dollarization rate declined by 5.9 pps, whilethe non-adjusted rate fell by 3.6 pps. Despite this decline, the dollarization rate still remains high and requires particular attention. The deposit dollarization rate fell by 4.1 pps, excluding the exchange rate effect. Without exchange rate adjustment the deposit dollarization decreased only by 1.7 pps. In the case of deposits the decline was

Table 9.2.1 Return on Deposits in Domestic and Foreign Currency

| Date | | Lari | | US dollar | | |
|-------|---------|---------------|---------|---------------|---------|---------------|
| | Deposit | Interest Rate | Deposit | Interest Rate | in Lari | Exchange rate |
| I-07 | 1,000 | 12.6% | 581 | 9.4% | 1,000 | 1.7199 |
| I-08 | 1,126 | 13.5% | 636 | 11.2% | 1,009 | 1.5870 |
| I-09 | 1,278 | 13.5% | 707 | 11.2% | 1,179 | 1.6670 |
| I-10 | 1450 | 14.0% | 786 | 11.7% | 1,369 | 1.7415 |
| VI-10 | 1,653 | - | 878 | - | 1,620 | 1.8442 |

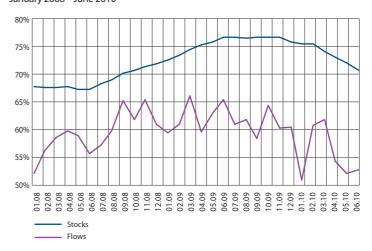
also due to current and demand deposits, while dollarization of term deposits dropped by insignificant 0.6 pps.

9.3. INTEREST RATES

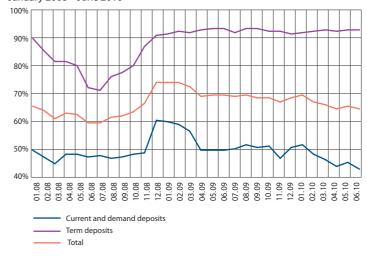
The National Bank of Georgia gradually loosened the monetary policy after the 2008 August developments and the global financial crisis with the aim of restoring economic activity and ensuring stability in the banking system. At end-November 2009 the NBG cut the monetary policy rate to 5%. The monetary policy rate represents the minimum interest rate on refinancing loans, also being an operational target rate. The interbank money market interest rate should fluctuate around this operational target. Against the backdrop of excess liquidity in the commercial banks in the second half of 2009 the interbank market saw a sharp reduction in turnover as well as in interest rates. In November and December 2009 the interest rates on overnight loans (TIBR1) were below 1%, large banks often borrowed overnight from small banks, as the latter used such operations as overnight deposits. In the same period the commercial banks discontinued their demand for the NBG's refinancing loans, which rendered the interest rate transmission mechanism practically ineffective. In June 2010 along with high annual growth of the M3 monetary aggregate and revival of economic activity the NBG's Monetary Policy Committee decided to increase the monetary policy rate to 6.25% in order to meet the inflation target in the medium-term.

Use of excess liquidity accumulated in commercial banks in the first half of 2010 for economy crediting was conditioned by a significant decline in loan interest rates in the accounting period. The market interest rates on loans extended in domestic currency fell by 2.4 pps in the accounting

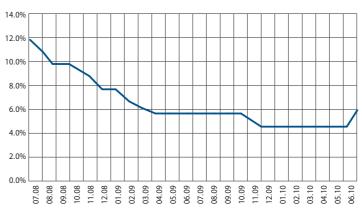
GRAPH 9.2.4 Exchange-Rate-Adjusted Loan Dollarization January 2008 – June 2010



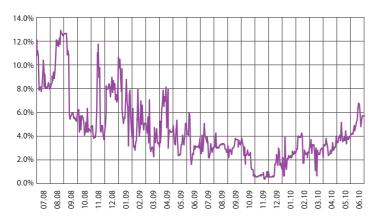
GRAPH 9.2.5 Exchange-Rate-Adjusted Deposit Dollarization January 2008 – June 2010



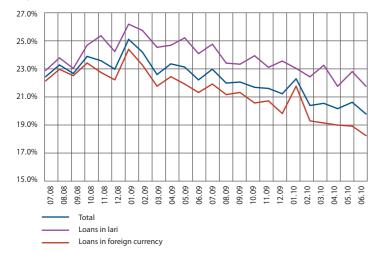
GRAPH 9.3.1 Monetary Policy Rate July 2008 – June 2010



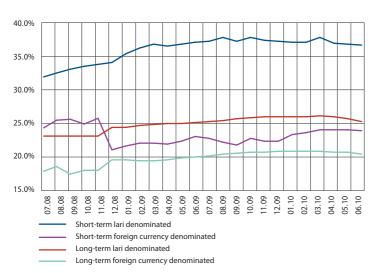
GRAPH 9.3.2 Overnight Interest Rate (TIBR1) at Tbilisi Interbank Exchange July 2008 - June 2010



GRAPH 9.3.3 Market Interest Rates on Loans July 2008 - June 2010



GRAPH 9.3.3 Weighted Average Interest Rates on Consumer Loans July 2008 - June 2010



period, standing at 21.5% at end-June 2010. The interest on foreign currency denominated loans shed 3.3%, decreasing to 17.6%. In June 2010 the weighted average interest rate was 19.3%, compared with 21.9% in June 2009. It is remarkable that dynamics of interest rates on loans in lari and in foreign currency is similar, pointing to loosening of credit policies on the part of commercial banks. With regard to the interest rate spread for loans in national and foreign currency, no pronounced tendencies have been manifested, although the difference slightly increased in Q2 2010, likely due to lari depreciation. Decreases in interest rates influence the relevant parameters of the existing loan stock with a certain lag; however, by the end of the accounting period the downtrend in the weighted average interest rates on consumer loans was already visible. At end-June 2010 the weighted average interest on short-term loans equaled 36.1% for loans in lari and 23.6% for foreign currency denominated loans. The lowest interest rates were registered for long-term loans in foreign currency, indicating the fact that commercial banks find such loans as the least risky.

In the accounting period the interest rates on loans extended to legal entities decreased as well, promoting revitalization of economic and commercial activity. The decrease in interest rates on lari denominated loans was particularly evident in hotels and restaurants (8.1 pps), agriculture (5.5 pps), industry (4.4 pps) and trade (3.3 pps). The interest rates on loans denominated in foreign currency were also down, at the exception of the financial intermediation sector, where interest rates increased.

Analysis of real interest rates is also important. Economic boom in the previous years was characterized by high inflation, leading to a decrease in real interest rates. Appreciation of lari peculiar to the economic boom along with capital inflows made loans in foreign currency more available, compared to lari denominated loans. For the majority of borrowers who had their incomes in lari the real interest rate on foreign currency denominated loans was decreasing even more due to lari's exchange rate appreciation. This tendency was clearly pronounced between the second half of 2007 and the first half of 2008. Such dynamics of interest rates obviously contributed to a rapid growth of crediting, but with the onset of the crisis the tendency immediately reversed. The financial crisis applied deflationary pressure on prices and with the dry-up Table 9.3.2 of capital inflows led to lari depreciation, thus increasing real interest rates. The effect was particularly strong for real interest rates on foreign currency denominated loans. Growth of real interest rates conditioned drastic worsening of the loan quality and created liquidity problems. The analysis of real interest rates reemphasized the procyclicality of interest rates and exchange rate, confirming high riskiness of loans denominated in foreign currency. Similar to loan interest rates, the market inte-

