

# FINANCIAL STABILITY REPORT

NATIONAL BANK OF GEORGIA

# 2011



2008

2009

2010

2011

NATIONAL BANK OF GEORGIA

**FINANCIAL STABILITY REPORT**  
**2011**

TBILISI 2011



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# 1. INTRODUCTION

The year of 2010 was the period of economic recovery in Georgia. The real gross domestic product grew at 6.3%, among the highest in the region.

The economic recession started in Q3 2008 was discontinued in Q1 2010, with the real GDP rising 3.7%. According to the Geostat's preliminary data, the annual growth rates in Q2-Q4 2010 equaled 8.3%, 6.7%, and 6.1%, respectively.

The 2010 economic growth was significantly enhanced by channeling commercial banks' excess liquidity into the economy, conducing to considerable revitalization of credit activity. The growth of credit portfolio in the banking system was largely related to loans to trade sector. Increase in crediting of this type contains smaller risks for financial stability, since the trade sector is among the most rapidly developing in the country. Essential contributions to economic growth were also made by transport, construction, financial intermediation, community and social services.

Eradication of consequences brought about by the 2008 financial crisis remains one of the main global challenges. Although in the second half of 2010 the international environment displayed signs of improvement in the economic and financial situation, in 2011 the situation changed. According to the International Monetary Fund's (IMF) forecasts, the global economic growth rates are expected to slow down in 2011 relative to the previous year.

One of the main causes of the existing financial imbalances in the global economy is a search for alternative ways of deriving revenues by private investors. The latter is in turn conditioned

by a number of factors. In particular, an essential source of risks is related to a very low level of interest rates set by the leading central banks over an extended period, stimulating an increase in capital outflows to emerging countries. In addition, developing countries purchase large amounts of state debt securities in developed countries, retaining the yield on long-term state securities at a low level. This represents another reason for private investors to seek alternative sources of revenues.

Such course of developments creates risks for both sides. In the developed countries it slows down economic activity, while creating problems related to excessive growth, economy overheating, and asset price bubbles in the developing countries. All of the above may cause volatility in the financial markets, with a subsequent effect on the real economy.

Against the background of global economic recovery, large price increases in the international markets were immediately reflected in the Georgia's balance of payments. In 2010 the current account deficit slightly deteriorated, although the latter was not only fully financed, but there occurred a significant increase in reserve assets. Widened trade deficit was partly offset by service revenues. A remarkable expansion of the tourism sector needs to be pointed out. Despite financial difficulties in certain European countries, remittances sent by Georgian migrants' rose considerably. In the preceding year, against the backdrop of sharply increased foreign capital inflows, there was a certain increase in risks related to higher capital servicing costs. In contrast to the preceding

years, the share of private sector in current account financing increased. It is particularly remarkable that financing of the current account deficit was made largely at the expense of long-term capital inflows, and a considerable part of these funds traditionally represented foreign direct investments. In the reporting period there was a significant increase in portfolio investments as well, owing to the placement of Eurobonds by the private sector. The volume of state external debt increased, but there were no significant changes in its composition; the private sector's debt still dominates with a large share of debt being inter-company loans, while in terms of maturity, 79.2% of external loans are long-term, with the short-term loans thus accounting for the remaining 20.8%. It can be asserted that such debt structure does not contain significant risks and is favorable in terms of financial stability. One of the important indicators of a country's ability to service external debt, ratio of reserve assets to short-term loans, remains at a fairly high level of 120%-130%.

In the reporting period real estate prices remained stable. The latter are particularly important for the country's financial stability, producing an essential impact on stability of the banking sector's credit portfolio and representing an important determinant of the country's overall business cycle.

In the reporting period against the backdrop of economic recovery the government conducted a relatively less active fiscal policy (compared to the preceding year), conditioning lower growth rates of consolidated budget expenditures relative to GDP. As a result, the role of government finances in the economy lowered for the first time in the last 7 years. Against the tendencies existing before the 2009, the share of public administration will continue to shrink in the current year as well. This

creates stimuli to the private sector, and the fiscal consolidation is positively reflected on the stability of the macroeconomic environment.

In the reporting period the banking sector manifested positive outcomes. The banking assets rose 22% to total GEL 11.2 billion. The assets-to-GDP ratio reached 51.4%. The volume of assets grew due to expansion in the credit portfolio, which in turn was triggered by interest rate decreases in the market. Despite this fact, the asset concentration by banks still remains high. 2 out of 19 banks account for almost 60% of the total banking assets. An increase in liabilities was recorded as well, being largely manifested in a 31% rise in non-banking deposits to GEL 5.8 billion.

The majority of the banks ended the last year on profit and it is likely that in 2011 the total profit will significantly exceed the previous year's level. However, traditionally high overhead costs point to inefficiencies in the banking sector. The returns on capital and assets reached the pre-crisis average level, amounting to 13.3% and 2.2%, respectively. The banking sector's interest margin tends to decline, standing currently at 7.7%, indicating a rise in competition in the banking sector.

The capitalization in the banking sector remains high. The regulatory capital adequacy stands at 16.5%, exceeding the required minimum by 4.5 pps. 72% of the regulatory capital constitutes high quality Tier 1 capital, the adequacy ratio of which equals 11.9%. Along with an increase in profitability, the banks' balance sheets saw a rise in the undistributed profit item, currently standing at GEL 132.7 million.

As a result of improvement in loan quality and a sustainable demand for deposits on the part on individuals, liquidity risk declines. The share of current and demand deposits in attracted deposits is

quite high, but the risk of their drastic decline remains low due to an upturn in the economic activity and revenues.

In 2010 the assets of the non-banking sector grew as well. One needs to distinguish a remarkable 70% expansion of the credit portfolio of microfinance organizations and a 35.3% rise in insurance companies' assets. The latter posted 45.7% and 8.7% growth rates of the ROA and ROE, respectively.

In June 2011 the total amount of loans extended in the financial system equaled GEL 6.9 billion, amounting to a 20% increase in loan portfolio. The quality of extended loans improved as well, posting a decline in non-performing and overdue loans. Stable economic environment reduced risk premium, leading to a decrease in long-term loan interest rates and an expansion of long-term loans. The structure of non-performing loans remained mainly unchanged. In the reporting period the downtrend in written-off loans was preserved.

The financial system remains stable with respect to market risk. In terms of interest rate risk, a financial system faces the risk of declining interest rates which may potentially reduce interest revenues. The interest rate risk in Georgia does not have systemic importance, since the Georgian financial system does not actively use complex market instruments and, thus, is less vulnerable to financial market volatility. The significant threat in terms of market risk consists in dollarization of the financial system. Despite a certain decrease, the latter remains high, as the loan dollarization level stood at 72% in June 2011. On a positive note,

excluding the exchange rate effect, the overall dollarization rate is 2 pp lower than the pre-crisis level. It should be noted that the dollarization rate of long-term loans and deposits is still high, creating an exchange-rate-induced currency mismatch risk. In the reporting period a decline in loan dollarization should be considered positive – excluding two large loans, the loan dollarization rate moved down to 50% by the end of the reporting period.

Stability of the financial system is corroborated by the results of stress-tests. The latter showed that under the conditions of high dollarization the primary systemic risk remains depreciation of the lari potentially inflicting large losses to the financial system. Despite the importance of this risk, the financial stability is not put into doubt even under more unfavorable developments.

In the reporting period the financial intermediation expanded its overall activities. The credit activity grew considerably, being accompanied with a significant increase in non-banking deposits. Against the backdrop of economic recovery the banking activity grew profitable again, as the returns on capital and assets equaled the pre-crisis levels. The quality of banking sector capitalization is also satisfactory. The conducted analysis manifests resilience of the financial system with regard to the existing risks.

In conclusion, it can be said that the financial sector continues to grow and remains in the process of development. Unfavorable developments in the financial intermediation sector are not foreseen in the medium-term perspective.



## 2. OVERVIEW OF INTERNATIONAL ENVIRONMENT

Almost four years passed since the world encountered one of the most severe and large-scale financial crises, but risks and financial instability brought about by the crisis have not been yet fully overcome. Despite the fact that the global economy to a certain extent recovered from an acute shock returning to the normal growth path, signs of instability and reemergence of the crisis are still visible, being particularly manifested in the aggra-

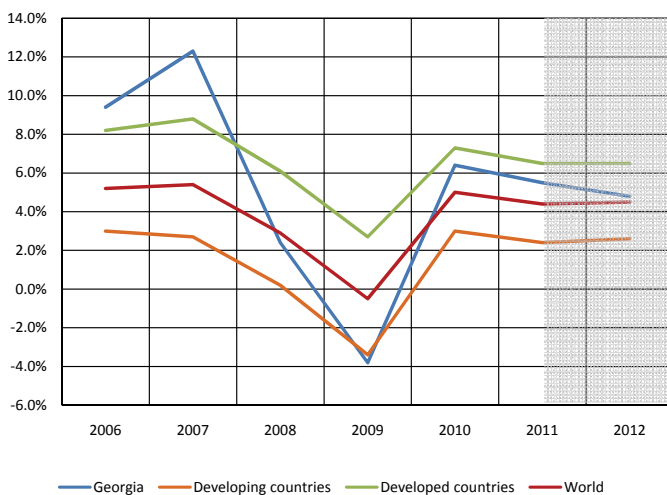
vation of the EU sovereign debt problems in 2011.

At the early stages of the crisis a large-scale anti-crisis policies enhanced stabilization of the financial markets and improvement of the economic situation in 2009-2010. However, the positive impact of anti-crisis policies gradually weakened, with their effect expected to fade away in the future. Reductions in government anti-crisis policies were also caused by significant budget deficits and large state debt in many countries. Governments of these countries, mainly being the EU members, started the policy of fiscal consolidation, which, on the one hand, is inevitable in the process of settling deficit and debt-related issues, while, on the other hand, may adversely affect aggregate demand and slow down development of the global economy.

These developments were reflected in the growth rates of the global economy. If in 2010 the international environment was characterized with improved economic and financial situation, in 2011 the situation worsened again. The global GDP growth rate equaled 5% in 2010, while the 2011 forecasts stand at 4.4%. In line with the IMF forecasts, low growth rates are expected to prevail in the subsequent years.

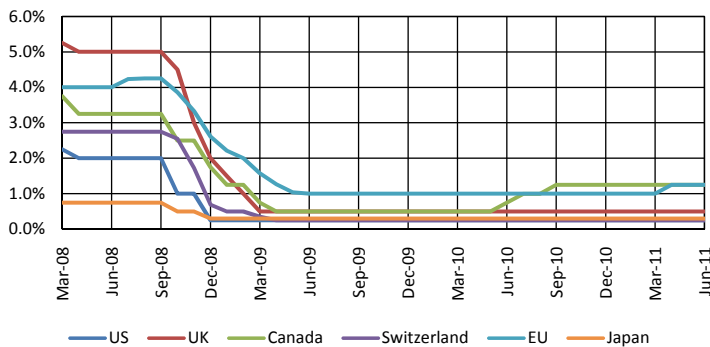
It should be noted that distribution of economic growth across countries and regions is very uneven – rapidly developing countries (China, India, Argentina) succeeded in restoring growth rates when other countries were stuck in recession (See Diagram 2.1). This in turn led to price increases, adversely affecting developing countries through import of goods. In the recent years the real growth rates of GDP in the developing countries always

**DIAGRAM 2.1.**  
Real GDP Growth Rates (%)



**SOURCE:** IMF, World Economic Outlook (WEO), April 2011

**DIAGRAM 2.2.**  
Dynamics of Key Policy Interest Rates in Leading Economies, 2008-2010



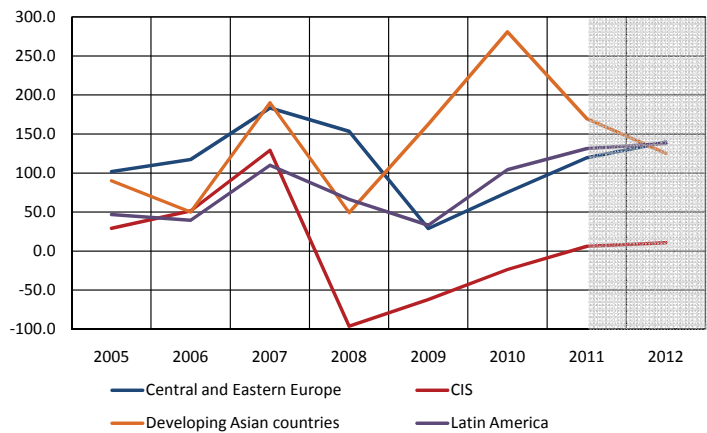
**SOURCE:** Central banks' data

exceeded that in the developed countries. According to the IMF, the 2010 economic growth equaled 7.3% in the developing countries and 3% in the developed countries. It should also be pointed out that the primary source of the above-mentioned 3% growth represented high growth rates (8.4%) in the newly industrialized countries. The EU area recorded a 1.8% economic growth rate in 2010. Further slowdown of economic growth is expected in 2011. Relatively lower economic growth rates in the developed countries are conditioned by weak domestic demand, high level of unemployment and slack expansion of credit. On the other hand, high economic growth rates in the developing countries are largely related to considerable growth of private consumption. In the last two years the real GDP growth rates in Georgia exceeded those in the developed countries, while falling behind the economic growth rates in the developing countries. Such asymmetric and uneven geographic distribution of economic growth may represent a considerable factor hindering sustainable growth of the global economy.

Starting from the second half of 2010 the global inflation was on an uptrend. Price increases were mainly caused by food and oil price gains. According to the FAO<sup>1</sup>, in December 2010 global food prices reached record high levels, primarily owing to bad harvests in the main food exporter countries and growing demand in the developing countries. By the end of 2010 the annual growth of the food price index stood at 25.1%, reaching 222.6.

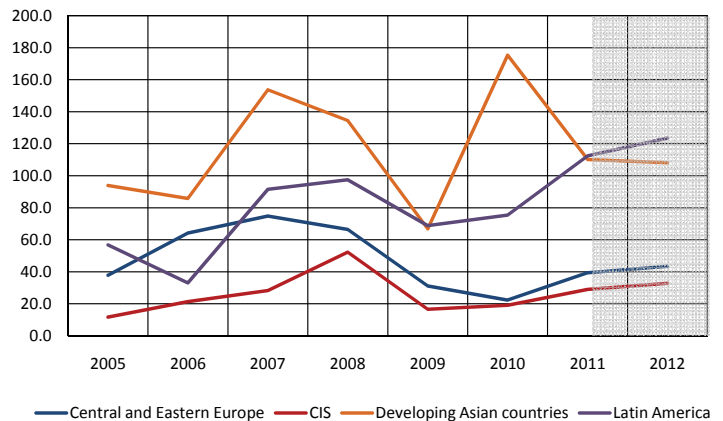
Price increases particularly affected developing countries where food and oil have relatively large weights in the consumer basket. According to the

**DIAGRAM 2.3.**  
Net Private Financial Flows (USD billions)



SOURCE: IMF, WEO, April 2011

**DIAGRAM 2.4.**  
Net FDIs (USD billions)



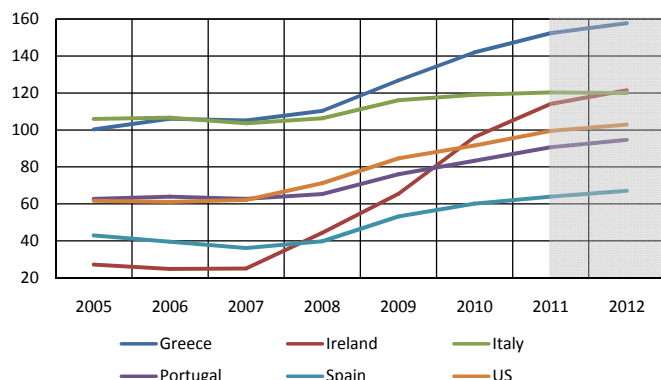
SOURCE: IMF, WEO, April 2011

IMF, the annual growth rates of inflation in 2010 equaled 1.6% in developed countries and 6.2% in developing countries, while in 2011 the respective inflation rates are projected to increase to 2.2% and 6.9%. It should also be pointed out that in 2012 the price level is projected to decline. Analogous developments took place in Georgia, where a significant rise in inflation occurred in the second half of 2010 and early 2011. However, starting from June 2011 the inflation rate has been declining and the downtrend in inflation is projected to prevail in the subsequent few quarters.

1 Food and Agricultural Organization of the United Nations

**DIAGRAM 2.5.**

Total Government Debt, in percent of GDP



**SOURCE:** IMF, WEO, April 2011

Apart from the risks related to the 2008 global financial crisis, the current economic policies and developments in the financial systems create new risks for the international economy. One of the primary reasons for the existing financial imbalances in the global economy represents a search for alternative ways of deriving revenues by private investors. The latter fact is conditioned by a number of reasons. In particular, an essential source of risks is related to maintenance of low interest rates by the leading central banks over extended period of time (See Diagram 2.2). Low interest rates translate into low nominal return on traditional assets, prompting investors to seek other sources of revenues. This in turn represented a source of finan-

cial imbalances. Capital outflows from developed countries to emerging countries tend to grow (See Diagram 2.3, Diagram 2.4), creating risks for both sides. In the developed countries it slows down economic activity, while creating problems related to excessive growth, economy overheating, and asset price bubbles in the developing countries. In addition, excessive inflows of short-term capital expose a country to the risks related to rapid capital outflows, conducive to financial and currency crises.

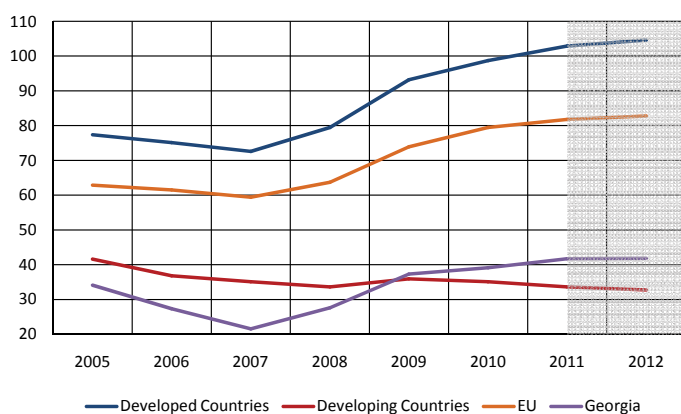
Taking into consideration all the above-mentioned, in response to the current economic developments some central banks started contractionary monetary policies at the end of 2010 raising interest rates. However, recent events, particularly taking place in the EU area, stopped the tendency of interest rate increases. Moreover, it is expected that central banks of a few countries will cut interest rates.

The existing risks, initially related to fiscal problems and increases in sovereign debt in Greece, Spain, Ireland, and Portugal, hindered revitalization of the economic environment (See Diagram 2.5). Despite the fact that essential efforts made by the EU governments and international financial institutions to settle sovereign-debt-related issues somewhat mitigated the situation, the problem still exists and ways to resolve it are still to be found. Furthermore, an increasing number of countries encounter similar problems (See Diagram 2.6).

Apart from the above-mentioned, developing countries invest large amounts of funds into state debt securities of developed countries, preserving interest rates on long-term state securities at low levels. This represents another reason for investors to seek alternative sources of revenues. This phe-

**DIAGRAM 2.6.**

Total Government Debt, in percent of GDP



**SOURCE:** IMF, WEO, April 2011

nomenon is also reflected in increased prices of investment goods in general and gold, in particular. Excessive investments in turn may lead to creating price bubbles and incur losses for investors, especially in a short-term period.

Thus, a primary threat to financial stability in developed countries represents low level of interest rates, increasing state debt and a related search for alternative revenue sources by private investors. Developing countries, on the other hand, face different challenges and problems related to growing domestic demand, rapid credit expansion and large capital inflows. All of these factors may bring about instability in the financial markets, which may produce a significant effect on the real economy.

In order to eradicate existing risks and avoid potential threats, in December 2010 the Basel Committee on Banking Supervision worked out a new set of recommendations – Basel III. The primary aim of Basel III represents improvement in regulation, supervision and risk management of the banking sector as well as strengthening of capital and liquidity standards by means of introducing stricter requirements. Basel III envisages changes in other indicators of capital, liquidity and bank supervision in line with international standards. First of all, changes will be made with respect to improvement in quality and quantity of capital, generally implying an increase in banks' capital adequacy. Changes are also aimed at reducing procyclicality of financial institutions, which cause deterioration of the situation in the real economy during shocks. For this purpose Basel III envisages introduction of two buffers – conservation buffer and countercyclical buffer, aimed at forcing banks to reduce payment of dividends with the view of

creating capital reserves for loan loss provisioning. Along with the capital adequacy a new indicator, the leverage ratio, has been introduced. The objective of the latter is to reduce the weight of external financing of the banking sector and ensure additional anti-risk mechanisms. In addition, introduction of new standards is intended with the view of improving liquidity management.

Adoption of the recommendations elaborated by the Basel Committee on Banking Supervision is planned starting from 2013, while their comprehensive implementation should take place by 2018.

In the recent years one of the main issues largely discussed by international experts was to find ways for reducing expenditures caused by the international crisis and other unfavorable developments. Along with the new recommendations of banking regulation (Basel III), the issue of using a loan reserves is additionally discussed. The goal of this instrument is to reduce procyclicality. A similar mechanism represents dynamic loan loss provisioning in relation to the business cycle. This instrument implies that loan reserves are created not only for materialized but also for expected losses throughout the business cycle. Numerous international organizations work on this instrument. In June 2010 the Basel Committee on Banking Supervision published comments with respect to the proposal of the International Accounting Standards Board (IASB) stipulating concrete steps for introducing dynamic provisioning. All of the above clearly shows that with the purpose of improving stability of the financial system a number of initiatives are being prepared to strengthen resilience of the financial sector towards systemic risks and avoid further complications.

### 3. EXTERNAL SECTOR

Against the background of the global financial crisis the current account deficit was gradually improving in 2009. However, in parallel to global economic recovery accompanied with increased demand, the international markets recorded significant price gains. These developments were immediately reflected in Georgia's balance of payments. Starting from Q2 2010 the current account deficit deteriorated again, equaling USD -1.3 billion, or 10.1% more than in 2009, and constituting 11.4% of the GDP (See Table 3.1). The 2010 current account deficit was not only completely financed,

but there occurred a significant growth of reserve assets. The deterioration of the current account continued in the first half of 2011 and the downward trend is projected to prevail until the end-year.

The current account deficit as well as its improvement or deterioration in Georgia is largely conditioned by the trade deficit. The latter constituted 19.2% of the GDP in the first half of 2010, while increasing to 22.1% a year later (See Table 3.1). Against the backdrop of economic recovery, price increases in the international markets increased cost of imports, on the one hand, while

**TABLE 3.1.**  
Balance of Payments (USD millions), 2010 – Q2 2011

	2010-Q1	2010-Q2	2010-Q3	2010-Q4	2010	2011-Q1	2011-Q2
<b>Current Account</b>	<b>-253.9</b>	<b>-372.3</b>	<b>-286.4</b>	<b>-420.4</b>	<b>-1333.0</b>	<b>-355.3</b>	<b>-464.5</b>
Goods	-512.7	-642.2	-661.8	-769.6	-2586.3	-686.2	-733.9
Exports	542.4	587.9	584.0	747.9	2462.2	688.2	863.4
Imports	-1055.2	-1230.0	-1245.8	-1517.5	-5048.5	-1375.0	-1597.3
Coverage ratio (percent)	51.4	47.8	46.9	49.3	48.8	50.1	54.1
Services	87.3	91.1	202.0	134.4	514.8	145.2	147.4
Income	-109.7	-52.2	-103.4	-94.7	-360.0	-100.2	162.9
Current transfers	281.2	230.9	276.8	309.5	1098.4	281.7	282.0
<b>Capital and Financial Account</b>	<b>264.5</b>	<b>397.4</b>	<b>277.3</b>	<b>409.1</b>	<b>1348.3</b>	<b>370.6</b>	<b>486.1</b>
Capital account	26.2	41.6	52.6	85.6	206.0	54.9	46.7
Financial account	238.3	355.8	224.7	323.5	1142.3	315.7	439.5
Foreign direct investment	166.7	208.3	224.6	209.0	808.6	184.8	262.8
Portfolio investment	9.3	-25.5	262.4	5.8	252.0	36.9	54.1
Financial derivatives	-0.1	0.0	0.3	0.5	0.7	0.0	2.3
Other investment	201.2	-86.1	-108.0	281.8	288.9	501.1	141.1
Reserve assets	-138.9	259.2	-154.6	-173.7	-208.0	-407.0	-16.2
<b>Net errors and omissions</b>	<b>-10.6</b>	<b>-25.1</b>	<b>9.2</b>	<b>11.3</b>	<b>-15.2</b>	<b>-11.2</b>	<b>-18.6</b>
<b>Current-account-to-GDP ratio (percent)</b>	<b>-10.2</b>	<b>-13.3</b>	<b>-9.8</b>	<b>-12.3</b>	<b>-11.4</b>	<b>-12.1</b>	<b>-13.2</b>
Trade-balance-to-GDP ratio (percent)	-20.6	-22.9	-22.6	-22.5	-22.2	-23.3	20.9

SOURCE: NBG

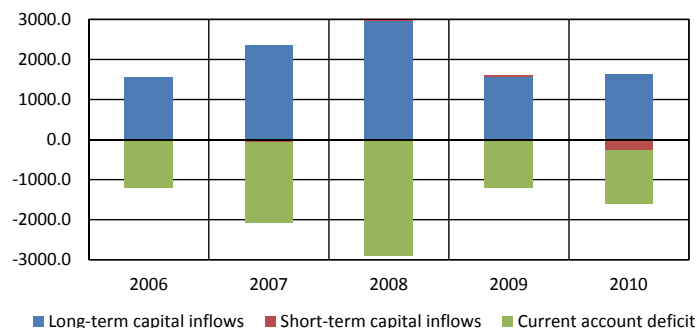
raising the value of the Georgian exports at a faster rate, on the other hand. In particular, in 2010 the annual growth of exports and imports equaled 30.0% and 17.6%, respectively. The annual export-import coverage ratio stood at 48.8%, up 2.4 pps year-on-year. In line with the NBG's forecasts, further growth of exports and imports will continue in 2011, with the growth rate of exports being projected at a relatively higher rate than that of imports. Despite this fact, the trade deficit is still expected to deteriorate.

The service component of the balance of payments is traditionally positive, partly offsetting the trade deficit. Compared to the preceding year, the balance of services grew 51.5% in 2010 fueled by increased tourism and transportation revenues. In 2011 the positive balance of services continues to rise at high rates (See Table 3.1).

The traditionally positive income balance turned negative in 2008 as a result of massive FDI inflows. Along with an increase in foreign capital liabilities, capital servicing costs grew as well. Accordingly, the negative component of the income account, investment income (expenses), exceeded the positive component, labor income. However, the largest part of the negative income component was related to profit reinvestment by foreign investors, which in turn does not require additional sources of financing. In 2010 the income account deficit widened 3.1 times, while in the first half of 2011 the income account improved, as the deficit declined 9.4% year-on-year.

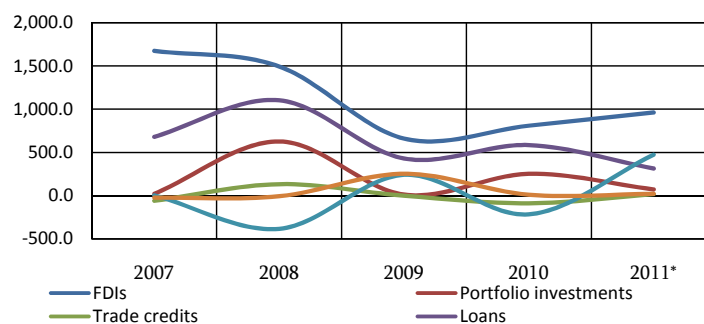
In 2010 the current account deficit was financed again by long-term capital inflows, with the FDIs accounting for a significant part thereof (See Diagram 3.1 and Diagram 3.2). It should also be pointed out that the share of net foreign investments in total capital inflows started to grow again.

**DIAGRAM 3.1.**  
Current Account Deficit and Inflow of Funds (USD millions), 2006-2010



SOURCE: NBG

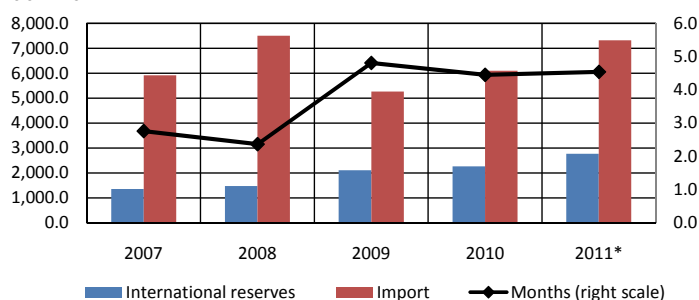
**DIAGRAM 3.2.**  
Main Sources of Current Account Deficit Financing (USD millions), 2007-2011



\* - NBG Forecast

SOURCE: NBG

**DIAGRAM 3.3.**  
Import Coverage of Reserve Assets (USD millions, months), 2007-2011

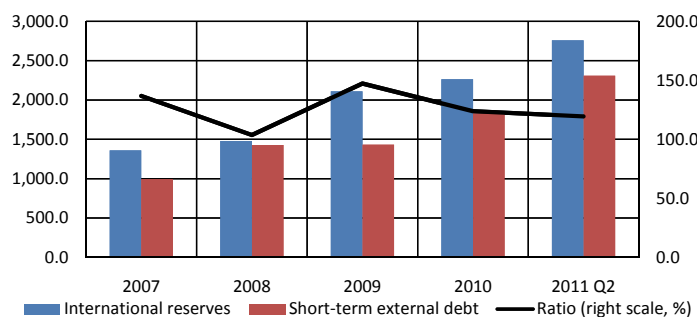


SOURCE: NBG



**DIAGRAM 3.4.**

Short-Term External Debt and International Reserves (USD millions, percent), 2007-2011



**SOURCE:** NBG

Due to the impact produced by the 2008 global financial crisis and the August war, the volume of FDIs in Georgia declined considerably. By end-2008 the inflow of FDIs dropped 9.1%, contracting at a much higher rate in 2009. In 2010 the situation reversed and a rise in FDIs was recorded. Throughout the year the volume of foreign investments posted a 23.7% year-on-year growth rate, amounting to USD 814.5 million.

In 2010 Georgia's overall balance of payments (excluding exceptional financing mobilized by the government sector) posted a USD 29.5 million deficit. Financing of the overall balance of payments included funds allocated within the framework of the IMF assistance program in Q1 2010. Conversely, in the first half of 2011 there was a significant surplus.

In 2010 the reserve assets increased by USD

208.0 million. As a result, the NBG's international reserves stood at USD 2,263.9 million, as of December 31, 2010. The coverage ratio of imports by international reserve assets assessing a country's capacity to satisfy its needs in the international markets without any external assistance stood at 4.5 months in 2010. The ratio is projected to remain at the same level in 2011 (See Diagram 3.3).

The ratio of reserve assets to short-term debt, one of the main indicators of a country's ability to service external debt, oscillated between 115% and 125% in 2010 and Q1-Q2 2011 (See Diagram 3.4).

At end-Q2 2011 Georgia's total external debt reached USD 10.5 billion, or 82.1% of GDP. The government and the NBG accounted for 42.6% of total debt, while the share of liabilities to direct investors equaled 23.2%. In terms of maturity structure, 78.0% of external debt is long-term. In the remaining period of 2011 the exact amount of debt repayment is not precisely determinable. According to the NBG's estimates, the latter equals approximately USD 1,594.8 million. The largest part (89.1%) represents private debt. A significant part (48%) of external debt repayment by non-financial corporations represents inter-company loans. The liabilities to be repaid by the government and the NBG in 2011 account for 10.9% of the total repayable debt.

## 4. GROSS DOMESTIC PRODUCT AND INFLATION

In 2010 the Georgian economy was in the mode of recovery. The gross domestic product grew 6.3% in real terms, one of the highest rates in the region.

The economic recession started in Q3 2008 was discontinued with a 3.7% GDP growth in Q1 2010. According to the Geostat's preliminary data, the annual growth rates of GDP in Q2-Q4 2010 equaled 8.3%, 6.7%, and 6.1%, respectively.

The 2010 economic growth was significantly enhanced by channeling excess liquidity of commercial banks into the real economy, which was manifested in a considerable revival of credit activity. As a result, the real value-added in the financial intermediation sector grew 15%.

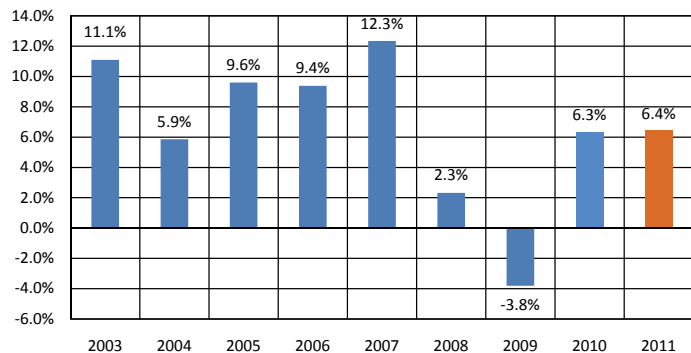
In 2010 and in the first half of 2011 the growth of credit portfolio in the banking system was largely related to trade loans. Increase in crediting of this type contains lower risks for financial stability, since the trade sector is among the most rapidly developing in the country. This fact is corroborated by banking statistics as well: the level of non-performing loans in this sector of the economy is one of the lowest.

It should be noted that starting from Q3 2010 the GDP growth rates were slowing down, mainly owing to the "base effect"<sup>2</sup>.

The economic sectors, which experienced significant contraction in 2009 (trade, manufacturing, construction) achieved high rates of real growth in 2010, essentially contributing to the economic growth.

<sup>2</sup> In the first half of 2009 the economic contraction was record high, with the decline in value-added relatively slowing down in the second half of the year.

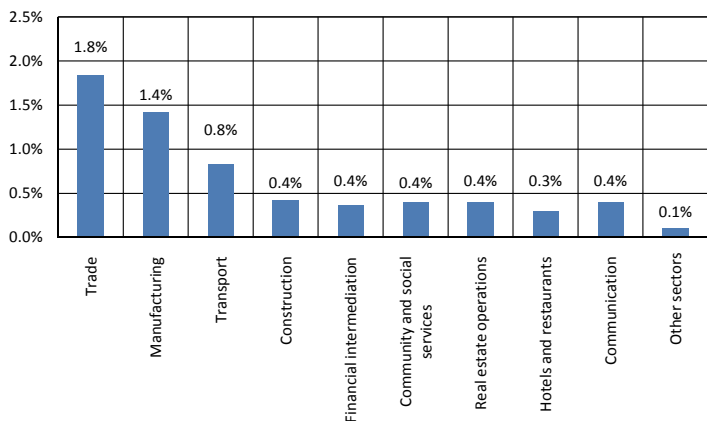
**DIAGRAM 4.1.**  
Real GDP Growth



**SOURCE:** NBG

As it was already mentioned, the largest impact to the 6.3% real GDP growth recorded in 2010 was produced by trade and manufacturing sectors. Large positive contributions were also made by transport, construction, financial intermediation, "community, social, and personal services", and "real estate operations, renting and business activities". High growth rate, and hence significant contribution, was posted by "hotels and restaurants", owing to tourism development. The impact

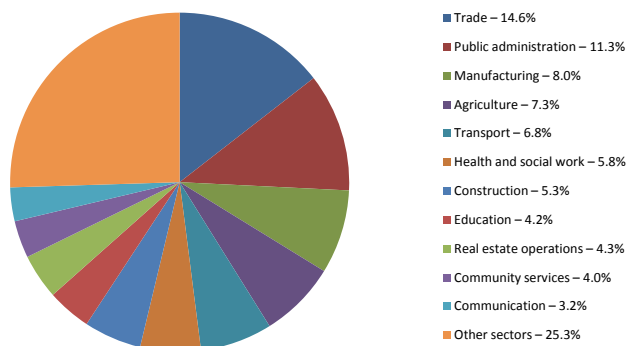
**DIAGRAM 4.2.**  
Sectoral Contributions to Real GDP Growth, 2010



**SOURCE:** NBG



**DIAGRAM 4.3.**  
Sectoral Contributions to Nominal GDP, 2010



**SOURCE:** NBG

of other economic sectors on the growth of real GDP was relatively insignificant.