Table 9.3.1 Average Annual Interest Rates on Loans Extended to Individuals in Domestic Currency, June 2010

| | Less than 1 year | 1-5 years | More than 5 years |
|------------------------------|------------------|-----------|-------------------|
| Mortgage loans | 15.0% | 16.0% | 15.2% |
| Car loans | 5.7% | 17.1% | _ |
| Pawn loans | 42.1% | - | - |
| Consumer loans | 28.1% | 23.8% | 17.0% |
| With collateral | 22.4% | 21.9% | 18.0% |
| Without collateral | 29.0% | 24.4% | 16.2% |
| Credit cards | 34.3% | 21.2% | 19.1% |
| Installment credit | 31.0% | 49.6% | - |
| Wage-related credit products | 21.9% | 20.6% | 15.6% |
| Other | 21.0% | 28.0% | 44.6% |

Table 9.3.2 Average Annual Interest Rates on Loans Extended to Individuals in Foreign Currency, June 2010

| | Less than 1 year | 1-5 years | More than 5 years |
|------------------------------|------------------|-----------|-------------------|
| Mortgage loans | 16.4% | 16.1% | 14.5% |
| Car loans | 18.1% | 18.3% | 18.8% |
| Pawn loans | 41.7% | - | - |
| Consumer loans | 23.7% | 24.3% | 19.0% |
| With collateral | 14.7% | 24.0% | 19.2% |
| Without collateral | 31.2% | 27.1% | 18.2% |
| Credit cards | 33.3% | 22.3% | 24.0% |
| Installment credit | - | 33.8% | - |
| Wage-related credit products | 20.2% | 23.8% | 16.5% |
| Other | 22.3% | 39.9% | 18.6% |

Table 9.3.3

Average Annual Interest Rates on Domestic Currency Denominated Term Loans to Resident Legal Entities by Sectors

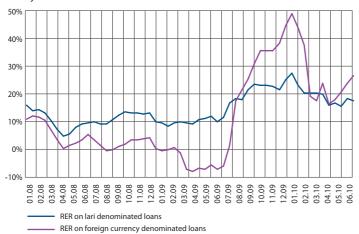
| | Agriculture | Industry | Construction | Trade | Hotels and Restau- rants | Transportation and Communication | Financial Interme- diation | Real Estate Opera- tions, Commercial Activities | Education | Healthcare and Social Assistance | Other Types of Services | |
|-------------------|-------------|----------|--------------|-------|-----------------------------|----------------------------------|-------------------------------|---|-----------|-------------------------------------|----------------------------|--|
| Interest rates(%) | | | | | | | | | | | | |
| VII-09 | 21.8 | 20.3 | 17.0 | 19.8 | 26.2 | 17.0 | 16.7 | 16.1 | 20.3 | 17.3 | 14.2 | |
| VIII-09 | 16.6 | 17.9 | 18.7 | 19.1 | 0.0 | 17.0 | 19.8 | 17.2 | 18.0 | 17.6 | 16.7 | |
| IX-09 | 17.9 | 17.9 | 17.2 | 19.2 | 33.0 | 17.1 | 20.5 | 16.0 | 10.0 | 16.0 | 15.0 | |
| X-09 | 19.9 | 18.2 | 18.1 | 18.1 | 16.0 | 18.0 | 8.5 | 17.1 | 21.7 | 18.5 | 13.3 | |
| XI-09 | 14.4 | 18.2 | 16.6 | 17.9 | 28.1 | 19.0 | 9.0 | 16.6 | 30.4 | 17.2 | 16.8 | |
| XII-09 | 16.1 | 17.8 | 18.4 | 17.9 | 48.0 | 15.4 | 20.4 | 12.0 | 15.1 | 17.0 | 14.5 | |
| I-10 | 16.6 | 18.0 | 16.2 | 17.4 | 0.0 | 15.0 | 17.2 | 16.0 | 16.1 | 17.0 | 17.6 | |
| II-10 | 12.9 | 16.7 | 14.6 | 17.0 | 24.9 | 16.1 | 19.0 | 13.0 | 14.0 | 18.9 | 12.6 | |
| III-10 | 19.0 | 16.9 | 16.7 | 17.0 | 22.8 | 16.2 | 21.6 | 14.2 | 18.0 | 16.0 | 14.2 | |
| IV-10 | 17.8 | 13.5 | 17.0 | 17.2 | 19.9 | 13.4 | 20.0 | 16.6 | 15.0 | 17.0 | 13.2 | |
| V-10 | 20.1 | 15.9 | 16.4 | 16.5 | 17.7 | 19.4 | 16.7 | 13.7 | 16.3 | 15.6 | 14.0 | |
| VI-10 | 16.3 | 15.9 | 16.5 | 16.5 | 18.1 | 14.8 | 16.1 | 12.8 | 16.0 | 15.5 | 12.6 | |

Table 9.3.4

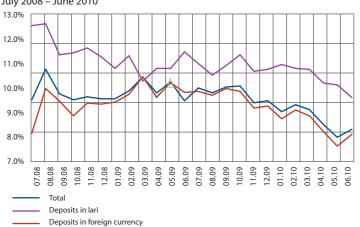
Average Annual Interest Rates on Foreign Currency Denominated Term Loans to Resident Legal Entities by Sectors

| | Agriculture | Industry | Construction | Trade | Hotels and Restau- rants | Transportation and Communication | Financial Interme- diation | Real Estate Opera- tions, Commercial Activities | Education | Healthcare and Social Assistance | Other Types of Services | |
|--------------------|-------------|----------|--------------|-------|-----------------------------|----------------------------------|-------------------------------|---|-----------|-------------------------------------|----------------------------|--|
| Interest Rates (%) | | | | | | | | | | | | |
| VII-09 | 15.6 | 18.6 | 20.6 | 20.3 | 38.2 | 16.4 | 12.2 | 18.1 | 19.3 | 20.0 | 17.9 | |
| VIII-09 | 17.1 | 14.2 | 19.2 | 18.7 | 16.8 | 19.4 | 22.0 | 17.6 | 21.9 | 19.1 | 17.7 | |
| IX-09 | 21.7 | 15.0 | 21.7 | 17.6 | 23.0 | 18.6 | 18.0 | 17.3 | 21.9 | 15.8 | 16.9 | |
| X-09 | 22.5 | 17.2 | 19.1 | 18.0 | 19.4 | 17.5 | 0.0 | 17.8 | 21.6 | 16.5 | 17.3 | |
| XI-09 | 22.7 | 17.9 | 17.2 | 18.1 | 18.5 | 17.2 | 21.2 | 23.1 | 21.6 | 18.6 | 17.7 | |
| XII-09 | 19.4 | 16.0 | 17.2 | 18.0 | 19.7 | 17.3 | 18.1 | 16.3 | 20.0 | 17.8 | 16.6 | |
| I-10 | 19.2 | 18.7 | 19.1 | 18.6 | 16.8 | 16.3 | 22.0 | 17.6 | 18.1 | 12.7 | 15.1 | |
| II-10 | 15.7 | 16.7 | 17.3 | 16.1 | 16.7 | 14.9 | 19.0 | 15.8 | 21.8 | 17.3 | 17.6 | |
| III-10 | 18.0 | 14.8 | 17.5 | 17.1 | 18.4 | 16.8 | 19.0 | 15.3 | 17.0 | 18.6 | 17.4 | |
| IV-10 | 16.1 | 16.1 | 15.8 | 16.6 | 14.4 | 13.0 | 17.4 | 15.6 | 17.2 | 15.5 | 17.1 | |
| V-10 | 15.4 | 14.2 | 16.4 | 16.5 | 14.6 | 13.4 | 21.5 | 15.6 | 15.1 | 16.5 | 16.9 | |
| VI-10 | 16.0 | 15.8 | 17.7 | 15.5 | 15.3 | 13.9 | 17.3 | 15.6 | 16.3 | 15.1 | 17.0 | |

GRAPH 9.3.4 Dynamics of Real Interest Rates January 2008 – June 2010



GRAPH 9.3.3 Market Interest Rates on Deposits July 2008 – June 2010

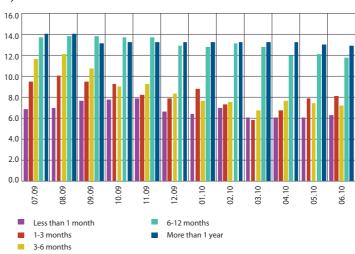


rest rates on attracted deposits also decreased in the accounting period. Decline in deposit interest rates is conditioned by expansion of deposits and accumulation of excess liquidity in banks. The average annual interest rates on lari denominated deposits fell by 1.9 pps, amounting to 9.5% in June 2010. Meanwhile, the interest on deposits in foreign currency averaged 8.0%, down 1.7 pps year-on-year. Overall, the interest rate on attracted deposits fell from 9.4% to 8.2% in the accounting period. Decline in deposit interest rates implies that attracted funds became cheaper and should lead to decreases in loan interest rates, which actually took place, as shown in the analysis of loan interest rates above.