With regard to the first half of 2011, the real GDP growth equaled 6.1% in Q1 and 4.9% in Q2. The growth of value-added was largely due to sectoral growth in manufacturing, trade, financial intermediation, and transport. In 2011 significant contributions to economic growth were also made by “real estate operations”, “production and distribution of electricity, gas, and water”, and communications. It is remarkable that agriculture recorded a positive growth after a long period of decline, while the upswing in “hotels and restaurants” was preserved.

Overall, in 2010 the annual growth rate of nominal GDP equaled 15.3%, followed by a 5.7% contraction. In the first half of 2011 the nominal growth amounted to 18.3%.

Analysis of the nominal GDP by categories of use shows that in 2010 the economic growth was boosted by the upswing in exports and high growth of gross capital formation. During 2010 the exports rose 35%.

In the pre-crisis period the GDP growth was mainly conditioned by “final consumption expenditures”, largely financed by foreign capital inflows. In 2010 this model of economic growth changed

and the main determinant of growth became “export of goods and services”. This represents a prerequisite of more sustainable growth and, thus, contains lower risks in terms of economic and financial stability.

A 50% contraction of “capital formation” in 2009 was followed by a 91% growth in 2010, as a result of high growth rates of investments and business inventories.

Due to relatively lower growth rates, the importance of imports in the country’s economy somewhat declined in 2010, although the “weight” of this category (in particular, import of goods) still remained essential, equaling 53% of the nominal GDP, with only the import of goods accounting for 43%.

With regard to final consumption, the largest expenditure category of the GDP, in 2010 it recorded a decline in real terms (deflated by the CPI). Despite a 6% growth of nominal household consumption, a decrease in government consumption conditioned the overall contraction.

According to the current forecasts, economic growth rates are expected to rise in the second half of 2011, with the real GDP growth rate reaching 7%.

The 2011 GDP growth is projected at approximately 6.5%. It is likely that the growth will be largely conditioned by trade, manufacturing, financial intermediation, and transport. In terms of categories of use, the 2011 growth will be mainly fueled by “capital formation” and “export of goods and services”.

According to the Geostat, the annual rate of inflation grew by 6.3 pps in a one-year period. At end-June 2010 the inflation rate stood at 3.7%, while rising to 10.0% a year after.

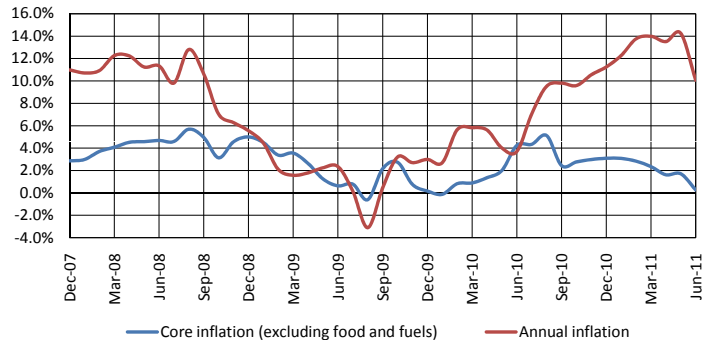
Similar to other developing countries, the

share of food in the Georgian consumer basket is relatively large, currently standing at 40.5%. Accordingly, sensitivity of the inflation rate to food price changes is high. Food prices in the international markets are subject to significant volatility, in turn affecting inflation. During 2006-2009 the impact of food price changes on the overall inflation averaged 50%, while starting from the second half of 2010 the contribution of food prices to the inflation rate equaled almost 90%.

As it was already mentioned, in 2010 the inflation rate tended to rise, sharply accelerating from June 2010. In the reporting period the impact of exogenous factors was significant. Along with the post-crisis recovery, abrupt price increases in the global markets exerted a substantial impact on the Georgian price level. Starting from the second half of 2010 the inflationary pressure influenced imported goods. Over one-year period the price of crude oil in the international market rose 20%, immediately affecting dynamics of prices on fuel and petroleum products in Georgia. As a result, the annual inflation rate increased by 0.7 pps due to fuel price gains.

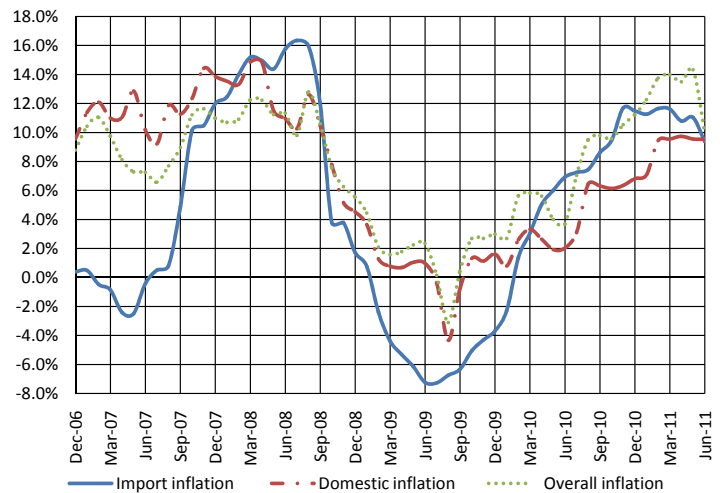
The share of food expenditures in Georgia, as a lower middle income country, constitutes 35-40%. Thus, food price increases sharply reduce population's real income and creditworthiness. Spoiled harvest due to draughts and fires significantly increased wheat prices, directly affecting bread and wheat flour. Wheat price increases affected prices for substitutes (sunflower, buckwheat) as well as poultry and livestock, leading to price gains for meat and milk. Against the background of natural calamities, production of sugar drastically declined, resulting in an unprecedented increase in sugar prices. As a result, the general level of food prices in June rose 22.6% year-on-year, contribut-

**DIAGRAM 4.4.**  
Annual CPI and Core Inflation Excluding Food and Fuels



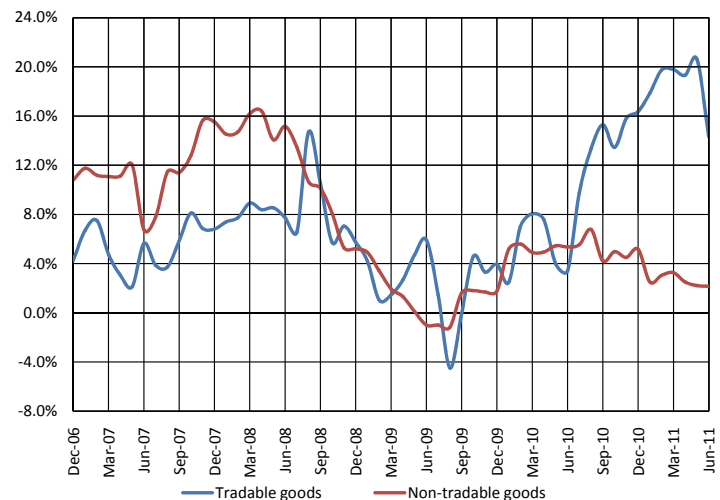
**SOURCE:** NBG

**DIAGRAM 4.5.**  
Annual Inflation by Production Location



**SOURCE:** NBG

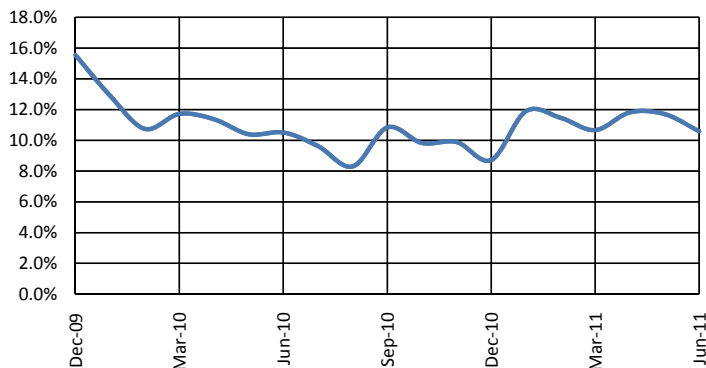
**DIAGRAM 4.6.**  
Annual Inflation of Tradable and Non-Tradable Goods



**SOURCE:** NBG

**DIAGRAM 4.7.**

Real Interest Rate on Loans to Legal Entities

**SOURCE:** NBG

ing 9.1 pps to the overall inflation indicator. Analogously, inflationary processes in the transport sector were important, resulting from fuel price increases. In the reporting period, price increases for transport services equaled 8.1%. In addition, it should be noted that price increases for utilities also adversely influenced households' creditworthiness.

The dynamics of consumer prices excluding food and fuels is important to analyze. Core inflation calculated in this way is much lower, standing at 0.3% at the end of the reporting period (See Diagram 4.4. Annual CPI and Core Inflation Excluding Food and Fuels).

Starting from June 2010 the annual rate of import inflation was on the uptrend, being fully in line with price increases in the international markets. From Q2 2011 the growth rate of prices on imported goods relatively slowed down to 9.4% in June, which is still 2.5 pp higher than a year be-

fore. The domestic inflation stood at 9.5% (See Diagram 4.5). The prices on tradable and non-tradable goods rose 14.3% and 2.2%, respectively, in the same period (See Diagram 4.6).

As it was already mentioned, in the reporting period drastic increases in food prices significantly raise households' expenditures. Accordingly, the real household incomes declined and household creditworthiness deteriorated, indicating higher credit risk for households. Analogously, it is important to note an uptrend in real costs of servicing debt in the corporate sector. In case of rising real interest rates in the business sector, the real value of debt servicing increases as well, resulting in higher credit risk in the corporate sector, which represents a critical factor for financial stability. The values of real interest rates were obtained by deflating nominal market interest rates on loans to legal entities with the inflation rate for non-tradables. The real interest rate calculated in this way went up in the first half of 2011, compared to the second half of 2010. In January 2011 a drastic increase in real interest rates was registered, owing to a sharp decline in the price level of non-tradables. Such growth of real interest rates represents a critical factor determining higher credit risk. At the end of the reporting period the real interest rates tended to decline due to lowered nominal interest rates. From the beginning of 2011, the real interest rate fell by 1.3 pps, from 11.8% to 10.6% (See Diagram 4.7).

## 5. REAL ESTATE MARKET

The Georgian real estate market had been developing at a fast rate until Q3 2008. Rapid growth of real estate prices and abundant financial resources enhanced development of the construction sector. Under these circumstances the latter turned into one of the important economic sectors of the country.

Real estate prices are critical for a country's financial stability. Since investment into real estate represents an alternative to investment in financial assets, the real estate market also assumes the function of the financial market. Accordingly, price changes in the real estate market are similar to the price changes for other financial assets, being an important determinant of the country's business cycle. Drastic price drops for real estate may produce a substantial impact on the financial market stability. In the event of real estate price drops the riskiness of loans on commercial banks' balance sheets rises, since default on a loan increases the borrower's losses. Along with price decreases the value of collateral declines as well, further deteriorating the capability of developing companies of financing current projects and obviously increasing default risks. Sharp decline in real estate prices negatively affects financial stability on the part of households as well. In particular, this adversely impacts borrowers' ability and willingness<sup>3</sup> to repay debt.

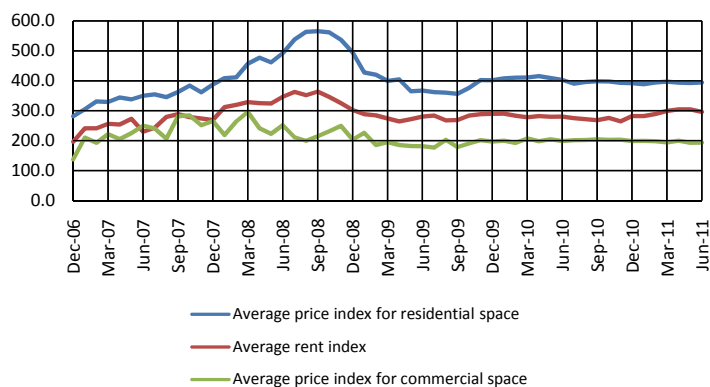
According to the available information<sup>4</sup>, be-

<sup>3</sup> This particularly applies to persons who received loans a short time ago and repaid only a small part thereof, as their incentives to refuse the purchases of already inexpensive real estate at high prices increase.

<sup>4</sup> The source of data represents newspaper advertisements with regard to supply prices on apartments for rent, just finished apartment structures, and land parcels in Saburtalo and Varketili districts of Tbilisi.

**DIAGRAM 5.1.**

Real Estate Price Index (relative to January 2004)



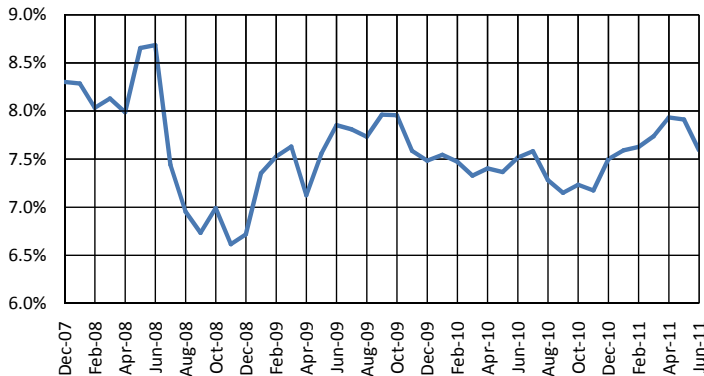
**SOURCE:** NBG

tween June 2010 and June 2011 the offer prices for real estate remained stable. In June 2011 the price index for residential and commercial space declined annually at 2%<sup>5</sup>. The annual increase in the residential rent average index equaled 5% in June 2011 (See Diagram 5.1). Until 2010 the ask and offer prices significantly differed in the market, owing to a small number of transactions. Stabilization of real estate prices settled in January 2010, leading to an increase in market transactions. According to the Gremic's<sup>6</sup> survey of the real estate market, in 2010 the secondary prices on real estate rose 50% year-on-year. In line with the same company's survey, the number of real estate

<sup>5</sup> It should be noted that price quotation for real estate is made primarily in the US dollars, thus, the index growth indicates a rise in the dollar prices. In order to observe prices in the lari, the dynamics of the exchange rate needs to be taken into account.

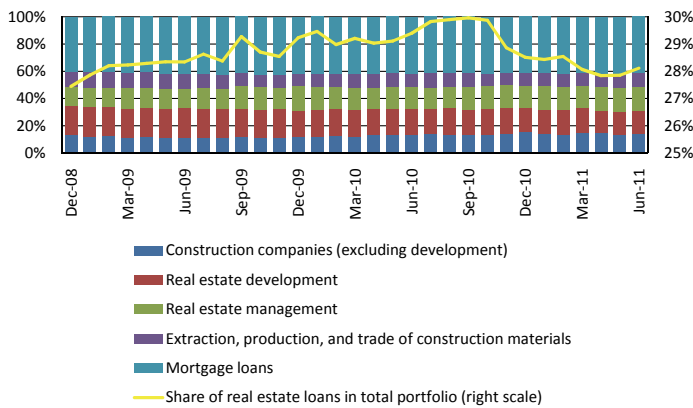
<sup>6</sup> Georgian Real Estate and Investment Management Company

**DIAGRAM 5.2.**  
Real Estate Capitalization Rate



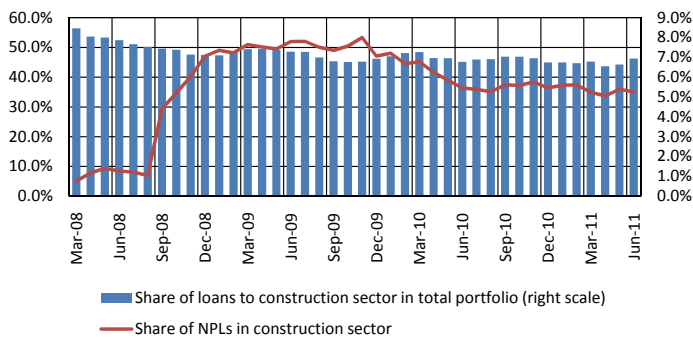
SOURCE: NBG

**DIAGRAM 5.3.**  
Share of Real Estate Sector in the Total Banking Portfolio



SOURCE: NBG

**DIAGRAM 5.4.**  
Share of NPLs in the Construction Sector



SOURCE: NBG

transactions<sup>7</sup> in 2010 exceeded the 2009, 2008, and 2007 levels by 8%, 34%, and 27%, respectively. Under these circumstances we can assume that the demand and supply price differentials caused by uncertainty in the post-war real estate market decreased, indicating an uptrend in the number of transactions and further revitalization of the sector.

The above-mentioned difference between year-on-year changes in offer prices and rent in the reporting period led to a slight growth of capitalization rate by 0.08 pps (See Diagram 5.2). In general, an increase in the index increases economic agents' willingness to purchase real estate property, serving as a prerequisite for attracting investments to the real estate sector. However, between July 2010 and June 2011 improvements in capitalization rate turned out insufficient for significant investment growth in the real estate sector.

Loans extended to the real estate sector comprise a large share in the banking sector's portfolio (See Diagram 5.3). It should be noted that the real estate sector is a broader term than the construction sector. For convenience it can 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, as of June 2011, the share of the real estate sector in the total banking portfolio exceeded 28%.

Starting from Q2 2008, along with the onset of the financial crisis the risks related to the real estate market significantly increased, posing a threat to financial stability (See Diagram 5.4). Large share of non-performing loans (NPLs) in the construction sector was maintained from September 2008, although a certain downtrend became visible in the last two years. Today the share of NPLs in the loans extended to the construction sector equals 35%, which is 17 pp lower than in June 2009, indicating lower risks in the real estate market.

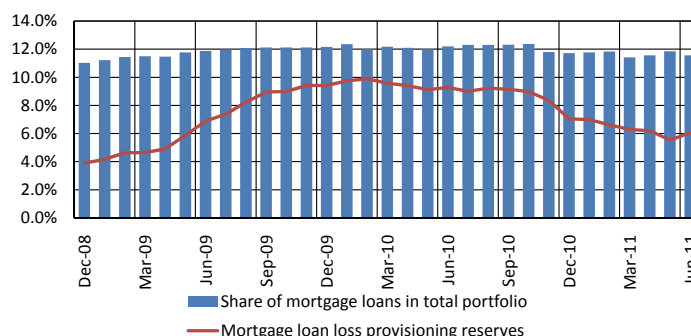
<sup>7</sup> According to Gremic's data, the 1- and 2-room apartments in Gldani-Nadzaladevi and Isani-Samgori municipalities are most liquid apartments in Tbilisi. The suburbs of Tbilisi account for 50% of total transactions.

In the construction market mortgage loans contain the lowest risk. As of June 2011, the mortgage loan reserves decreased 26%. The mortgage loan loss provisioning was on a stable downtrend starting from January 2010, standing at 6% in June 2011 (See Diagram 5.5).

High riskiness of loans in the construction sector in the recent years represents the result of a difficult financial situation for businesses operating in the real estate sector. The share of own capital in financing development project is negligible, making construction companies dependent on bank loans and advance sales. The post-crisis deficit of free circulating funds limited both of these primary financing sources for developers. As a result of banks' tightened credit policies it became difficult not only to obtain financing for development projects – the availability of mortgage loans also deteriorated, causing a sharp reduction in advance sales. The contraction of advance sales indicates the existing information asymmetry between sellers and buyers, inflicting losses to both fair and dishonest companies. The post-crisis problems of the development companies were manifested in a significant difference between started and completed construction space (See Diagram 5.6). According to the Geostat's data, in 2010 the total completed residential space in Tbilisi grew 52% compared to the 2008 level, while the volume of started construction fell 40% and 70% compared to 2009 and 2008, respectively. The figures seem quite logical if we take into account the fact that a part of construction stopped in the second half of 2008 was completed in 2009, while relatively few construction projects were initiated in 2009, since completion of stopped projects was of higher importance. Developing companies made a rational use of available resources in 2010 as well, focusing on completion of started projects. As a result, in the recent period the difference between started and completed construction space during a year significantly narrowed.

In the post-crisis period the government introduced some initiatives to support the construction sector. One such example was the initiative of Tbilisi

**DIAGRAM 5.5.**  
Mortgage Loan Loss Provisioning

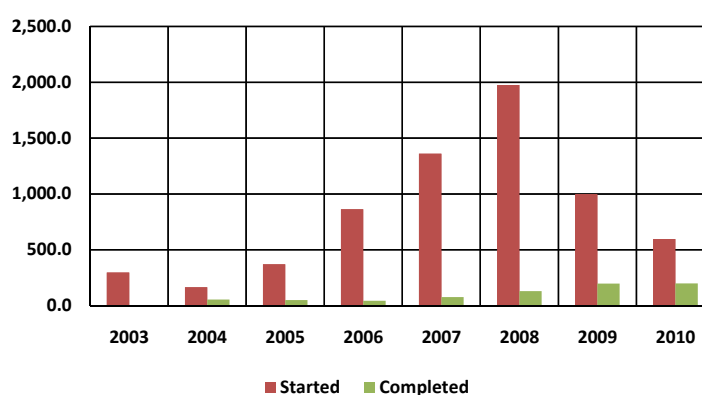


**SOURCE:** NBG

mayor's office, according to which the latter acts as a guarantor of development companies in obtaining bank credit. This type of financing is aimed at rehabilitation of the old Tbilisi district. According to the decision of the Tbilisi government, the mayor's office will purchase the apartments constructed in the framework of the "New Life of Old Tbilisi" project. Such initiatives lay a good foundation for resumption of suspended construction and full revitalization of the sector.

In the recent years the Georgian real estate market displayed signs of stability. In the nearest future, along with improvement in the macroeconomic environment, it is expected that the situation in the real estate market will stabilize further.

**DIAGRAM 5.6.**  
Residential Space (thousand square meters) in Tbilisi, flows<sup>8</sup>



**SOURCE:** Geostat

<sup>8</sup> Construction is considered started when a construction permit has been issued.



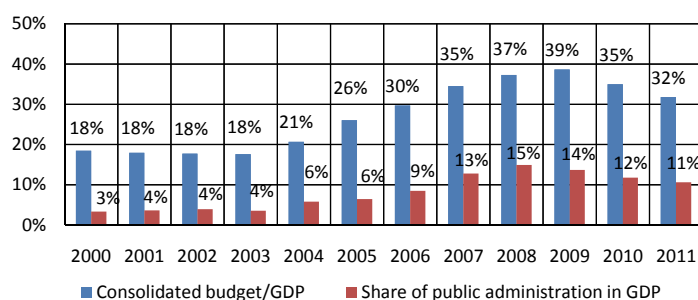
## 6. GOVERNMENT FINANCES

Against the background of the 2010 recovery, the government pursued less active fiscal policies (compared to the preceding year), which caused the consolidated budget expenditures to grow at a lower rate than the GDP. As a result, the role of government finances in the economy decreased for the first time in the last 7 years. The share of public administration in the GDP discontinued the uptrend in 2009 and its contraction is expected in 2011 as well. The contraction of public administration was due to the GDP growth (public administration expenditures remained almost at the same level in 2010). It is projected that the role of government finances and public administration will decline in 2011 as well, taking into account expectations of higher economic growth.

Along with an increased role of fiscal and budget policies in the Georgian economy, it is important to analyze risks related to government finances, which may potentially affect the country's economic and financial stability. The analysis of government finances is given in line with its primary components, such as government debt, budget revenues and expenditures, and budget deficit.

**DIAGRAM 6.1.**

Ratio of Consolidated Budget to GDP and Share of Public Administration in GDP



**SOURCE:** NBG

### 6.1. Revenues and Expenditures

In 2010 the consolidated budget revenues grew 11.4%, largely owing to the increases in grants and tax revenues. The latter rose 10.9% in 2010, following a 7.7% decline a year before. The growth of tax revenues was caused by the post-crisis economic recovery. In 2010 the tax burden declined – the tax-to-GDP ratio dropped to 23.4% in 2010 from 24.5% a year before.

The 2011 budget envisages a 14.6% growth of tax revenues, being in line with the current forecast of real economic growth. The latter equals 5.5%. The tax burden is expected to increase in 2011 by 1.8 pps to 25.2%. In the first half of the year the actual tax revenues posted a 26.6% increase in annual terms.

**TABLE 6.1.**  
Consolidated Budget

Consolidated Budget	2006	2007	2008	2009	2010	2011 (plan)	2011, first half
Revenues (GEL millions)	3850.2	4792.7	5853.9	5264.5	5865.9	6725.0	3386.1
Taxes	2646.6	3669.0	4752.7	4388.8	4867.5	5930.0	2985.6
Grants	195.7	102.0	617.2	388.6	472.1	355.0	142.6
Other revenues	1007.9	1021.7	484.0	487.1	526.3	440.0	257.9

**SOURCE:** NBG

Against the backdrop of considerable revenue growth, the 2010 expenditures rose at a relatively low rate (by GEL 337 million). The largest increase occurred in the capital expenses and net lending category, growing by GEL 467 million, while the subsidies category posted a decline. In 2010 the government continued issuance of Treasury bills, aiming, apart from financing of budget expenditures, at develop-

ment of the securities market. Overall, in 2010 the total placement of T-bills equaled GEL 600 million, while the redemption volume stood at GEL 422 million.

According to the plan, in 2011 the consolidated budget expenditures will grow by GEL 506 million to equal GEL 7.78 billion. The largest categories of the 2011 budget expenditures represent social protection (GEL 1.7 billion) and capital expenditures (GEL 1.66 billion). It is remarkable that in 2011 the government started issuance of 5-year T-bills with the purpose of enhancing development of the money market and improving domestic debt management.

**TABLE 6.2.**  
Consolidated Budget Expenditures

Consolidated Budget	2006	2007	2008	2009	2010	2011 (plan)	2011, first half
Expenditures (GEL millions)	4098.0	5864.7	7113.9	6937.0	7272.8	7531.0	3358.9
Current expenditures	2998.4	4379.0	5410.1	5611.5	5480.3	5772.0	2687.9
Wages and salaries	565.1	696.9	1006.7	1048.3	1120.2	1205.0	564.7
Good and services	773.6	1590.8	1606.6	1105.2	1138.6	1071.0	538.8
Interest payments	103.6	98.6	123.1	171.2	206.1	344.0	166.9
Subsidies	568.0	267.3	362.5	613.4	380.0	401.0	212.1
Grants	6.8	18.7	12.2	8.7	10.5	14.0	8.6
Social Protection	664.6	933.7	1345.2	1505.9	1623.6	1700.0	812.4
Other expenditures	316.8	773.0	953.8	1158.8	1001.3	1037.0	384.4
Capital expenditures and net lending	1099.6	1485.7	1703.8	1325.5	1792.5	1759.0	671.0

SOURCE: NBG

## 6.2. Deficit

In 2010 the consolidate budget deficit totaled GEL 1.4 billion, or 6.8% of GDP. It should be noted that the budget-deficit-to-GDP ratio had been on an uptrend over the recent years until 2010. In 2011 the budget deficit is envisaged to decline to 3.4% of GDP. The budget deficit financing was ensured

largely via increases in external liabilities related to allocation of significant credits by the international donors in the aftermath of the 2008 August developments and the global financial crisis.

In 2011 a part of budget deficit will be financed through government-issued T-bills. The existence of the T-bill market will enhance development of the financial markets and is important for increasing efficiency of monetary policy. The budget deficit contraction is important in the sense that high deficit leads to deterioration of trade balance, on the one hand, and crowds out private investments, on the other. In the last year against the background of revitalization of economic activity, the current-account-to-GDP ratio dropped by 1.6 pps, while the ratio of the consolidated budget deficit to GDP fell from 9.2% in 2009 to 6.8% in 2010. The budget deficit contraction in turn led to narrowing of the current account deficit. The decline in the budget-deficit-to-GDP ratio (to 3.4%) plays a crucial role in avoiding deterioration of the current account.

**TABLE 6.3.**  
Budget Deficit

	2006	2007	2008	2009	2010	2011 (plan)
<b>Deficit (GEL millions)</b>	<b>357.7</b>	<b>892.0</b>	<b>1259.3</b>	<b>1672.5</b>	<b>1407.0</b>	<b>806.0</b>
Privatization	564.5	888.4	697.5	358.1	220.0	200.0
Decrease in deposits	-124.5	-8.6	-390.6	367.7	-121.2	-1021.0
Increase in liabilities	-82.3	12.2	952.4	946.7	1308.2	1627.0
External	-54.9	34.5	952.4	682.7	1205.3	1532.0
Domestic	-27.4	-22.3	0.0	264.0	102.9	95.0
Of which: Treasury bills				270.0	157.1	200.0
<b>Deficit/GDP (%)</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>
<b>Primary Deficit</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>

SOURCE: NBG



### 6.3. Government Debt

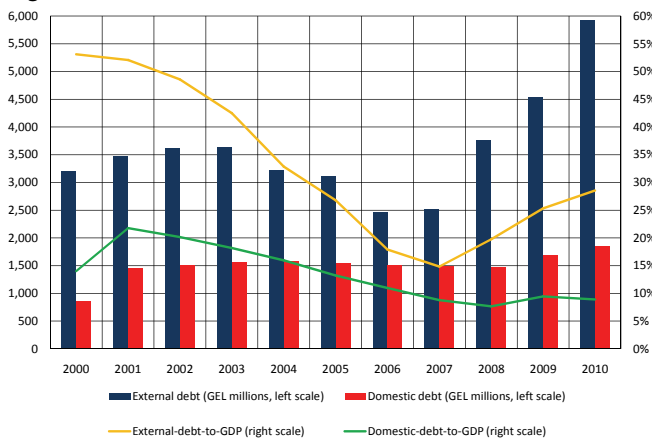
In the aftermath of the global financial crisis in most of the countries monetary transmission mechanisms weakened, bringing forth the necessity of governments’ fiscal stimulus programs. The latter required additional debt accumulation and Georgia was no exception in this regard. In 2010 the government debt grew by USD 561.5 million. In order to eradicate the war effects Georgia received large donor assistance in the form of grants and concessional loans. Meanwhile, the GDP contraction occurred in the crisis times, leading to a considerable increase in external and domestic debt burden. Although the Georgian economy

started to recover in 2010, the government continued to absorb funds allocated by donors. Notwithstanding the 2010 increase of government debt, the average interest rate currently stands at approximately 2%, conditioning low annual debt servicing costs. It should also be pointed out that the main part of government debt is contracted at a fixed interest rate, implying low government debt risks.

In 2010 the European Investment Bank joined the list of the government’s creditors, while in the structure of external debt the shares of the ADB and the IMF increased largely at the expense of the IDA.

**DIAGRAM 6.2.**

Georgia’s Government Debt (GEL millions) and Debt-to-GDP Ratio



**SOURCE:** NBG

## 7. BANKING SECTOR

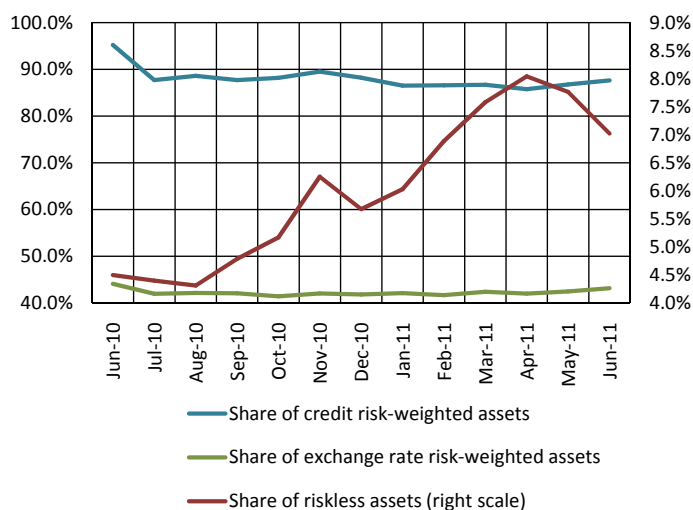
In the reporting period the banking sector's assets grew 21.8% to total GEL 11.2 billion. Against the background of credit revival, the growth of assets was essentially conditioned by a 20.1% expansion of loans extended to businesses and households (to GEL 6.9 billion). Along with the asset growth the role of financial intermediation in the economy is increasing as well – the assets-to-GDP ratio equaled 51.4% by end-June 2011, up by 3.1 pps year-on-year.

The sectoral assets became relatively less risky – in the reporting period the share of government debt securities and the NBG's Certificates of Deposit in total assets rose from 4.5% to 7.0%. Meanwhile, the share of assets containing credit and currency risk in total assets declined (See Diagram 7.1).

As it was noted, expansion of the banking sector's assets was largely conditioned by a growth of banks' credit portfolio. In the reporting period the volume of loans extended to businesses grew 13.2% (to GEL 3,663.8 million), while the loans to households rose 21.4% (to GEL 2,540.9 million). The primary reasons of portfolio expansion represented economic recovery and decreased market interest rates. The latter was partly caused by increased competition among banks (for more details See chapter on credit risk), although the sector still maintained high concentration of assets, probably due to economies of scale – at the end of the reporting period the Herfindahl-Hirschman Index equaled 20.4%. The fact that the volume of deposits attracted by the banking sector lagged behind the volume of extended loans indicates that banks used other sources for loan financing (See Diagram 7.2), largely from non-resident financial

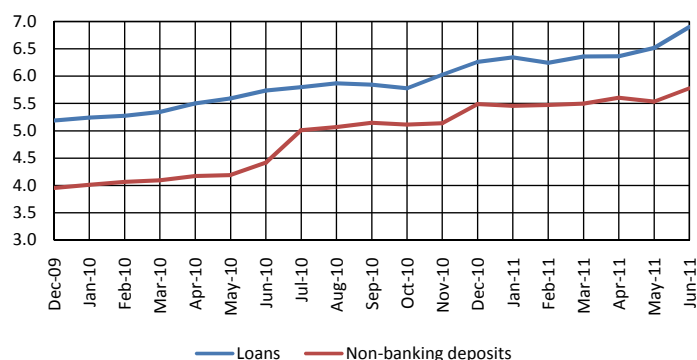
institutions. However, the non-banking deposits still represent the primary source of financing, accounting for 61.5% of total liabilities. The volume of deposits grew from GEL 4.4 billion to GEL 5.8 billion in the reporting period, with the share of term deposits constituting 41.1%.

**DIAGRAM 7.1.**  
Shares of Risk-Weighted and Riskless Assets in Total Assets



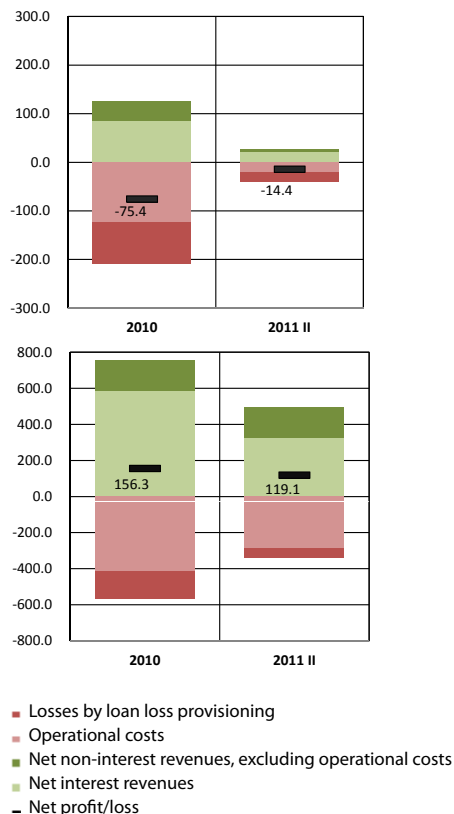
**SOURCE:** NBG

**DIAGRAM 7.2.**  
Loans and Non-Banking Deposits (GEL million)



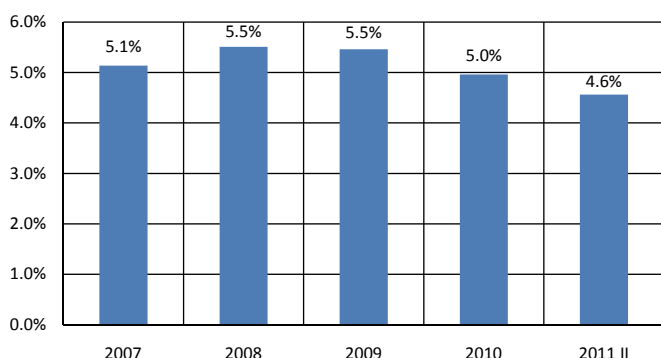
**SOURCE:** NBG

**DIAGRAM 7.3.**  
Loss-Making Banks (Upper Scale) and Revenues and Expenses of the Overall Banking Sector, GEL millions



SOURCE: NBG

**DIAGRAM 7.4.**  
Ratio of overhead costs to average assets (2007- Q2 2011)<sup>11</sup>



SOURCE: NBG

### Profitability

At the end of 2010 the net profit of the banking sector totaled GEL 156.3 million, while by end-Q2 2011 its amount already reached GEL 119.4 million (the annualized volume standing at GEL 238.3 million<sup>9</sup>). Six banks ended the 2010 with losses, and the majority of them still had negative profits as of end-Q2 2011, largely owing to higher overhead costs and provisioning expenses relative to net revenues (See Diagram 7.3). In general, the overhead costs are traditionally high in the whole banking sector (See Diagram 7.4) due to significant personnel costs and insufficient economies of scale<sup>10</sup>, although the latter also conditions the fact that the ratio of overhead costs to assets for large and medium-sized banks is almost twice as low as for small banks.