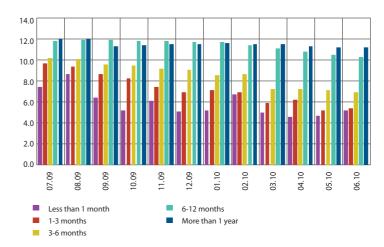
In analyzing deposit stocks the interest rate downtrend becomes immediately clear for both short- and long-term deposits. In the accounting period the weighted average annual interest rate on long-term lari deposits declined by 0.9 pps to equal 13.2% by end-June 2010. The interest rates significantly decreased on short-term deposits as well. With regard to deposits attracted in foreign

currency, the interest rate on long-term deposits fell by 0.8 pps to 11.2%. The interest rate differential for deposits attracted in national and foreign currency did not change significantly, fluctuating around 2 pps for different terms.

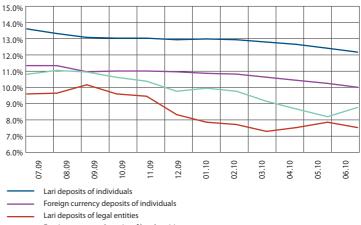
GRAPH 9.3.4 Interest Rates on Deposits in Domestic Currency (Stocks) July 2009 – June 2010



GRAPH 9.3.5 Interest Rates on Deposits in Foreign Currency (Stocks) July 2009 - June 2010



GRAPH 9.3.6 Interest Rates on Term Deposits (Stocks) July 2009 - June 2010

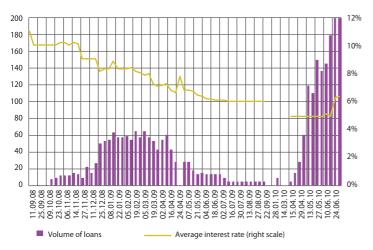


Foreign currency deposits of legal entities

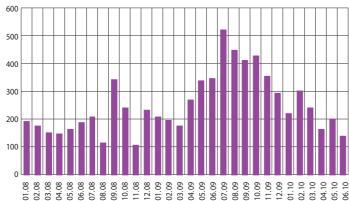
10. LIQUIDITY RISK

The main principles of the NBG with respect to liquidity management aim at eradicating temporary misbalances of liquidity and withdrawing long-term liquidity from the banking sector or supplying relevant short-term liquidity, as necessity arises. For this purposes the NBG issues threemonth Certificates of Deposit (CDs) and one-week refinancing loans. The refinancing loans are issued through auctions, where commercial banks may

GRAPH 10.1 Dynamics of Refinancing Loans September 2008 – June 2010, Lari, millions



GRAPH 10.2 Funds on Corresponding Accounts January 2008 - June 2010, Lari, millions



borrow a refinancing loan against collateral defined by the NBG. With the purpose of developing the lari money market and assisting banks in efficient management of liquidity, the NBG's Monetary Policy Committee decided to introduce permanent refinancing loans starting from April 29, 2010. By means of this instrument commercial banks are able to borrow a refinancing loan without auction, at a fixed predefined interest (monetary policy rate + 1 percentage point). By the decision of the MPC legislative amendments were also made with the view to increase the list of collateral types for refinancing loans, adding to the existing ones (CDs and government securities) guarantees issued by international organizations and credit portfolio of commercial banks. It is remarkable that loans eligible to be used as collateral for refinancing loans should be denominated in lari only.

Along with emergence of excess liquidity in the banking sector in the second half of 2009 and early 2010 demand for refinancing loans on the part of commercial banks plunged. In the second half of 2009 the total value of outstanding refinancing loans equaled GEL 109 million only. In Q1 2010 the refinancing loan instrument was idle, although along with introduction of changes in the NBG's monetary policy instruments demand for refinancing significantly increased from Q2 2010. In this period the value of issued refinancing loans totaled GEL 1,350 million.

With the purpose of meeting the inflation target in the medium-term period, on June 16, 2010 the NBG's Monetary Policy Committee increased the monetary policy rate by 125 basis points to 6.25%. Accordingly, the average interest rate on refinancing loans at end-June equaled 6.4%.

By the decision of the NBG's Monetary Policy Committee starting from September 2010 the base for calculating funds attracted in foreign currency will be changed, as borrowings from non-residents will be added. The required reserve requirement on funds attracted in lari were increased to 10% and in case this requirement is met, the NBG will accrue interest to commercial banks' additionally provisioned funds in the amount of monetary policy rate. The above changes aim at putting funds attracted from external and domestic sources on equal conditions.

10.1. LIQUIDITY ADEQUACY

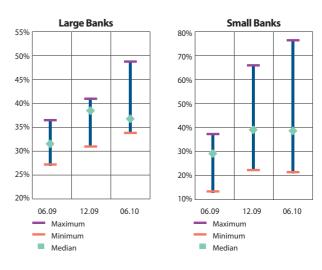
Liquidity adequacy of commercial banks is defined in line with the "Rule on Supervision and Regulation of Commercial Banks' Activities". In accordance with the Rule, the commercial banks' average liquidity ratio in the current month should equal at least 20%. The ratio initially was set at 30%, but under difficult economic circumstances it was reduced in the second half of 2008. Despite improvement of the situation the commercial banks maintain excess liquidity, and the second half of 2009 is characterized by growth of liquidity ratio. The record high liquidity ratio, 42.1%, was registered in February 2010, but subsequent revitalization of crediting on the part of commercial banks reduced this ratio to 37.5% in June 2010. This largely exceeds the current and the pre-crisis requirement, pointing to exceess liquidity in the commercial banks. It goes without saying that commercial banks should keep a certain amount of excess liquidity in order to be prepared for shocks, but accumulation of excess liquidity limits economy crediting and also reduces banks' profitability. On the other hand, the liquidity ratio is

a general indicator, which allows us to assess the current situation only and does not reflect potential risks, which banks may face in future. It should also be taken into account that a 20% requirement defines only the lowest bound. Liquidity risk differs by individual banks and assessment of such risks requires deeper analysis than simply monitoring the compliance with a certain ratio.

GRAPH 10.1.1 Average Liquidity Ratio January 2008 – June 2010



GRAPH 10.1.2 Liquidity Ratio by Individual Banks, June 2009 – July 2010¹⁵



¹⁵ Commercial banks with total assets over 100 million GEL are considered

Box N1 Liquidity Adequacy and International Practice

Prior to the financial crisis a banking supervision and a national bank paid attention to long-term liquidity of the banking sector, with the means of regulation mainly comprising CDs and government certificates, Treasury bills and refinancing loans. The prevalent view was that attainment of short-term liquidity was simple, as it only required attracting funds in the domestic and external markets. However, one of the important causes of the global financial crisis triggered in mid-2007 was incorrect and ineffective liquidity risk management, which created liquidity problems for the majority of banks.

Liquidity represents the ability of banks to finance short-term liabilities. Liquidity risk management is of utmost importance since even a single occurrence of liquidity deficit may lead to systemic consequences. In the last decade rapid development of the financial market increased the complexity of liquidity risk management.