Unlike in 2008-2009, in the reporting period the net profit before provisioning was not only sufficient for forming reserves (in line with potential asset losses) but also exceeded the latter on average 3 times as a result of portfolio quality improvement due to write-offs of negatively classified loans and increased volume of new loans. For the same reason, the ratio of loan loss provisioning amount to total assets shrank in the last 12 months by 3.3 pps to 8.4%.

The banking sector's return on equity exceeded the average 2007 pre-crisis level, amounting to 13.3% at end-June 2011. Diagram 7.5 shows the dynamics of ROE and its components according to

<sup>9</sup> The annualized indicator is obtained through multiplying the average monthly profit derived in January-June 2011 by 12.

<sup>10</sup> One should also take into account that banks prefer to perform double control of records, which increases overhead costs.

<sup>11</sup> In developed banking systems this ratio ranges from 1% to 2%.

the DuPont formula<sup>12</sup>. It should be noted that the profit margin and the ROE follow identical trends, owing to high correlation between total revenues and funds derived from sales of equities.

The sectoral leverage rate (assets-to-equity ratio) is similar to that in the developing countries, ranging on average between 500% and 800%. With the view of using business opportunities in the most efficient way possible, there exists certain room for increasing leverage, although accompanying risks need to be taken into consideration as well.

At end-June 2011 the profitability of total assets (total revenues to total assets) was 7.9 pps higher than that of riskless assets, compared to the 5.4 pp difference a year before. The increase in premium was caused by a decline in T-bill interest rates. It is remarkable that the ROE exceeded the interest rate on riskless assets<sup>13</sup> only in April 2011 (See Diagram 7.6).

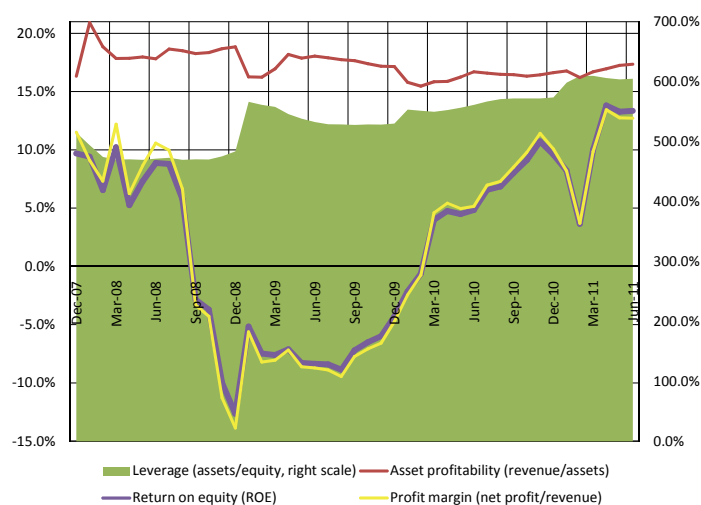
An increase in the sectoral competition<sup>14</sup> and reduction in risk-premium by banks (probably, as a result of increased trust in the economy) led to a decrease in contracted loan interest rates with no particular change in contracted deposit interest rates (See Diagram 7.7). No change in deposit interest is also explained by the fact that banks' increasing demand for deposits is accompanied by rising supply by depositors, who, along with seeing their revenues grow, are recovering confi-

12 According to the DuPont formula the ROE can be decomposed for analytical purposes in the following way:  
 $ROE = \text{net profit/equity} = (\text{profit margin}) * (\text{asset profitability}) * (\text{leverage}) = (\text{net profit/revenues}) * (\text{revenues/assets}) * (\text{assets/equity})$

13 Riskless assets represent alternative assets for deriving profit with the available equity.

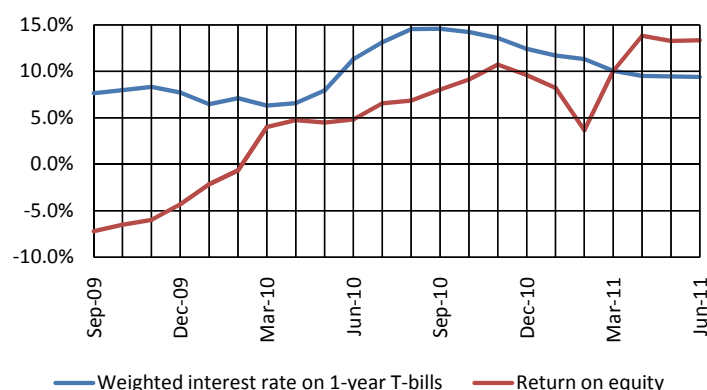
14 Increased sectoral competition was also enhanced by the NBG. In particular, in May 2011 the latter introduced a 2% upper limit on commission fees for advance repayment of refinancing loans.

**DIAGRAM 7.5.**  
ROE and Its Components According to DuPont Formula



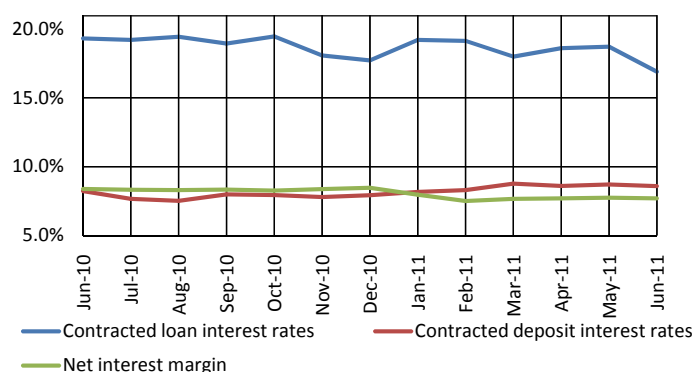
SOURCE: NBG

**DIAGRAM 7.6.**  
Return on Equity and Riskless Interest Rate



SOURCE: NBG

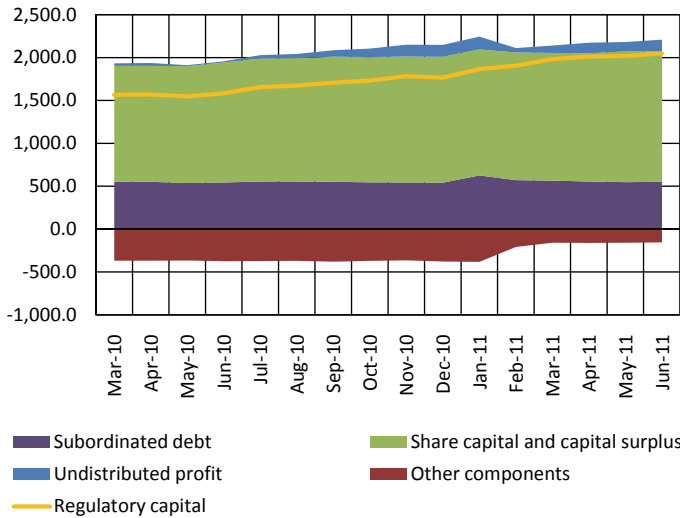
**DIAGRAM 7.7.**  
Contracted Loan and Deposit Interest Rates. Net Interest Margin



SOURCE: NBG

**DIAGRAM 7.8.**

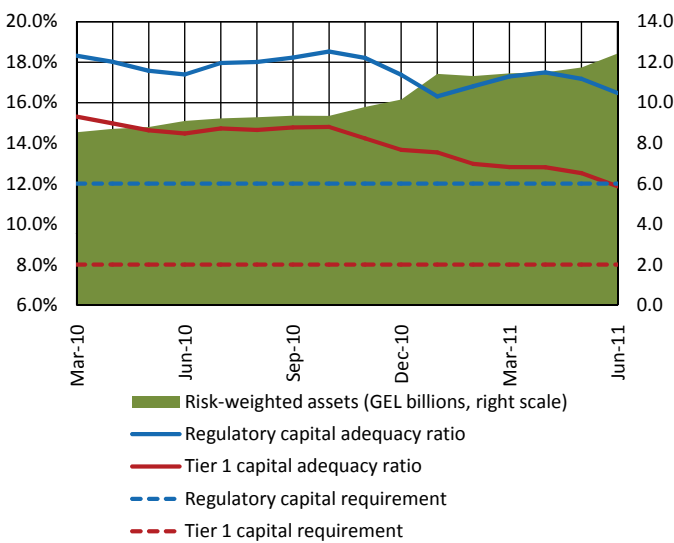
Regulatory Capital and Its Components (GEL millions)



**SOURCE:** NBG

**DIAGRAM 7.9.**

Risk-Weighted Assets and Capital Adequacy



**SOURCE:** NBG

dence towards the banking sector shattered during the 2008 developments. As a result, in the reporting period the net interest margin<sup>15</sup> declined, ultimately settling at 7.7%. In general, the net in-

<sup>15</sup> Net interest margin is the ratio of net interest revenues (interest revenues minus interest expenses) and interest-bearing assets.

terest margin is higher for legal entities than for individuals, implying higher service costs for the latter. The net interest margin is more stable for legal entities, although the dynamics is on a downtrend for both segments.

**Capital Adequacy**

The volume of the banking sector’s regulatory capital stood at a record high level (GEL 2,048 million) as of the first half of 2011, preceded by a continuous increase since early 2010 (See Diagram 7.8). Its largest part, 72.1%, is composed of high-quality Tier 1 capital. In contrast to an increase in regulatory capital, the adequacy ratio was on a downtrend in the reporting period, primarily due to credit expansion, implying a rise in risk-weighted assets<sup>16</sup>. Despite this, the current adequacy ratio exceeds the required minimum by 4.5 pps, standing at 16.5%. The Tier 1 capital adequacy ratio equals 11.9%, or 3.9 pp higher than the minimum requirement (See Diagram 7.9).

In 2010 along with the growth of the sectoral profitability the banks’ balance sheets saw a rise in the undistributed profit item. Despite a GEL 100 million decline in February 2011, it is likely that this important capital buffer will increase again. However, it is also possible that against the background of positive expectations, the banks will pay out larger amount of dividends relative to provisioning.

Approximately one-fourth of the banking sector’s regulatory capital represents subordinated debt, but the latter does not pose a threat to capital soundness in a medium-term perspective, as the debt repayment schedule is evenly distributed.

<sup>16</sup> In January 2011 the currency risk-weighting rate was increased by the NBG from 50% to 75%.

## 8. NON-BANKING SECTOR

As of June 2011, the Georgian non-banking financial sector consisted of 18 credit unions, 39 microfinance organizations (MFOs), 16 insurance companies, 1 stock exchange and 9 brokerage companies. Small amount of total non-banking assets and insignificant scale of activity makes the sector's systemic riskiness negligible. However, the number of MFOs and their credit portfolio grew considerably in 2010 (See Diagram 8.1). The NBG applies relatively simple supervisory rules to these organizations, with the view of enhancing development of the sector's activity. As it was mentioned, the non-banking sector has no systemic importance for the Georgian financial system, accounting for 7% of the total financial sector's assets. This implies that the threat of spreading risks from the non-banking sector to the commercial banks is small.

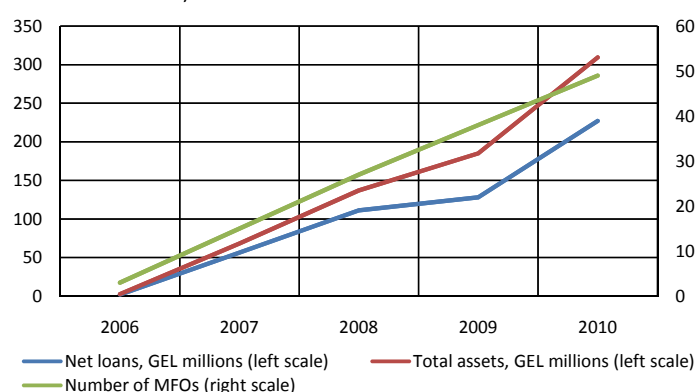
An increase in assets was also registered in the NBG-supervised insurance market (See Diagram 8.2). The NBG's efforts are focused on creation and permanent improvement of the legal and regulatory framework, as a prerequisite for reducing expected risks. In 2010 the insurance companies' ROE and ROA equaled 45.7% and 8.7%, respectively. It should also be noted that the structure of the founders is quite diversified, with foreign capital participation accounting for almost half of the overall insurance market.

The Georgian securities market still remains at an early stage of its development, as it is yet to become an effective instrument for attracting capital to private businesses. Compared to 2009, the value of transactions concluded at the Stock Exchange

in 2010 grew only 2.3% to GEL 101 million. Three commercial banks were particularly active, while participation of non-financial sector was minimal. The Georgian Stock Exchange introduced the GSX index, which represents an official indicator of the GSE trading system and gives an idea to investors about general trends in the capital market (See Diagram 8.3). In 2010 the index was increasing along with the ratio of securities capitalization to GDP. The latter ratio equaled 9.2% in 2010, up by

**DIAGRAM 8.1.**

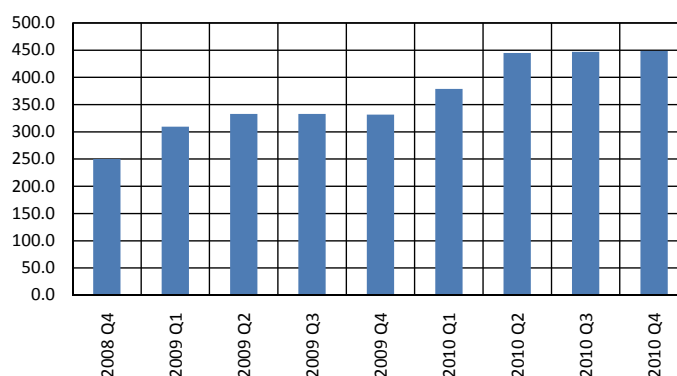
Number of MFOs, Net Loans and Total Assets



SOURCE: NBG

**DIAGRAM 8.2.**

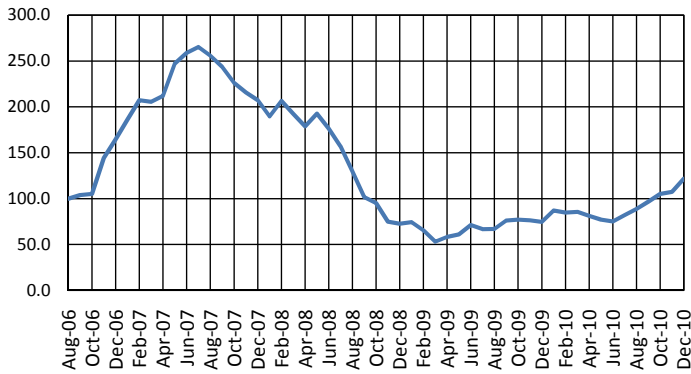
Dynamics of Insurance Companies' Assets



SOURCE: NBG

**DIAGRAM 8.3.**

Georgian Stock Exchange Index (GSX)



**SOURCE:** Georgian Stock Exchange

2.4 pps from 2009, although still considerably falling behind the average levels manifested by the Eastern European countries (60%) and the Asian emerging countries (150%).

# 9. CREDIT RISK

## 9.1. Credit Portfolio

In the reporting period the stock of loans extended by commercial banks equaled GEL 6.9 billion, recording a 30% annual increase, excluding the lari's exchange rate effect. The volume of loans extended in domestic currency grew 27% to GEL 1.9 billion, while the foreign currency loans rose approximately 31% to USD 3.0 billion.

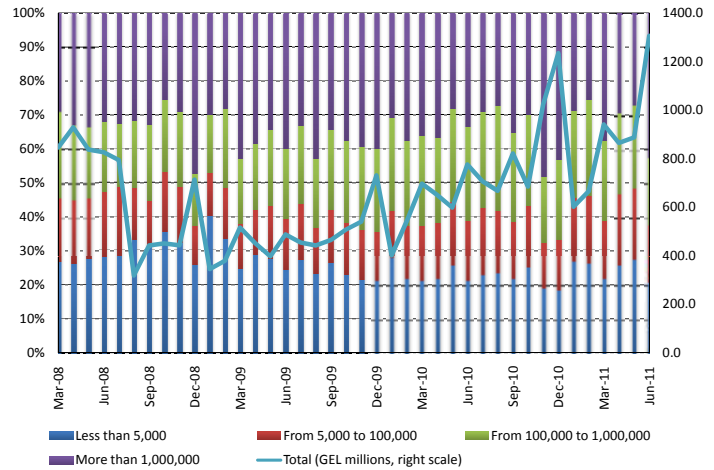
The share of loans with the face value of more than GEL 1 million equaled 35% of total loans extended (See Table 9.1); loans under GEL 5,000 accounted for 23% of total loans, equaling the level of the preceding period, while the smallest share in total loans, 17.5%, includes loans between GEL 5,000 and GEL 100,000. The share of loans above GEL 100,000 equaled more than 50%, similar to the preceding period. The share of loans under GEL 100,000 in total loans equaled 40.4% in the reporting period, rising 1.5 pps (See Diagram 9.1). Significant share of large loans in the total portfolio indicates concentration of credit risk, which may augment credit risk if the economic situation deteriorates.

**TABLE 9.1.**  
Loans by Amounts

Category	Total Loans (GEL thousands)		Share in Total (%)	
	Jun-10	Jun-11	Jun-10	Jun-11
Under 5000	1,575,790	2,378,578	23.2%	22.9%
5,000-100,000	1,065,022	1,825,526	15.7%	17.5%
100,000-1,000,000	1,708,272	2,544,328	25.1%	24.5%
Over 1,000,000	2,454,568	3,655,727	36.1%	35.1%

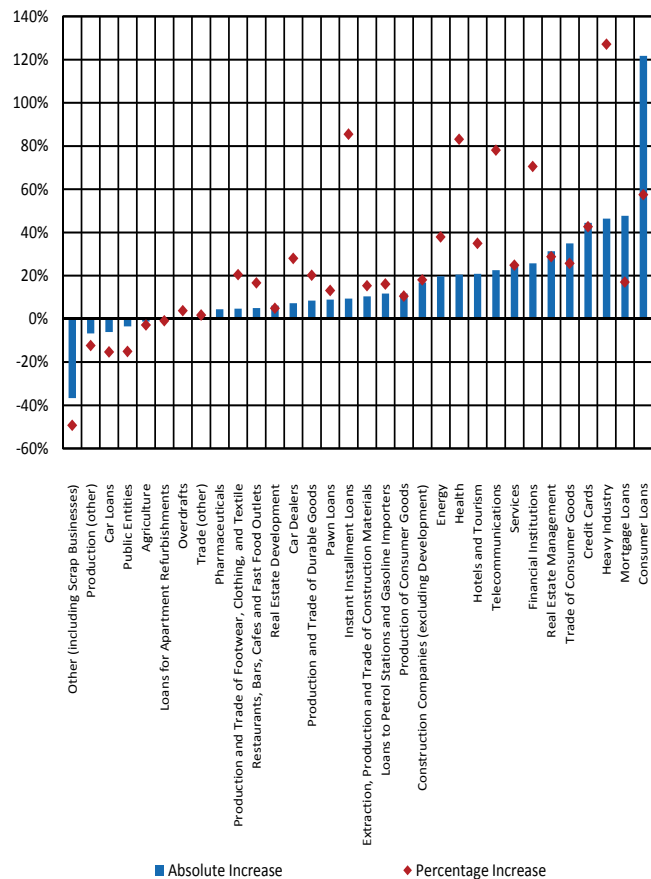
SOURCE: NBG

**DIAGRAM 9.1.**  
Loan Structure by Amounts (Stocks)



SOURCE: NBG

**DIAGRAM 9.2.**  
Sectoral Growth Excluding Write-Offs, as of June 30, 2011



SOURCE: NBG

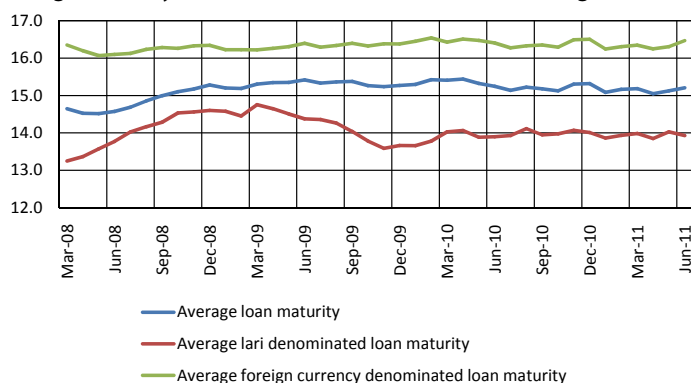


**TABLE 9.2.**  
Extended Loans by Risk Sectors (Lari, millions)

As of June 30, 2011				
Risk Sectors	Share of risk sectors in total portfolio	Loan stock	Loan reserves	Loan reserves/Total loans
Public Entities	0.7%	49.3	1.0	2.0%
Financial Institutions	2.3%	155.2	4.5	2.9%
Pawn Loans	2.8%	191.4	4.7	2.4%
Real Estate Development	4.7%	325.3	83.8	25.8%
Real Estate Management	5.1%	348.2	39.2	11.2%
Construction Companies (excluding Development)	3.9%	270.3	37.6	13.9%
Extraction, Production and Trade of Construction Materials	2.8%	195.5	28.7	14.7%
Trade of Consumer Goods	6.1%	422.5	26.7	6.3%
Production of Consumer Goods	4.3%	298.4	41.5	13.9%
Production and Trade of Durable Goods	1.7%	120.3	14.8	12.3%
Production and Trade of Footwear, Clothing, and Textile	1.0%	67.7	2.9	4.3%
Trade (other)	4.4%	302.1	19.3	6.4%
Production (other)	1.7%	116.6	14.8	12.7%
Hotels and Tourism	2.9%	201.1	13.0	6.5%
Restaurants, Bars, Cafes and Fast Food Outlets	1.3%	86.7	5.9	6.8%
Heavy Industry	3.0%	205.4	9.5	4.6%
Loans to Petrol Stations and Gasoline Importers	3.1%	210.5	25.9	12.3%
Energy	2.6%	179.3	13.7	7.7%
Car Dealers	1.2%	83.0	3.4	4.1%
Health	1.6%	112.2	7.1	6.3%
Pharmaceuticals	0.9%	64.1	6.1	9.5%
Telecommunications	1.9%	128.6	11.1	8.6%
Services	4.5%	309.6	17.8	5.8%
Agriculture	1.5%	104.3	9.8	9.4%
Other (including Scrap Businesses)	1.5%	100.8	9.5	9.4%
Retail Products	32.5%	2239.9	121.2	5.4%
Car Loans	1.2%	84.8	7.6	9.0%
Consumer Loans	11.9%	821.1	36.0	4.4%
Instant Installment Loans	0.7%	51.3	3.1	6.1%
Overdrafts	0.8%	54.5	3.7	6.9%
Credit Cards	4.7%	325.3	18.0	5.5%
Loans for Apartment Refurbishments	1.5%	106.1	4.6	4.3%
Mortgage Loans	11.6%	796.8	48.2	6.0%
Total	100.0%	6888.6	573.3	8.3%

SOURCE: NBG

**DIAGRAM 9.3.**  
Average Maturity Period of Loans in Domestic and Foreign Currency



SOURCE: NBG

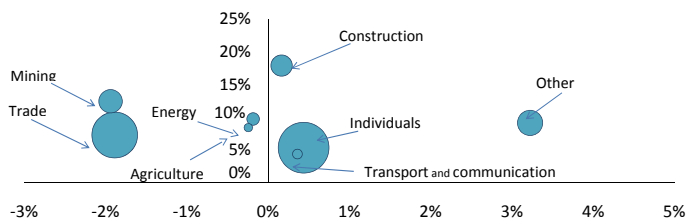
In the reporting period the consumer market made the largest contribution to the growth of credit portfolio (See Diagram 9.2). The stock of consumer loans grew by GEL 304 million, accounting for 24% of the total credit portfolio. The highest growth rate was posted by the heavy industry, equaling 127%. The quality of credit portfolio is favorably affected by a 17% (approximately GEL 119 million)

increase in mortgage loans. Excluding the effect of overdue loans, the loans in foreign currency rose 31.1%, with the domestic currency loans growing 30.6%.

Table 9.2 includes data on extended loans by sectors. Similar to the preceding period, the real estate development sector contains the highest

**DIAGRAM 9.4.**

Changes in Sectoral Shares of the Credit Portfolio; Ratio of Sectoral Reserves to Loans



SOURCE: NBG

**TABLE 9.3.**

Loans by Maturity Period

Maturity	Total loans (GEL millions)			Share in total (%)		
	Jun-10	Dec-10	Jun-11	Jun-10	Dec-10	Jun-11
<b>Short-term loans:</b>						
<b>Less than 1 month</b>	168	161	182	3%	3%	3%
<b>Between 1 and 3 months</b>	148	188	118	3%	3%	2%
<b>Between 3 and 6 months</b>	255	293	296	5%	5%	4%
<b>Between 6 and 12 months</b>	796	892	1,040	14%	15%	15%
<b>Short-term loans, Total</b>	1,366	1,534	1,637	25%	25%	24%
<b>Long-term loans</b>	4,162	4,548	5,084	75%	75%	76%

SOURCE: NBG

**TABLE 9.4.**

Loan Interest Rates

Date/Interest Rates	Domestic Currency		Foreign Currency	
	Short-term	Long-term	Short-term	Long-term
<b>Q2 2010</b>	24.3%	21.2%	21.3%	16.8%
<b>Q2 2011</b>	26.6%	19.6%	16.7%	14.7%

SOURCE: NBG

**TABLE 9.5.**

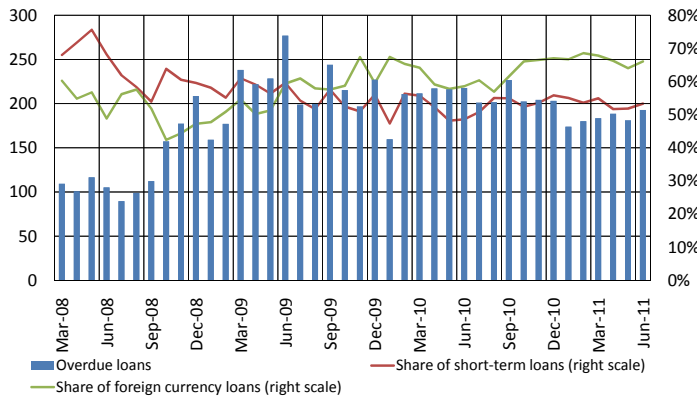
Loans by Risk Sectors (GEL millions)

	June-10	Dec-10	Jun-11
<b>Loans to trade and service sectors</b>	1808.6	1917.7	2046.3
<b>Loans to energy sector</b>	135.4	205.3	150.3
<b>Loans to agriculture and forestry sectors</b>	60.6	48.7	56.3
<b>Loans to construction sector</b>	388.3	422.3	478.8
<b>Loans to mining and manufacturing sectors</b>	472.1	399.3	434.4
<b>Loans to transport and communication sectors</b>	82.5	95.6	124.3
<b>Loans to individuals</b>	2229.7	2413.8	2713.4
<b>Loans to other sectors</b>	557.4	758.0	896.9

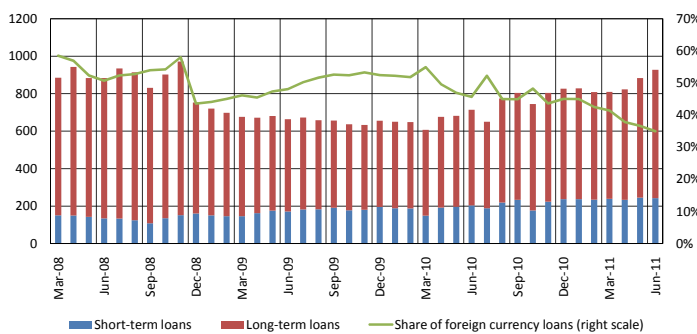
SOURCE: NBG

**DIAGRAM 9.5.**

Overdue Loans (GEL millions), January 2008 – June 2011

**SOURCE:** NBG**DIAGRAM 9.6.**

Consumer Loans (Stock, GEL millions), January 2008 – June 2011

**SOURCE:** NBG

credit risk, 25.8%, up by 1 pp in annual terms.

In the considered period the average maturity period of loans did not change significantly (See Diagram 9.3). The average maturity period of foreign currency denominated loans is 2.5-month longer than that of domestic currency loans. This fact may in turn increase exchange-rate-induced credit risk. The underlying reason is that borrowers usually receive revenues in the lari, hence in the event of the lari's depreciation servicing of dollar denominated loans becomes more burdensome, increasing credit risk.

At the end of the reporting period the short-term loans stood at GEL 1,637 million, or GEL 270

million more year-on-year (See Table 9.3). Despite this increase in the stock of short-term loans, the share of short-term loans in the credit portfolio shrank by 1 pp to 24%. This is likely due to the fact that in contrast to the preceding period, the economy stabilized, positively affecting economic agents' expectations towards economic development and, thus, reducing risk premium. In addition, during the reporting period long-term interest rates on loans denominated in domestic and foreign currency tended to decline (See Table 9.4).

In the reporting period the growth rate of loans extended to individuals equaled 22%, although their proportion to the credit portfolio remained unchanged<sup>17</sup> at 39% (See Table 9.5). The volume of loans extended to the trade and services sector rose 12%, resulting in a decrease of the sectoral share in the credit portfolio by 2 pps to 30%. The share of construction sector loans in the credit portfolio did not change.

The diagram 9.4 measures on the horizontal axis changes in sectoral shares of the total credit portfolio in the reporting period (See Diagram 9.4). The vertical axis shows the sectoral shares of loan loss provisioning reserves, while the magnitude of a ball denotes a sectoral share in the total portfolio in June 2011. In terms of sectoral shares of loan loss reserves the three riskiest sectors were construction, mining, and energy sectors, with the respective shares of loan loss reserves equaling 17.9%, 12.4%, and 9.7%. The banks increased the credit portfolio mainly at the expense of consumer loans, the share of which was the largest in the total portfolio, equaling 39% (up 0.4 pps in the reporting period). The share of loans extended to

<sup>17</sup> Credit portfolio denotes net loans, equaling total loans minus loan loss provisioning reserves

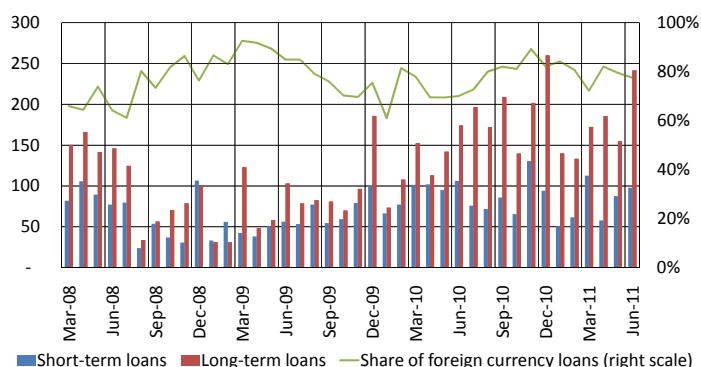
“other sectors” increased as well – the growth rate was the highest among other sectors (3.2%); loan loss reserve rate for this sector is relatively high, standing at 9%. In the reporting period despite a 2 pp decline in the share of trade loans, the latter still remains significant in the total portfolio, containing relatively low risks. Accordingly, the trade loan reserves accounted for 7.3% of total trade loans.

In the reporting period the amount of overdue loans declined by GEL 24 million, while the share of overdue loans in the total portfolio shrank by 0.9 pps to 2.9% (See Diagram 9.5). This implies that in the reporting period, against the backdrop of improved economic environment, the credit risk declined and borrowers fulfill their liabilities in a timely manner. On average, the share of overdue loans in the credit portfolio equaled 3.2%, down 0.7 pps year-on-year. The share of foreign currency loans in overdue loans increased by 3.6 pps. In the same period the foreign currency denominated loans accounted for 70.4% of the total credit portfolio, exceeding the respective share in overdue loans by 5.5 pps. The analysis of overdue loans in terms of maturity structure shows that along with improvement in loan quality the share of long-term loans in overdue loans declined, while that of short-term loans grew by 1.3 pps with respect to the preceding period.

In the reporting period the stock of consumer loans grew 30%, amounting to GEL 927 million at end-June 2011 (See Diagram 9.6). Similar to the preceding period, the dollarization rate of consumer loans continued to decline. The dollarization rate dropped to 35% in June 2011, decreasing by 11 pps with respect to June 2010.

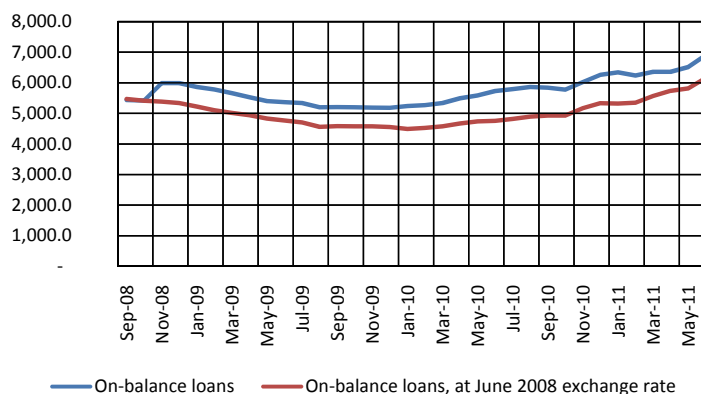
In the reporting period the volume of loans secured with real estate equaled GEL 3.2 billion, posting a 37% growth rate year-on-year (See Dia-

**DIAGRAM 9.7.**  
Loans Secured with Real Estate



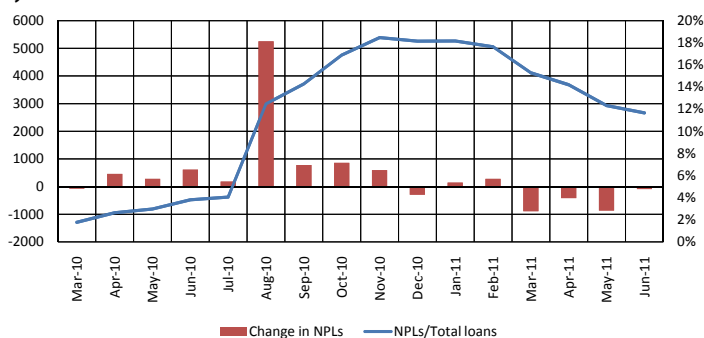
SOURCE: NBG

**DIAGRAM 9.8.**  
Dynamics of Total Loans Portfolio



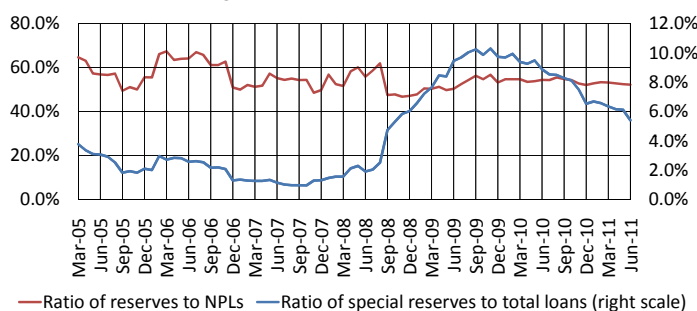
SOURCE: NBG

**DIAGRAM 9.9**  
Dynamics of NPLs



SOURCE: NBG

**DIAGRAM 9.10.**  
Loan Loss Provisioning Reserves



SOURCE: NBG

gram 9.7). Compared to the preceding period, the share of foreign currency denominated loans secured with real estate rose by 6 pps, equaling 80%.