During the global financial crisis the banks tried to maintain adequate level of liquidity, which practically led to a standstill in the money markets underlining the importance of liquidity in the banking sector in times of crisis. The banking system found itself in a difficult situation, which required from central banks to promote functioning of money markets and in certain cases to provide liquidity to individual institutions. Central banks were forced to provide unprecedented liquidity support in order to protect the financial system. However, even such a large-scale support could not save a number of banks from bankruptcy.

During a number of years prior to the financial crisis the financial system possessed sufficient liquidity, and because of this fact liquidity risk management was not given adequate priority compared to other types of risks. However, the crisis clearly manifested the speed and scale of liquidity risk development.

The primary cause of the financial crisis consisted in incorrect and ineffective management of liquidity risks. A bank should realize the importance of its liquidity risk management and control. A supervision agency in turn evaluates adequacy of banks' liquidity risk management and tries to obtain information about drawbacks in banks' risk management in order to protect depositors and ensure stability of the financial system.

In February 2008 the Basel Committee on Banking Supervision released a paper "Liquidity Risk: Management and Supervisory Challenges". Its principles ensure consistent supervision of important aspects of liquidity risk management in the banking institutions. In planning their liquidity a large number of banks did not take into account a few main principles of liquidity risk management failing to keep a sufficient amount of liquidity necessary to cover liabilities, which spread the risks over the whole banking system.

The paper stresses importance of supervision with respect to adequacy of banks' liquidity risk management and liquidity assessment, describing certain measures which supervisors might take if liquidity does not meet the existing standards. These principles also underline the importance of effective cooperation between supervisors and other stakeholders.

Liquidity problems are usually infrequent making banks pay more attention to other, more

probable risks. Moreover, the expectation that a central bank will ensure liquidity support might weaken banks' motivation to adequately manage their liquidity.

The banking supervision is responsible for development and implementation of liquidity risk management strategies. A strategy should include concrete liquidity management policies, such as composition of assets and liabilities, diversification and stability of financial sources, and an individual approach to liquidity management with respect to different currencies.

In order to maintain stability in the financial sector and ensure smooth operation of the banking system, the banking supervision agencies in different countries use various liquidity requirements in order to avoid liquidity problems. A liquidity requirement usually implies maintenance of certain ratios at a minimum level. These types of ratios are used by different countries as follows:

For example, in Azerbaijan and Latvia supervisors impose the ratio of liquid assets to current liabilities to be maintained at least at 30%. Turkey differentiates between the ratio of total assets to total liabilities and the assets-to-liabilities ratio in FX currency for different terms, requiring the FX liquidity ratio to be not less than 80% and the total ratio to be at least 100%.

In Croatia ensurance and maintenance of optimum liquidity, as opposed to other risks, is bank-specific. There is no pair of banks to which the same liquidity policies and procedures are applied. The banking supervising examines how adequately the bank management assesses liquidity requirements, whether appropriate monitoring and data analysis is performed, how prompt the decision-making is and how the objectives are met. Such approach to liquidity is important since there are no predefined rules, data or ratios which could be adopted as a golden standard to measu-

Liquidity Requirements in Various Countries

| Country | Ratio | Description | Supervisory Minimum | | |
|------------------------------|---|---|------------------------|--|--|
| A | Total liquidity ratio | Highly liquid assets/Total assets | 15% | | |
| Armenia | Current liquidity ratio | Highly liquid assets/Demand liabilities | 60% | | |
| A | Liquidity ratio | Liquid assets/Deposits (Peso and FX) | | | |
| Argentina | National liquidity ratio | Liquid assets/Deposits (Peso) | | | |
| Azerbaijan | Liquidity ratio | Liquid assets/Current liabilities (<30 days) | 30% | | |
| Latvia | Liquidity ratio | Liquid assets/Current liabilities (<30 days) | 30% | | |
| | M1 General and special liquidity reserves – Volatile external funds | | | | |
| F | M2 General and special liquidity reserves/ Volatile external funds | | | | |
| Poland | M3 | Supervisory capital/Illiquid assets | 100% | | |
| | M4 | Supervisory capital and stable external funds/Illiquid assets and assets with limited liquidity | 100% | | |
| | Quick Ratio | | 20% | | |
| Ukraine | Current liquidity ratio | | 40% | | |
| | Short-term liquidity ratio | | 60% | | |
| T . I | FX liquidity ratio | FX assets / FX liabilities (0-7days; 0-30 days) | 80% | | |
| Turkey Total liquidity ratio | | Assets/Liabilities (0-7days; 0-30 days) | 100% | | |
| Dami | FX liquidity ratio | Liquid assets/Short-term liabilities | 20% | | |
| Peru | Liquidity ratio in domestic currency | Liquid assets/Short-term liabilities | 8% | | |

| | FX liquidity ratio | FX liquidity ratio | 20% |
|-----------|---|--|-------|
| | | Liquid assets/Short-term liabilities | |
| Croatia | | FX liquid assets/FX short-term liabilities | |
| | | Liquid assets/Total assets | |
| | | FX liquid assets/FX assets | - |
| | Liquidity position | Financial assets in FX and domestic currency/Liabilities in FX and domestic currency | |
| Slovenia | | Category I – 0-30 days | 100% |
| | | Category II – 0-180 days | |
| | Domestic liquidity ratio | | 8-45% |
| Brazil | Effective liquidity | Central bank of Brazil analyzes both systemic and bank-specific liquidity needs on a | |
| | | daily basis with respect to total liquidity in the system | |
| Chile | Liquidity indicators in the banking system | Liquid assets/Total assets | |
| Crille | | Liquid assets/Time Deposits | |
| Australia | Primary asset ratio | Primary assets/Liabilities | 3% |
| Austria | Cash ratio | | 2.5% |
| Austria | Primary asset ratio Cash ratio Quick ratio Short-term liquidity ratio Instant liquidity ratio Current liquidity ratio Liquidity ratio | | 20% |
| | Short-term liquidity ratio | Assets/Liabilities (<12 months) | |
| Belarus | Instant liquidity ratio | Demand assets/Demand and overdue liabilities | |
| | Current liquidity ratio | Current assets/Current liabilities (<1 month) | |
| Estonia | Liquidity ratio | Liquid assets/current liabilities | 30% |
| | Instant liquidity ratio (N2) | Highly liquid assets/Demand liabilities | 20% |
| Russia | Current liquidity ratio (N3) | Liquid assets/Short-term liabilities (<30 days) | 50% |
| | General liquidity ratio (N5) | Liquid assets/Total assets | 20% |
| | Domestic liquidity rating | Liquid assets/Liabilities in domestic currency (0-30 days) | 17% |
| | | Liquid assets/Liabilities in domestic currency (30-90 days) | 9% |
| | | Liquid assets/Liabilities in domestic currency (91-180 days) | 6% |
| Uruguay | | Liquid assets/Liabilities in domestic currency (181-367 days) | 4% |
| | FX liquidity rating | Liquid assets/FX liabilities to residents (< 180 days) | 25% |
| | | Liquid assets/FX liabilities to residents (> 180 days) | 19% |
| | | Liquid assets/FX liabilities to non-residents | 30% |

re liquidity status for all categories of banks. When managing liquidity every bank should conduct monitoring and control its liquidity situation both in the domestic and the FX currency. Accordingly, currency-specific analysis of strategies should be performed.

The examples of Peru and Uruguay should be pointed out, when liquidity ratios include currency-specific supervision requirements.

In Peru one of the means of liquidity risk regulation is considered to be minimum liquidity ratios in domestic and foreign currency. Liquidity ratio is defined as liquid assets divided by short-term liabilities. Peru's economy is highly dollarized and the domestic currency often depreciates with respect to the US dollar. Therefore, the required liquidity ratio in foreign currency equals 20%, while for the domestic currency it stands at 8%. Stricter liquidity requirements for foreign currency denominated funds helps banks to overcome potential outflow of FX deposits in the event of sharp exchange rate depreciation.

In Uruguay the liquidity requirements were separated from reserve requirements in March 2007. In order to comply with the liquidity requirements banks should keep cash in the amount of 17% for peso accounts, 25% for residents' FX accounts, and 30% for non-residents' FX accounts. Liquidity requirements can be met by means of reserves at the central bank, interbank loans and T-bills. Uruguay is one of the few countries in Latin America with a special liquidity regime, where requirements are term-, currency-, and residency-specific.

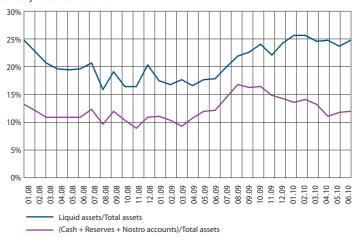
From these data we can assert that countries attach great importance to assessment and management of liquidity, which is explained by the topicality and potential scale of the issue.

10.2. LIQUID ASSETS

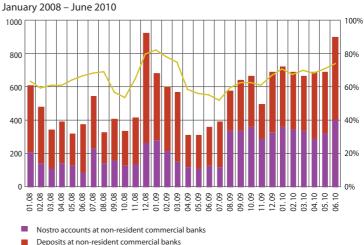
Calculation of the medium-term liquidity ratio implies proportion of liquid assets to liabilities. However, it is equally interesting to observe the share of liquid assets in total assets. In the accounting period this ratio was steadily increasing to reach 24.9% by end-June 2010. To compare, in June 2009 the same ratio equaled 18%. The volume of consolidated liquid assets of the banking sector in the accounting period grew 46.4% to total GEL 2,290 million. It is remarkable that starting from Q4 2009 the liquidity ratios for primary liquid assets - cash, required reserves and funds placed on corresponding accounts - started to decline, pointing to placement of funds into less liquid but more profitable investment securities or short-term deposits at other banks. In the accounting period the ratio reached a record high level of 16.9% in August 2009, subsequently falling to 12.1% in June 2010.

The analysis of dynamics of liquid assets in the accounting period shows a decrease in funds on the NBG's corresponding accounts (by 58.2%) and, on the other hand, an increase in funds placed on non-resident commercial banks' nostro accounts (by 212.6%), invested in securities (by 230.8%) and liquid assets (by 139%). To compare, at end-June 2009 the volume of funds on the NBG's corresponding accounts equaled GEL 330 million, the funds in investment securities totaled GEL 125 million. while the funds on nostro accounts at non-resident commercial banks amounted to GEL 130 million. The respective volumes of funds by end-June 2010 equaled GEL 138 million, GEL 414 million, and GEL 405 million. The volume of deposits at non-resident banks grew 115.4%, amounting to GEL 500 million in June 2010. Meanwhile, in the accounting period the share of FX assets (dollarization) in cash and liquid assets placed on bank accounts increased by 17.9

GRAPH 10.2.1 Liquidity Asset Ratios January 2008 – June 2010



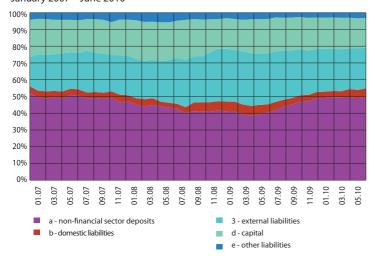
GRAPH 10.2.2 Funds Placed in Non-Resident Banks



Dollarization rate of cash and funds on bank accounts (right scale)
 GRAPH 10.2.3

Dynamics of Liquid Assets January 2008 - June 2009, Lari, millions 2000 1500 1000 02.09 06.09 08.09 08.09 09.09 11.09 11.09 01.10 02.10 03.10 06.10 01.09 60 60 04.0 01. 02. 03. d - nostro accounts at non-resident banks b - required reserves at NBG e - government securities and CDs of the National Bank c - nostro accounts at NBG f - other liquid assets

GRAPH 10.3.1 Structure of Financing Sources January 2007 – June 2010



GRAPH 10.3.2 External Borrowings January 2007 - June 2010, Lari, millions



pps. This share equaled 55.2% in June 2009, whereas by June 2010 it amounted to 73%. The issuance of T-bills allowed commercial banks to place liquid funds into profitable assets denominated in domestic currency, and starting from March 2010 the banks increased crediting in domestic currency.

10.3. LIQUIDITY FINANCING

The primary sources of financing for commercial banks remained deposits in the domestic market and external borrowings. In the accounting period the downtrend in the share of deposits manifested in the previous accounting period was reversed. The ratio of non-financial sector deposits to banking sector's consolidated assets in the accounting period grew from 40.3% to 49.4%, while the share of external borrowings dropped from 30.5% to 24.3%. It is remarkable that in the accounting period there was a 5.5% decrease in commercial banks' external liabilities. By end-June 2010 the liabilities to the international financial institutions amounted to GEL 1,808.8 million, while the volume of loans received from non-resident banks equaled GEL 390.5 million.

Deposit liabilities of the banking sector were affected through different shocks. In particular, during the August war deposit withdrawals mainly occurred on the part of individuals. Further withdrawal of deposits took place by legal entities, mainly in the most difficult period of recession. In the post-war period conducted surveys indicated that in the case of legal entities the causes for withdrawal were related to plunge in economic activity, while individuals used funds primarily for financing current expenditures, as the latter reason outweighed the effect of precautionary savings. Despite decreases in banks' deposit liabilities, the above-mentioned arguments showed that this process would discontinue, since a decline in deposits was not related to mistrust of the banking system. A large share of deposits withdrawn in panic during the August developments was gradually returned to the system. In the second half of 2009, along with restoration of trust and economic recovery, the volume of deposits was already in an uptrend. The growth of non-bank deposits decreased the ratio of loans to non-bank deposits down to 1.3 in June 2010, compared with 1.8 a year before. Decline in this ratio points to growth of domestic financing for the banking sector and improvement in liquidity situation. Functioning of the banking sector under the improved liquidity conditions served to overcoming economic recession, which was manifested in gradual growth of crediting, more daring restructuring, halting of the deposit interest rate level and its subsequent decrease.

In the accounting period along with an increase in deposits the financing gap of commercial banks declined significantly, amounting to 22.9% at end-June 2010. The financing gap decreased from 49.7% to 29.8% in foreign currency, while the financing gap in domestic currency equaled 3.8%. This means that loans extended in domestic currency were almost fully covered by domestic currency denominated deposits attracted in the domestic market.

In 2009 and the first half of 2010 the volume of deposits placed at commercial banks by non-residents grew considerably. By end-June 2010 the volume of these deposits amounted to GEL 597.9 million, or 12.7% of total deposits. To compare, at end-June 2009 the volume of non-residents' deposits equaled GEL 309.8 million, accounting for 9.6% of total deposits. The growth of non-residents' deposits was mainly due to individuals' deposits, which was probably due to high fixed deposit interest rates. Large inflows of speculative funds in the banking system present a threat to a country's financial stability, since such funds are volatile and may create liquidity problems in the banking system in the event of rapid withdrawal. At this stage the volume of non-resident individuals' deposits is low, but it still requires attention.