## 9.2. Non-Performing Loans and Reserves

Improved economic situation positively affected the quality of credit portfolio. In the reporting period the volume of NPLs was decreasing, while the volume of extended loans was increasing (See Diagram 9.8).

**TABLE 9.6.**  
Structure of NPLs

Structure of NPLs (%)	Sub-standard loans	Watch loans	Bad loans
2007	38	47	15
2008	55	29	16
2009	42	37	22
2010	41	40	19
Jun-2011	42	39	20

SOURCE: NBG

**TABLE 9.7.**  
Structure of NPLs in Domestic Currency

Structure of NPLs in Domestic Currency (%)	Sub-standard loans	Watch loans	Bad loans
2007	32	59	9
2008	48	32	20
2009	36	39	25
2010	21	49	30
Jun-2011	24	59	17

SOURCE: NBG

**TABLE 9.8.**  
Structure of NPLs in Foreign Currency

Structure of NPLs in Foreign Currency (%)	Sub-standard loans	Watch loans	Bad loans
2007	42	40	18
2008	58	28	13
2009	43	36	21
2010	44	38	18
Jun-2011	45	35	20

SOURCE: NBG

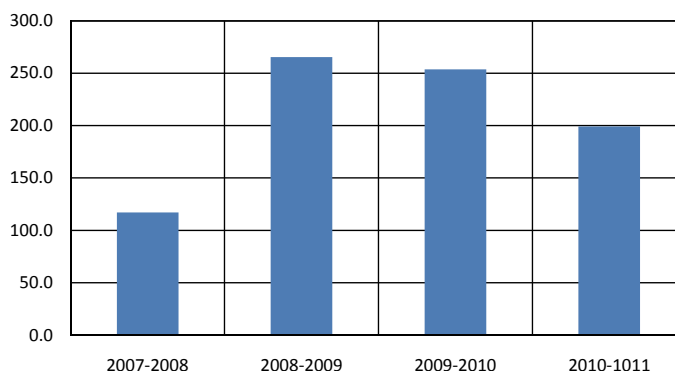
This conditioned a contraction of NPLs in proportion to total loans, displaying a continued downtrend in this indicator (See Diagram 9.9). The share of NPLs in total loans reached a record high level at end-2009, equaling 18%. Starting from the end of 2009 this ratio started to decline, with the downtrend being preserved throughout the reporting period. As of June 2011 the ratio fell by one-third compared to the record high level, settling at 12%. Despite these positive tendencies, caused not only by an expansion of loans but also but a contraction of NPLs, the indicator still remains quite high.

In the reporting period, along with the reduction in NPLs, the amount of special reserves also declined, which, being accompanied with loan expansion, decreased the ratio of special reserves to total loans by 4 pps, bringing it to less than 6% in June 2011 (See Diagram 9.10). It is important to note the proportion of NPLs covered by special reserves. The latter remained stable in the considered period, never falling below 50%, as was the case during the 2008 economic crisis.

It is also remarkable that in the reporting period the structure of NPLs did not deteriorate. The share of bad debts remained at a low level not exceeding 20%, despite growing by 1 pp with respect to the preceding period (See Table 9.6). The share is still higher than the pre-crisis level of 15% in 2007. The structure of NPLs denominated in domestic and foreign currency is similar to the overall picture (See Table 9.7 and Table 9.8).

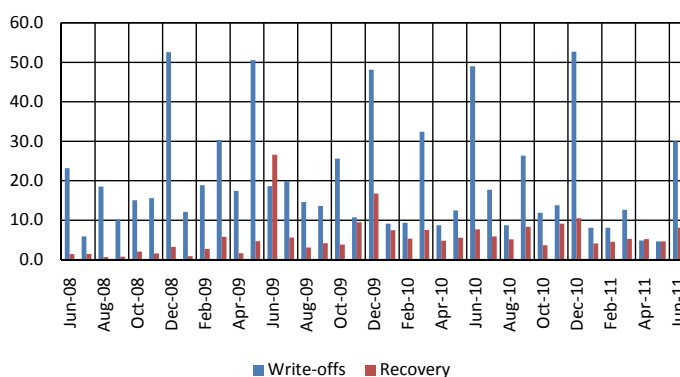
In the reporting period the downtrend in written-off loans continued; despite the fact that the amount of loan write-offs increased 70% with respect to the pre-crisis level, there was a 21% decrease with respect to the preceding period (See Diagram 9.11). This can be partly explained by

**DIAGRAM 9.11.**  
Loan Write-Offs (GEL millions)



**SOURCE:** NBG

**DIAGRAM 9.12.**  
Loan Write-Offs and Recovery



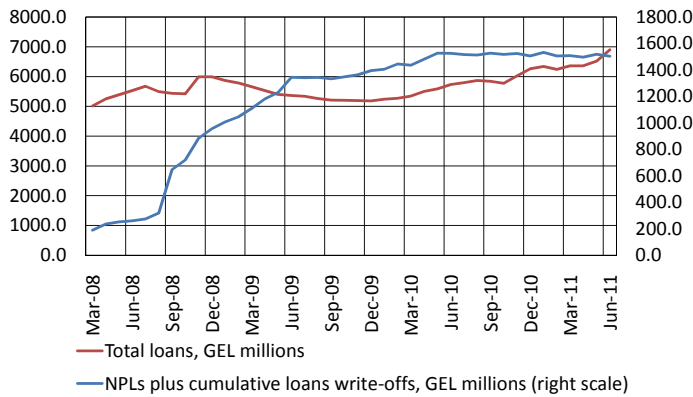
**SOURCE:** NBG

**DIAGRAM 9.13.**  
Repossessed Property



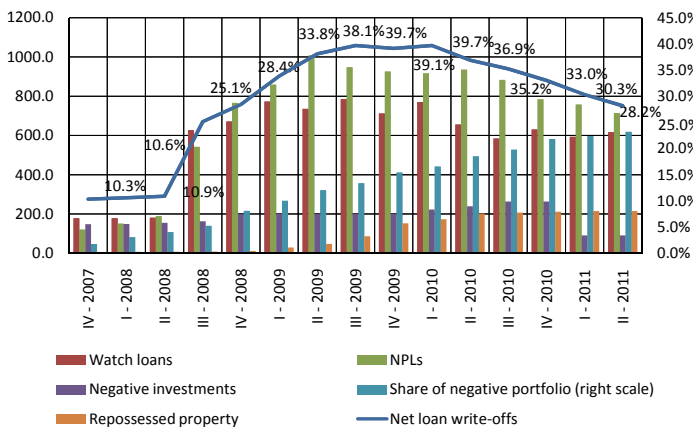
**SOURCE:** NBG

**DIAGRAM 9.14.**  
Dynamics of NPLs and Loan Write-Offs



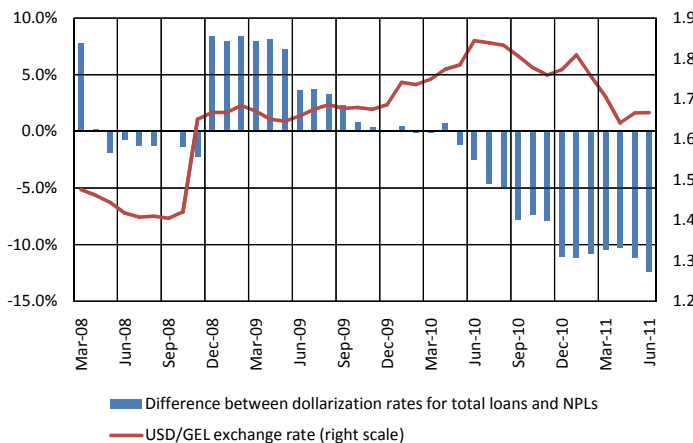
SOURCE: NBG

**DIAGRAM 9.15.**  
Problematic Portfolio



SOURCE: NBG

**DIAGRAM 9.16.**  
Dollarization-Induced Credit Risk



SOURCE: NBG

more conservative approaches taken by banks in the post-crisis period, which represents a positive phenomenon for the system's stability.

The amount of recovered loans decreased in the reporting period to GEL 74 million from GEL 81 million in the preceding period (See Diagram 9.12).

In the reporting period the value of the repossessed property rose insignificantly, while the proportion of repossessed property to total loans fell by 0.3 pps to 3.1% (See Diagram 9.13).

The sum of NPLs and cumulative loan write-offs in the reporting period decreased 1%, equaling GEL 1,504 million at end-June 2011 (See Diagram 9.14). This is explained by the fact that in the reporting period the contraction of NPLs exceeded the growth of loan write-offs. This phenomenon indicates an improvement in loan quality, since, on the one hand, the amount of NPLs did not grow, while, on the other hand, the contraction of NPLs was not fully conditioned by loan write-offs (there was a partial loan recovery, in turn related to the post-crisis economic upturn and improvement in economic environment).

The ratio of problem assets to total loans of the banking system tended to decline since 2010, and the downtrend was preserved in the reporting period (See Diagram 9.15). In June 2011 the problematic portfolio<sup>18</sup> shrank 11% year-on-year, amounting to GEL 2,257 million. This indicator corroborates the above-mentioned view that there exists a downward tendency in riskiness of loans extended by the banking sector. The negatively classified assets sharply increased in autumn 2008, continuously rising until June 2010, when the

<sup>18</sup> **Problematic portfolio:** negative portfolio equal to the sum of watch loans, NPLs, negative investments, net loan write-offs, and repossessed property.

problematic portfolio reached the record high of GEL 2,526 million.

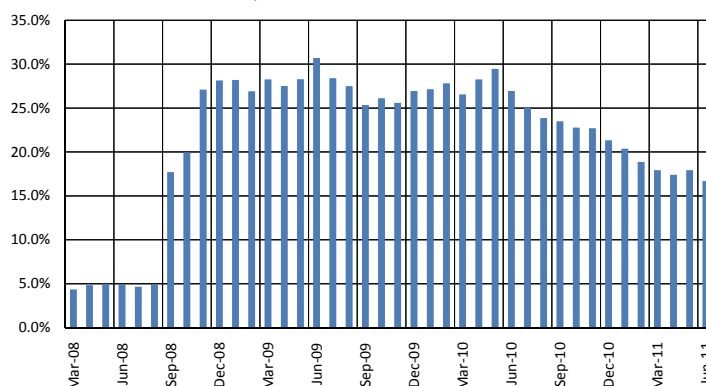
If we look at the difference in dollarization rates for total loans and NPLs, we will see that, other things being equal, the lari's depreciation has a lagged effect on the increase in dollarization-related credit risk, since in the reporting period the dollarization rate of NPLs exceeded that of total loans (See Diagram 9.16).

In the reporting period the ratio of net NPLs<sup>19</sup> to equity continued to decline. In June 2011 the ratio equaled 17%, down by 10 pps year-on-year (See Diagram 9.17). This represents a positive phenomenon, since materialization of losses will cause smaller reduction in equity. The ratio reached the maximum value in June 2009, amounting to 31%. The downtrend in the ratio was mainly explained by capitalization growth, while in the reporting period both NPLs and loan loss reserves were decreasing.

In the reporting period the ratio of sectoral NPLs to the respective sectoral loans declined in all sectors, at the exception of real estate development, pharmaceuticals, healthcare, and heavy industry. The share of loans extended to the latter sectors constituted 10% of the credit portfolio, while the largest growth rate (17.2%) was posted in the pharmaceutical sector, which accounted for less than 1% of the total credit portfolio. The increases in the share of NPLs equaled 0.5 pps for heavy industry and 6 pps for healthcare. Similar to the preceding period, the largest share of NPLs was in real estate development, equaling 50.9%, up by 1.4 pps year-on-year. The increase was due to a rise in NPLs, confirming the fact that this sector contains high credit risk.

In the reporting period the share of blank loans

**DIAGRAM 9.17.**  
Loss Absorption Capacity



**SOURCE:** NBG

increased by 2 pps year-on-year, equaling 13%. The share of loans secured with real estate stood at 44%, down 10 pps with respect to the preceding period. Based on the above, we can infer that the banks loosened credit terms which resulted in credit expansion and may imply an increase in credit risk. Compared to the preceding period, the distribution of blank loans across different sectors changed. The consumer loans account for 24% of blank loans, the largest sectoral share. They are followed by the energy sector loans (16%), with the latter posting a decline in blank loans of almost 34 pps. The lowest share of blank loans still remains in the agricultural sector, standing at 1.9%.

### 9.3. Banking Sector Sustainability Assessment

Analysis of the banking sector stability shows the extent of financial system's resilience towards adverse economic shocks. For this purpose the financial system sustainability has been tested under different scenarios. If the capital adequacy level in the financial system does not exceed required limits despite different negative economic shocks, it implies that the system can withstand such shocks without additional injection of capital. Negative shocks which were used include the lari's

<sup>19</sup> Net NPLs = NPLs - loan loss provisioning reserves.



**TABLE 9.9.**  
Scenarios: Shocks and Outcomes

Scenarios/Shocks	Moderate	Pessimistic
Interest rate increase	1%	3%
Deposit outflow	10%	20%
<b>Outcomes:</b>		
Capital adequacy ratio	16.4%	16.1%
Losses (GEL millions)	14.7	44.2
Loss recovery: Interest rate risk position (GEL millions)	14.7	44.2
Contraction of regulatory capital, allowable to meet the 12% CAR (GEL millions)	541.5	556.2
Liquidity ratio	33.8%	27.8%

**SOURCE:** NBG

depreciation, slowdown in real GDP growth rates, interest rate increases on external borrowings, and reduced confidence in the financial system manifested in an outflow of deposits. The required level of the regulatory capital adequacy rate stands at 12%, while the actual rate at the end of the reporting period equaled 16.5% for the whole system. Analysis of different shocks shows that the main risk for the financial system represents exchange rate depreciation, owing to high dollarization rate.

Consideration of shocks related to interest rate changes and deposit outflows shows the resilience of the financial system towards these shocks. As it was already mentioned in the interest rate risk analysis, the latter is not essential for the Georgian financial market, which is further supported by the stress-test data. One percentage-point increase in interest rates will produce losses of GEL 14.7 million, while a 3 percentage-point increase will lead to losses of GEL 44 million, insignificantly reducing equity and keeping the capital adequacy ratio above 16%.

The financial system is also sound in terms of liquidity. At the end of the reporting period the liquidity ratio stood at 38.96%. Assuming a 10% outflow of deposits, the liquidity ratio in the financial system will fall by 5 pps to 33%, still meeting the required level of 30%. In the event of a 20% deposit outflow,

the liquidity ratio drops to 27.8%, or below the required threshold, but taking into account the fact that a 20% deposit outflow represents an extremely pessimistic scenario, the obtained result should be considered positive in terms of soundness of the financial system.

To measure the currency-depreciation-induced credit risk different scenarios assumed a 5.5% real GDP growth rate. In case of a 5% depreciation of the lari against the US dollar the capital adequacy ratio becomes 15.4%, while the losses incurred by the financial system total GEL 69 million. It is remarkable that the lari's depreciation deteriorates the credit portfolio due to increased credit risk, manifested in a GEL 20 million growth of loan loss provisioning reserves and a GEL 50 million rise in NPLs. Assuming an unlikely scenario of a 15% depreciation, i.e. the USD/GEL exchange rate falling to 2.17, the capital adequacy ratio will still be met, standing at 12.87%. Under this pessimistic scenario the financial system's losses total GEL 280 million, where the NPLs account for 80%, while the loan loss provisioning reserves – for the remaining 20% of the losses. Under the 15% currency depreciation scenario, in order to keep the capital adequacy ratio unchanged, the ratio of the long open FX position to regulatory capital should equal 66%.

**TABLE 9.10.**  
Scenarios: Shocks and Outcomes

Scenarios/Shocks	Less pessimistic	Moderate	Pessimistic
Lari's depreciation against the US dollar	5%	10%	15%
Real GDP growth rate	5.5%	5.5%	5.5%
<b>Outcomes:</b>			
Capital adequacy ratio	15.4%	14.1%	12.9%
Losses (GEL millions)	69.4	174.8	280.1
Profit/Loss redistribution <sup>20</sup> (GEL millions):			
Accounting effect	3.2	6.4	9.6
Loan loss provisioning reserves	-21.8	-43.7	-65.5
Exchange rate induced loan losses	-50.8	-137.5	-224.3
Contraction of regulatory capital, allowable to meet the 12% CAR (GEL millions)	432.3	-275.5	-118.8
Growth of regulatory capital necessary to meet the 16.5% CAR (GEL millions)	143.6	318.3	493.0
Recommended ratio of long open FX position to regulatory capital necessary to keep the CAR unchanged	69.3 %	66.9%	66.2%

**SOURCE:** NBG

**TABLE 9.11.**  
Scenarios: Shocks and Outcomes

Scenarios/Shocks	Less pessimistic	Pessimistic
Lari's depreciation against the US dollar	10%	15%
Real GDP growth rate	0%	-5%
<b>Outcomes:</b>		
Capital adequacy ratio	13.9%	12.4%
Losses (GEL millions)	210.7	348.7
Profit/Loss redistribution <sup>21</sup> (GEL millions):		
Accounting effect	9.6	6.4
Loan loss provisioning reserves	-65.5	-43.7
Exchange rate induced loan losses	-292.8	-173.5
Contraction of regulatory capital necessary to meet the 12% CAR (GEL millions)	242.6	56.2
Growth of regulatory capital necessary to meet the 16.5% CAR (GEL millions)	349.4	552.4

**SOURCE:** NBG

<sup>20</sup> **Accounting effect:** change in the value of foreign currency denominated assets and liabilities expressed in lari, as a result of changes in the exchange rate;

**Loan loss provisioning reserves:** change in the value of FX loan loss provisioning reserves due to changes in the exchange rate;

**Exchange rate induced loan losses:** an increase in NPLs as a result of changes in the exchange rate, i.e. materialization of exchange-rate-induced credit risk.