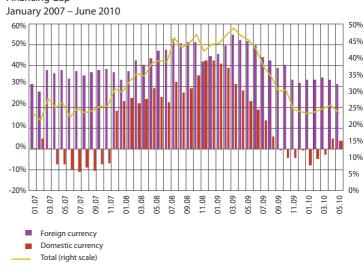
10.4. SHORT-TERM PERSPECTIVE OF LIQUIDITY

In the short-term period the expected liquidity status in the banking sector is reflected through the short-term liquidity gap – difference between assets and liabilities with maturity of less than one month. During nine months of 2009 this gap tended to decrease, which is explained by banks' cautious approach, although in the last quarter of 2009 and in 2010 the gap started to widen. By end-June 2010

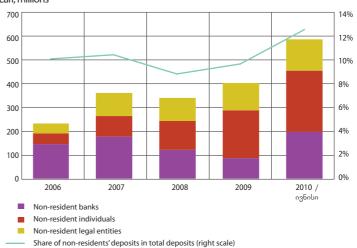
GRAPH 10.3.3 Ratio of Loans to Non-Bank Deposits June 2008 – June 2010



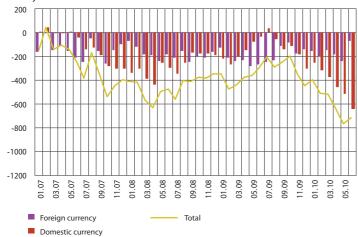
GRAPH 10.3.4 Financing Gap



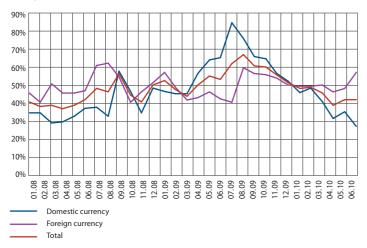
GRAPH 10.3.5 Non-Residents' Deposits Lari, millions



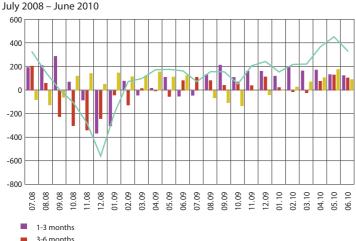
GRAPH 10.4.1 Difference between Assets and Liabilities with Maturity of less than 1 month January 2007 - June 2010



GRAPH 10.4.2 Ratio of Cash and Funds Placed at Banks to Current and Demand Deposits January 2008 - June 2010



GRAPH 10.5.1 Liquidity Position



dity gap may be considered a positive event, since it points to investment of attracted funds into relatively long-term assets (for example, government notes) and transformation of maturity terms is a part of a banking business model. It should also be noted that the volume of liabilities to be repaid within one month equaled GEL 494.6 million by end-June, while the value of funds to be received from net loans and investment securities amounted to GEL 515.1 million, attesting to a comfortable position of commercial banks in terms of short-term liquidity. The most liquid assets of commercial banks represent cash and funds placed on other commercial banks' accounts, while the main types of short-term liabilities include current and demand deposits. Ratio analysis of these assets and liabilities can also be useful in evaluating the short-term liquidity status. In the accounting period this ratio was decreasing, similar to the shortterm liquidity gap, and by end-June 2010 it equaled 40.4%, compared with 51.9% a year before. The ratio decrease for funds denominated in domestic currency is explained, as it was mentioned above, by directing liquid funds in domestic currency to purchases of T-bills

and extension of loans.

the consolidated liabilities of the banking sector

with maturity of less than one month exceeded the

consolidated assets with respective maturity by GEL 920 million, while a year before the same difference

equaled only GEL 388 million. Such a change is lar-

gely due to a 45% increase in current and demand

deposits in the accounting period. A growth of lia-

bilities was partially offset by a 150.9% increase in

funds placed at commercial banks. It is remarkable

that the difference in domestic currency denominated assets and liabilities shrank considerably, while

the same difference in foreign currency widened.

This is explained by the fact that growth of cash

and funds placed at commercial banks occurred in

foreign currency. Such a change in short-term liqui-

6-12 months

Cumulative

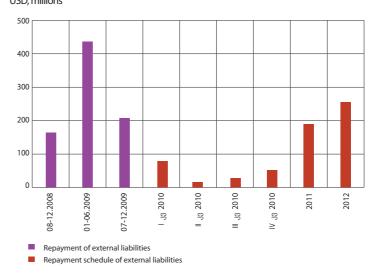
10.5. MEDIUM-TERM PERSPECTIVE OF LIQUIDITY

For a medium-term evaluation of expected liquidity in the banking sector we consider the liquidity position - difference between assets and liabilities with 1-12 month maturity. In 2009 the difference stabilized, whereas at end-June 2010 the assets exceeded the liabilities with the above-mentioned maturity by GEL 337 million. To compare, in June 2009 the difference equaled GEL 167 million. It should be noted that as of June 2010 the volume of subordinated liabilities with maturity period of less than one year totaled only GEL 3.7 million, while the value of loans, accrued interest and dividends to be repaid in the same period amounted to GEL 427.6 million. In the same time period the commercial banks should receive GEL 1,772 million, indicating a stable liquidity situation in the medium-term perspective.

The credit boom in the recent years was largely financed through external borrowings. After the August war, in the first half of 2009 the concentration of due external liabilities to be repaid was very high. Largely with the support of international financial organization as well as the parent companies, the banking sector managed to refinance the external liabilities without the necessity of contracting loans. As of June 2010, the external borrowings of the banking system amounted to only 7.2% of GDP, almost fully being long-term resources. 77% of these resources are received from international financial institutions, 13% - from parent companies, and only 10% - from other private sources. Such a composition of borrowers (their financial strength) promotes stability and sustainability of the banking system.

Concentration in servicing external liabilities, similar to that in the first half of 2009, is not expected. Despite the fact that repayment schedule of long-term borrowings from the wholesale markets is predictable and there are no risks of unexpected outflows, one of the lessons from the global financial

GRAPH 10.5.2 Financing of External Liabilities of the Banking Sector in 2008-2009 and 2010-2012 Repayment Schedule USD. millions



crisis consists in the fact that due to high refinancing risks banks should comply with the loans-to-deposits ratio and all measures should be taken to avoid periods of large repayment concentrations, both at macro and at micro level.

11. ACTIVITIES OF THE NATIONAL BANK OF GEORGIA

The second half of 2009 and the first half of 2010 was a post-crisis period for Georgia. In the second half of 2009 the crisis had already bottomed out, but the economic activity still remained slack. Due to high risks commercial banks were cautious in extending loans, which resulted in shrinking of credit portfolio. Starting from spring 2009 the downtrend in oil prices in the international markets was reversed, but this did not significantly affect the consumer prices in Georgia. In the second half of 2009 Georgia's main trending partners were still experiencing deflationary processes. Consequently, the impact of import inflation on the growth of consumer prices was negative. The inflationary pressure in the country was further weakened due to the fact that slackened credit and economic activity led to contraction of domestic demand. Therefore, at end-2009 and early 2010 there were downward risks to inflation.

Therefore, in the accounting period the NBG's objective was not focused on combating inflation but consisted in stimulating economic activity, promoting development of the lari money market, improving the monetary transmission mechanism and contributing to the dedollarization process of the economy. On the other hand, the NBG took into consideration the fact that along with resumption of FDI flows and a resulting upturn in economic activity inflation risks would reemerge bringing the issue of active monetary policy on the agenda. For conducting an active monetary policy it was necessary to introduce and implement all necessary policy instruments. Thus, in the accounting period one of the NBG's priorities consisted in introducing new monetary policy instruments and increasing efficiency of the existing ones, necessary for the purposes of effective monetary policy.

11.1. INTRODUCTION OF MONETARY POLICY **INSTRUMENTS**

In the accounting period one of the NBG's target areas was to increase efficiency of the interest rate transmission mechanism. The latter is closely linked with the existence of yield curve in the market. The yield curve is the relation between the interest rates on money market instruments with different terms to maturity. Since the National Bank is the only supplier of short-term liquid funds in the market, it has the monopolistic right to control short-term interest rates. In case there exists a relation between interest rates with different terms to maturity, changes in short-term interest rates transmit to interest rates with longer terms to maturity and, ultimately, to the bank loan rates. Thus, the objective of the National Bank is to strengthen the relation between interest rates with different maturity terms.

In order to have a yield curve in the market, it is necessary to have alternative money market instruments with different maturity terms. If investors (in Georgia those are only commercial banks) have a choice among different money market instruments with different maturity terms, then determination of a market interest rate for each maturity term will occur as a result of demand-andsupply interaction. The existence of the market interest rate intensifies competition among market participants and the relation between interest rates becomes stronger. Taking into consideration all the above-mentioned, in the accounting period the NBG continued issuance of three-month Certificates of Deposit. The issuance of CDs increased

from GEL 149 million in June 2009 to GEL 191.2 million a year later. It should be noted here that starting from August 2009 the Ministry of Finance resumed issuance of Treasury bills with different maturity terms (6 months and 1 year). At end-2009 the volume of T-bills in the market totaled GEL 270 million, rising to GEL 387 million by end-June.

Short-term interest rates are related to longterm interest rates through a forward rate. A forward rate in turn is dependent on an expected change in short-term rates. Thus in order to have a strong established relation between interest rates with different maturity terms, it is crucial to have stable short-term interest rates. In Georgia interest rates in the short-term money market (overnight and 7-day rates) were very volatile, hindering development of the money market, since market participants could not make safe forecasts. In order to reduce interest rate volatility, starting from 2010 the NBG introduced overnight loans and overnight deposits, which implied establishment of an interest rate band of +/- 2 pps around the monetary policy rate. As a result, the interest rate volatility significantly decreased. In the future it is possible to further narrow the band, with a relevant reduction in interest rate volatility.

In the second half of 2009 and early 2010 the banking system functioned under excess liquidity conditions. As a result, demand for the NBG's refinancing loans turned virtually inexistent. However, excess liquidity was not the only reason due to which commercial banks did not use the refinancing facility. Efficient functioning of the facility has been hampered by the lack of trust on the part of market participants, doubting that the NBG will provide refinancing loans in the future and will not decrease its volumes. Thus, banks did not want to be dependent on this instrument. To address this issue the NBG introduced a new instrument from April 2010 - permanent refinancing loans, allowing commercial banks to receive refinancing loans without collateral and without participation in the auction. The interest rate on such loans is defined as the monetary policy rate plus 1 percentage point. Introduction of the new instrument stimulated demand for refinancing loans; as a result, the volume of refinancing loans posted an unprecedented growth, amounting to GEL 271 million in June. Putting into operation of permanent refinancing loans strengthened the NBG's control over short-term interest rates. In addition, commercial banks received incentives to increase crediting in lari denominated loans.

In response to the challenges of the August 2008 war and the global financial crisis and with the purpose of avoiding liquidity problems in the banking system, the NBG cut the required reserve ratio to the level which imposed practically no constraints on commercial banks - banks kept more money for transactions than it was required. As it was already mentioned, starting from the second half of 2009 the banking system started accumulation of excess liquidity, mainly as a result of fiscal stimulus policy and slackening of the credit market. However, introduction of the guaranteed refinancing facility created incentives for commercial banks to resume extension of loans in lari, resulting in a decrease in excess liquidity. Accordingly, the necessity of reintroducing reserve requirements arose. On April 29, 2010 the NBG increased the required reserve ratio for funds attracted in lari to 10%. Increase in reserve requirements stimulates demand of commercial banks for lari, promoting money market development. As a result, introduction of new reserve requirements increased the volume of transaction in the interbank market, primarily in the interbank credit market. Thus, against the backdrop of higher reserve requirements the banks make more precise liquidity forecasting and, subsequently, better manage liquidity, which in turn promotes money market development. Amendments to the Regulation on calculation and observance of minimum reserve requirements also envisage interest accrual on additional reserves in the amount of policy rate, reducing the reserve requirement burden for commercial banks and, thus, contributing to reduction in interest rates.

Similar to other developing countries, one of the factors hindering economic stability in Georgia represents high dollarization. Promoting decrease in dollarization was one of the NBG's priorities in the accounting period. However, the NBG takes into consideration that accomplishment of this task is impossible in a short period and it is necessary to conduct consistent policies with the ultimate goal of making the use of lari resources more attractive for economic agents. The amendments to the "Regulation on Calculation and Observance of Minimum Reserve Requirements" served to the dedollarization purpose: they envisaged provisioning of borrowings from non-residents at 5%. Earlier external borrowings were exempt from compulsory provisioning, putting resources borrowed from external sources in a better position with respect to funds attracted in the domestic market. As a result of this change, on the one hand, banks receive more incentives to expand deposits in the domestic market, while, on the other hand, the banking system will be less dependent on external financing, increasing resilience to external shocks.

One of the necessary prerequisites for decreasing dollarization level represents development of exchange rate risk hedging market. In this regard the NBG initiated FX swap operations in autumn 2009, aiming at promoting development of risk hedging market. At the same time, the NBG took into consideration that a central bank cannot fully hedge the country's exchange rate risk and that provision of risk hedging instruments should come from the private sector. However, commercial banks did not express much interest towards FX swap operations, which is explained due to inexistence of demand for such type of instruments.

In order to decrease speculative FX operations and create demand for FX risk hedging instruments, it is important to have short-term exchange rate fluctuations. The latter significantly increased after the NBG introduced FX auctions in the beginning of 2009, which are more market-oriented compared to the foreign exchange market. The goal of FX auctions was to channel monetary flows from the government sector in the private sector. By intervening in the FX auctions the NBG does not attempt at reaching a certain exchange rate level or oppose the existing exchange rate trend. As a result, in the accounting period the fluctuations of the lari's exchange rate against the US dollar increased, promoting demand for lari denominated loans on the part of borrowers and leading to a considerable growth of crediting in lari, evident already from March 2010. Increased demand for lari loans creates incentives for commercial banks to dedollarize their liabilities and offer more attractive options for lari deposits with the purpose of accumulating more lari resources to meet demand for loans in lari. In addition, loans in lari are less risky due to inexistence of currencyinduced credit risk.

As it was already mentioned, in the second half of 2009 and the beginning of 2010 economic and credit activity was dull. Due to downward risks to inflation, the NBG's monetary policies in this period were directed at stimulating the economy. In November 2009 the monetary policy rate was reduced to 5%.

As a result of fiscal stumulus of the economy and revitalization of banks' credit activity in Q2 2010, a strong economic recovery was initiated. However, in the same period due to uncertainty related to coming elections, the inflow of private capital into the country still remained low. As a result, in the beginning of June the pressure on the exchange rate mounted, leading to a 5% depreciation, although followed by a 2% appreciation by end-month. After the above-mentioned depreciation economic agents had expectations of price increases augmenting inflation risks. In order to reduce inflation to the medium-term inflation target level, the NBG's Monetary Policy Committee took the decision at the June 16 extraordinary meeting to tighten the monetary policy, increasing the monetary policy rate by 125 basis points, which was unprecedented after switching to the inflation targeting regime. If against the backdrop of private capital recovery increased domestic demand augments inflationary risks, it is likely that the NBG will continue monetary policy tightening.

11.2. SUPERVISION POLICY MEASURES

Processes taking place in the global economy in recent years once again manifested the correctness of arguments in favor of co-existence of a central bank together with a financial sector. Today it is agreed that one of the main reasons of financial crisis was actual neglect of systemic risks by the supervision agencies. It should be noted here that for efficient operation of the monetary transmission mechanism, for fulfilling the functions of the lender of last resort, the information on sustainability of financial institution is extremely useful for a central bank. The issue of reducing expenditures on information collection and research and development is also important. Taking into account

that financial stability is one of the main objectives of a central bank, in case of a potential conflict of interests between monetary policy and financial stability, a single system will manage to define social interests in the best possible manner. In the recent period processes taking place in Georgia showed that it is necessary to have an efficient system for exchanging information and coordination between the central bank and the financial sector supervision, with more attention paid by the latter to macroprudential analysis.

As a result of legislative changes made in December 2009, the National Bank of Georgia has become a single supervisor of the financial sector. In particular, starting from December 1, 2009 the Organic Law "On National Bank of Georgia" dated June 23, 1995 became ineffective; a new Organic Law on the National Bank of Georgia has been adopted, in accordance with which the NBG has become a single supervisor of the financial sector.

With the purpose of ensuring financial stability and protecting consumers' interests, the NBG will conduct regulation of financial institutions in line with the principles of risk-oriented supervision, which generally implies a bank-specific approach to each financial institution, assessment of each institution's impact on stability of the Georgian financial sector and adequate redistribution of supervisory resources. The main principle of risk-based supervision represents assessment of each financial institution in two dimensions - in terms of effect index and probability index. Effect is related to systemacy of a financial institution, reflecting the latter's risk profile and likelihood of financial difficulties. By this approach the focus is on those risks, which pose threats to systemic stability, supervision resources are allocated in line with the revealed risks. Risk-based supervision envisages not only identification of materialized risks, but

also the probability of their materialization in the future. This approach is used in case of both micro- and macroprudential risks.

In accordance with the amendments to the Law on Commercial Banks, effective since December 1, 2009 and in line with the principles of risk-based supervision, the NBG is authorized to impose individual economic limits and norms with respect to each commercial bank.

With the purpose of overcoming deficit in the banking sector, the Financial Supervision Agency of Georgia reduced the weight of the FX-risk-weighted asset category. The change was a part of a counter-cyclical prudential policy, similar to the previous changes, which were related to lowering capital adequacy and liquidity requirements. Starting from August 1, 2009 the amendment to the "Regulation on Capital Adequacy Requirements for Commercial Banks" became effective. In accordance with the amendment, assets subject to FXrisk-weighting belong to a 50% risk category instead of a 70% risk category, and the FX risk factor is reduced from 0.75 to 0.50.

12. FINANCIAL STRENGH INDICATORS

| | Return Equity (ROE) | | -8.4 | -8.4 | -8.9 | -7.2 | -6.5 | -6.1 | -4.3 | -2.2 | -0.7 | 4.0 | 6.3 | 4.5 | 4.8 |
|---------------------------|---|------------------------------|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-------------|-----------|-----------|
| Profitabil- soitsR yti | (AOA) złaszA no mułaЯ | Percent | -1.6 | -1.6 | -1.7 | -1.4 | -1.2 | 1.1 | -0.8 | -0.4 | -0.1 | 0.7 | 1.1 | 8.0 | 6.0 |
| | oitsA YosupabA latiqs Anosivraqu2 | | 17.6 | 17.9 | 19.7 | 20.2 | 20.0 | 19.7 | 19.1 | 18.7 | 18.7 | 18.3 | 18.0 | 17.6 | 17.4 |
| | Consolidated Open Currency Position | | 143,440 | 141,269 | 124,641 | 170,700 | 117,928 | 106,972 | 27,351 | 21,843 | 73,100 | 67,677 | 65,546 | 23,521 | 83,650 |
| | noitizog Vonernu Oped Opsition | | 144,263 | 119,188 | 86,849 | 128,880 | 59,044 | 41,107 | (29,550) | (42,879) | 9,273 | (19,977) | (49,361) | (65,993) | 860'6 |
| | NPL Reserves | | 506,817 | 516,562 | 527,381 | 532,816 | 512,634 | 533,951 | 503,793 | 506,836 | 522,720 | 500,590 | 508,719 | 529,561 | 508,403 |
| | zneoJ gnimorPerforming Loans | | 1,007,910 | 060,286 | 971,725 | 947,614 | 938,193 | 942,257 | 925,775 | 927,503 | 957,041 | 915,910 | 952,098 | 985,307 | 935,057 |
| | Physical and Non-physical Fixed Assets | | 834,278 | 829,289 | 826,019 | 818,566 | 815,135 | 818,873 | 837,010 | 828,585 | 828,480 | 817,793 | 815,136 | 817,053 | 817,887 |
| | in Foreign Currency | | 1,375,894 | 1,313,008 | 1,527,662 | 1,365,404 | 1,397,372 | 1,382,970 | 1,488,450 | 1,510,768 | 1,574,104 | 1,477,427 | 1,482,914 | 1,592,372 | 1,619,020 |
| of which: | in Domestic Currency | | 947,359 | 1 922,776 | 1,014,801 | 1,056,044 | 1,078,097 | 1,146,055 | 1,167,827 | 1,145,307 | 1,239,088 | 1,279,051 | 1,412,756 | 1,468,268 | 1,661,142 |
| ıturity | orn danom I nedt eesd than I month ma | | 2,323,253 | 2,272,784 | 2,542,462 | 2,421,448 | 2,475,469 | 1,529,025 | 1,656,277 | 2,656,075 | 2,813,191 | 2,756,478 | 2,895,671 | 3,060,640 | 3,280,162 |
| | in Foreign Currency | | 1,035,769 2 | 998,786 | 1,225,787 2 | 1,224,608 2 | 1,287,374 2 | 1,154,266 2 | 1,305,682 2 | 1,314,826 2 | 1,323,472 2 | 1,285,601 | 1,245,266 2 | 1,281,205 | 1,527,381 |
| of which: | in Domestic Currency | housands | 899,149 1 | 1,001,348 | 938,411 1 | 873,972 1 | 930,000 | 911,492 | 775,161 1 | 823,313 1 | 828,236 1 | 798,740 | 826,371 | 803,765 | 832,813 1 |
| ity | Total Assets with less than 1 month matur | iod Average. Lari, Thousands | 1,934,918 | 2,000,134 | 2,164,199 | 2,098,581 | 2,217,374 | 2,065,758 | 2,080,843 | 2,138,139 | 2,151,709 | 2,084,341 | 2,071,637 | 2,084,970 | 2,360,195 |
| | Supervisory Captal | Period A | 1,631,946 | 1,650,750 | 1,616,820 | 1,637,025 | 1,630,687 | 1,596,064 | 1,566,088 | 1,551,354 | 1,563,283 | 1,565,401 | 1,570,273 | 1,546,593 | 1,583,036 |
| of which: | Tier 1 Capital | | 1,357,085 | 1,364,741 | 1,345,767 | 1,357,996 | 1,353,319 | 1,361,241 | 1,358,229 | 1,292,763 | 1,308,418 | 1,308,248 | 1,305,014 | 1,287,867 | 1,317,936 |
| | letiqeD (Yiup3 | | 1,534,235 | 1,529,713 | 1,495,131 | 1,511,042 | 1,505,808 | 1,512,109 | 1,516,988 | 1,514,320 | 1,532,944 | 1,549,500 | 1,554,138 | 1,539,082 | 1,575,954 |
| | iñord 19N | | (93,566) | (74,589) | (869'68) | (82,009) | (82,188) | (83,132) | (65,317) | (2,720) | (1,651) | 15,337 | 24,362 | 28,781 | 37,294 |
| | sənuəлəy | | 729,582 | 839,645 | 948,776 | 1,060,061 | 1,161,164 | 1,260,589 | 1,377,283 | 110,357 | 216,453 | 333,638 | 449,681 | 579,491 | 723,862 |
| | snoisivorA seoJ neoJ | | 653,105 | 667,379 | 677,543 | 683,903 | 674,776 | 683,829 | 662,103 | 908'899 | 679,577 | 660,467 | 929,639 | 683,344 | 670,263 |
| of which: | snsoJeubrevO | | 198,916 | 199,679 | 244,020 | 215,308 | 196,764 | 227,204 | 159,793 | 210,941 | 211,658 | 217,139 | 216,310 | 217,757 | 201,136 |
| | sneoJletoT | | | 5,338,282 | 5,262,962 | 5,209,975 | 5,204,853 | 5,193,287 | 5,186,540 | 5,241,090 | 5,271,026 | 5,343,553 | 5,498,133 | 5,589,490 | 5,734,582 |
| | | | 90-un | 60-Inf | Aug-09 | Sep-09 | Oct-09 | Nov-09 | Dec-09 | Jan-10 | Feb-10 | Mar-10 | Apr-10 | May-10 | Jun-10 |