<sup>21</sup> **Accounting effect:** change in the value of foreign currency denominated assets and liabilities expressed in lari, as a result of changes in the exchange rate;

**Loan loss provisioning reserves:** change in the value of FX loan loss provisioning reserves due to changes in the exchange rate;

**Exchange rate induced loan losses:** an increase in NPLs as a result of changes in the exchange rate, i.e. materialization of exchange-rate-induced credit risk.

The analysis shows that the lari's depreciation represents an important risk for the financial system, conditioned by high level of dollarization. Despite importance of the risk, the soundness of the financial system is not put into doubt even under the most pessimistic scenario.

The lari's depreciation can be considered in a more pessimistic scenario, when the GDP growth is lower than expected. Under a 15% depreciation a 5% contraction of real GDP, i.e. a highly pessimistic scenario, the capital adequacy requirement is not violated. The losses in the financial system total GEL 348 million, while the regulatory capital, other things being equal, may drop by additional GEL 56 million without falling below the required level of capital adequacy. However, under these circumstances the regulatory capital should increase by GEL 0.5 billion in order to reach the 16.5% CAR.

Now we shall consider the situation where all four negative economic shocks materialize concurrently. The exchange-rate induced growth of NPLs accounted for the large part of incurred losses (77%). This scenario is quite pessimistic, implying deterioration of the economic situation as well as significantly shattered confidence towards the financial system. Under these circumstances the financial system has excess capital of GEL 56 million to fulfill the capital adequacy requirement.

Thus, we can conclude that the financial system is sufficiently resilient to withstand substantial economic shocks. The primary systemic risk represents the lari's depreciation against the US dollar, producing the largest losses in the financial system. Despite the importance of this risk, the soundness of the financial system is not put into doubt even under more pessimistic scenarios.

**TABLE 9.12.**  
Scenarios, Shocks, and Outcomes

Scenarios/shocks:	Effect of all four shocks
Lari's depreciation against the US dollar	15%
Real GDP growth rate	-5%
Interest rate increase	2%
Deposit outflow	10%
<b>Outcomes:</b>	
Capital adequacy ratio	12.2%
Losses (GEL millions)	378.1
Profit/Loss redistribution (GEL millions):	
Accounting effect	9.6
Loan loss provisioning reserves	-65.5
Exchange rate induced loan losses	-292.8
Interest rate risk position	-29.5
Contraction of regulatory capital necessary to meet the 12% CAR (GEL millions)	56.2
Growth of regulatory capital necessary to meet the 16.5% CAR (GEL millions)	552.4
Liquidity ratio	33.8%
Recommended ratio of long open FX position to regulatory capital necessary to keep the CAR unchanged	53.6%

**SOURCE:** NBG

# 10. MARKET RISK

Market risk is the risk of on- and off-balance sheet losses caused by changes in market prices. The important aspects of market risk in Georgia include: interest rate risk, or potential losses that the financial system may sustain due to changes in interest rates; and currency risk, or potential losses of the financial system due to changes in the exchange rate.

## 10.1. Interest Rate Risk

In analyzing the interest rate risk one should take into account the fact that the main function of banks consists in transforming short-term deposits into long-term loans. This creates repricing risk, a type of interest rate risk. For example, a possibility that deposit interest rates may rise while loan interest rates remain unchanged due to a longer contracted maturity period deteriorates the bank's financial situation. In addition, in case of interest rate increases there exists a risk that depositors may default on their contracts and open new deposits at a higher interest. Similarly, in the case of loans it is quite likely that borrowers repay their loans in advance and contract new loans at lower interest. Due to this fact banks impose so high penalties on advance loan repayment, that they become unjust to borrowers. Accordingly, the NBG introduced a limitation, according to which the amount of penalties on advance loan repayment should not exceed 2%.

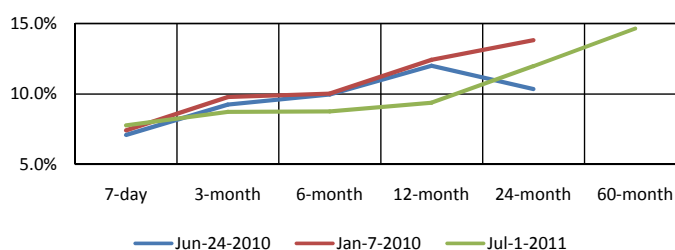
The interest rate risk can be expressed as a change in magnitude and/or direction of interest rates for different maturity periods. In the reporting period the interest rate curve became flatter

for the less-than-one-year maturity period.

It should be taken into account that interest rate volatility acts not only upon a bank's revenues and, thus, equity, but also changes economic value of the bank. In particular, a change in interest rates affects net present value of the bank's future funds. This shows a broader picture with respect to the interest rate risk, which is especially interesting for the bank's shareholders.

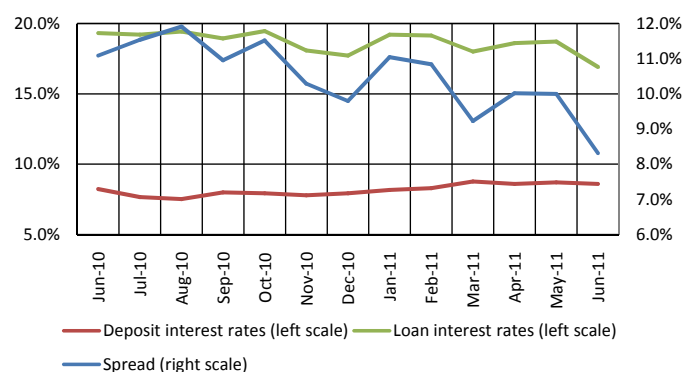
Against the background of increased credit risk following the 2008-2009 financial distress, banks significantly tightened loan terms. This led to accumulation of excess liquidity in the banking system.

**DIAGRAM 10.1.**  
Interest Rate Curve



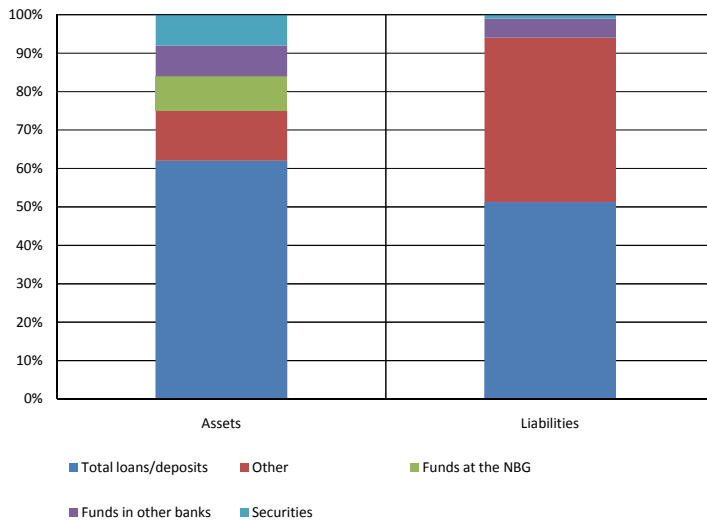
**SOURCE:** NBG

**DIAGRAM 10.2.**  
Interest Rate Spread in the Banking System



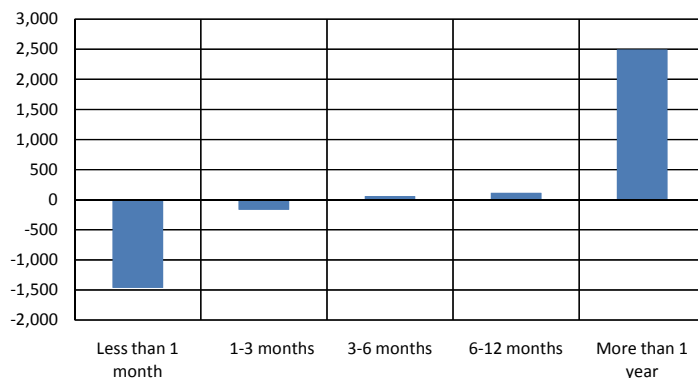
**SOURCE:** NBG

**DIAGRAM 10.3.**  
Structure of Assets and Liabilities



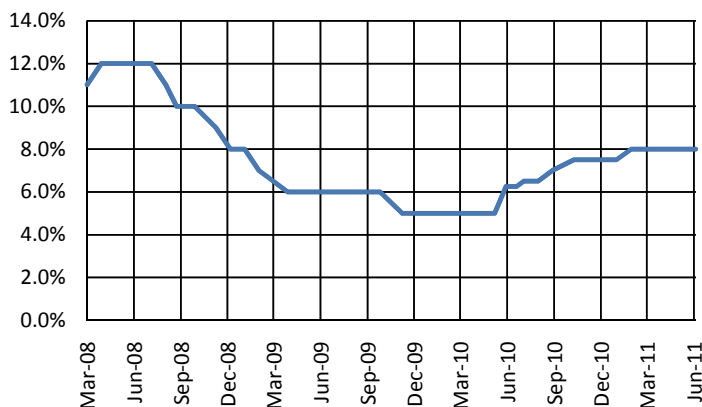
SOURCE: NBG

**DIAGRAM 10.4.**  
Interest Rate Risk Position: Assets minus Liabilities (GEL millions)



SOURCE: NBG

**DIAGRAM 10.5.**  
Monetary Policy Rate



SOURCE: NBG

In the second half of 2010, when the credit risk mitigated, banks started aggressive loan extension policies with the view to invest low-income liquid assets into high-yield loans. This process intensified competition and, against the backdrop of more liberal loan conditions in early 2011, the loan interest rates started to sharply decline, reducing interest rate spread and revenues. Assessment of credit and interest rate risk was unduly. Often-times banks were willing to give out loans below cost value striving to retain the market share. With the purpose of enhancing banks' profitability and preclude banks from creating a too risky loan portfolio, the NBG strengthened monitoring activities which led to widening of the interest rate spread in the subsequent months.

For the purposes of the interest rate risk analysis, we will consider the interest rate risk position. The analysis of assets and liabilities in terms of maturity period shows that the difference between assets and liabilities is at its highest for the maturity period of more than one year (See Diagram 10.4). This fact is in conformity with the assertion that one of the main aspects of banks' financial intermediation represents transformation of short-term funds into long-term assets.

Before analyzing the interest rate risk, let us briefly consider determinants of interest rates in order to better understand economic processes underlying changes in interest rates and, hence, conditioning interest rate risk. An interest rate is the cost of using money depending on such factors as the NBG's monetary policy, inflation, economic growth, changes in international interest rates, expectations of economic activity, etc.

The NBG affects short- and long-term interest rates through the monetary policy rate. In the accounting period the monetary policy rate grew

**TABLE 10.1.**

Analysis of Interest Rate Risk Position

Maturity period	Assets	Liabilities	GAP - Interest Rate Risk Position	Cumulative Interest Rate Risk Position
Less than one month	2,122,617,896	3,586,037,759	-1,463,419,863	-1,463,419,863
Between 1 and 3 months	785,055,380	950,101,107	-165,045,727	-1,628,465,590
Between 3 and 6 months	919,142,815	857,784,379	61,358,435	-1,567,107,154
Between 6 and 12 months	1,246,739,335	1,131,411,360	115,327,975	-1,451,779,179
More than 1 year	3,830,443,656	1,332,980,211	2,497,463,445	1,045,684,266
Total	8,903,999,082	7,858,314,816	1,045,684,266	1,045,684,266

**SOURCE:** NBG

from 6% to 8% (See Diagram 10.5). The NBG uses the inflation targeting regime, which implies that determination of the interest rate is based on the expected dynamics of inflation.

The interest rates are also affected by economic growth expectations. If economic agents project an economic upturn, they expect short-term interest rates to increase in the future, which is manifested in rising long-term interest rates and a steeper yield curve. Therefore, economic agents' expectations of economic growth determine current interest rates.

International financial markets also influence interest rates. For instance, the interest rates on external borrowings of the Georgian financial institutions are tied to the London Interbank Offered Rate (LIBOR), implying that a change in the latter directly conditions interest expenses of the Georgian financial institutions.

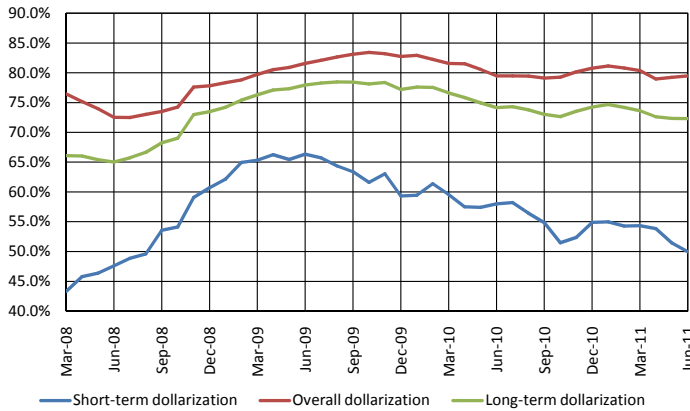
After this brief overview we shall consider possible changes in interest rates of different maturity periods and their impact on the Georgian financial system. We shall use assets and liabilities repricing model to identify the effect of changes in interest rates for different maturity periods on interest revenues. The model is based on the assumption that

interest rates on assets and liabilities of the same maturity period display similar trends.

Let us say that the forecasted inflation rate in the medium-term is lower than the targeted level. This allows us to expect that the central bank will cut the monetary policy rate, bringing down short-term interest rates. Under these circumstances we can observe changes in interest revenues and expenses of the banking system. Now assuming that the interest rate on assets and liabilities with less than one-month maturity declines by 1 pp, the profitability of the financial system will grow in this segment, since the interest rate risk position for this maturity period is negative, i.e. existing liabilities exceed assets in the financial system. The described change in the interest rate will increase interest revenues of the financial system by almost GEL 15 million (equal to the existing interest rate risk position multiplied by the interest rate change). As a result of the change in interest rates, the ratio of profits to total assets will increase 0.1%, i.e. if the interest rates on assets and liabilities with less than one-month maturity decline by 1 pp, the ROA of the banking system will improve by 0.1 pp.

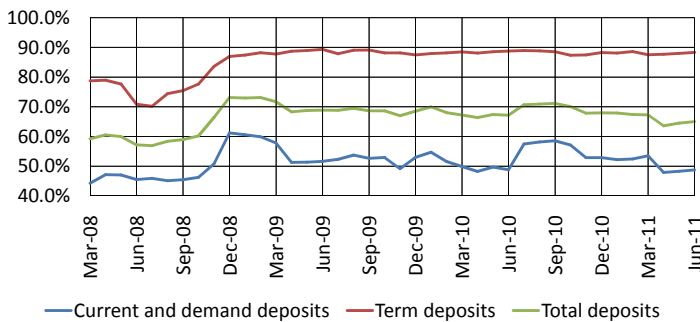
Assessing, for example, the maturity period of less than one-year and assuming that interest

**DIAGRAM 10.6.**  
Loan Dollarization (Stocks)



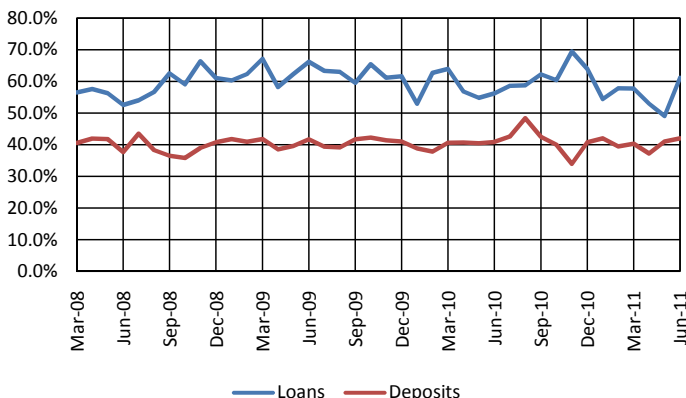
SOURCE: NBG

**DIAGRAM 10.7.**  
Deposit Dollarization (Stocks)



SOURCE: NBG

**DIAGRAM 10.8.**  
Dollarization (Flows)



SOURCE: NBG

rates for the respective assets and liabilities will increase by 1 pp, the interest revenues of the banking sector will rise by GEL 1.15 million. However, according to the same scenario, if we consider the cumulative interest rate risk position in the short-term – i.e. in less than one-year period, we will see that a 1 pp increase in the interest rate for assets and liabilities will result in a reduction of interest revenues by GEL 14.5 million, or 0.13% of total financial assets.

### 10.2. Exchange Rate Risk

As it was mentioned in the previous Financial Stability Report (See FSR 2010, pp. 56-58), the Georgian financial system is characterized with high dollarization, causing an increase in exchange-rate-induced credit risk. Taking into account importance of this phenomenon, we shall start the exchange rate risk analysis with a description of dollarization and the respective credit risk.

In the accounting period the dollarization rate of stocks of loans extended to households and legal entities declined by 2 pps to 72%. Thus, the downtrend in the dollarization rate was preserved, although still remaining high (See Diagram 10.6). The declining dollarization was due to the overall reduction in short-term loan dollarization<sup>22</sup>, as the dollarization of long-term loans remained unchanged at 79.5%, while the short-term loan dollarization fell by 8 pps to 50%.

The dollarization of stocks of deposits in the accounting period shrank by 2 pps to 65% at end-June 2011 (See Diagram 10.7). It should be noted that in the accounting period the deposit dollarization by maturity period also did not change: the dollarization of term deposits remains high at

<sup>22</sup> Short-term loans are loans with less than 1-year maturity, while long-term loans have the maturity period of more than 1 year.



88%, while that of current and demand deposits stands at 48.7%.

In analyzing the dollarization of the financial system it becomes obvious that the dollarization rate is substantially higher for long-term loans and deposits, still indicating the preference of foreign currency in long-term investment decisions.

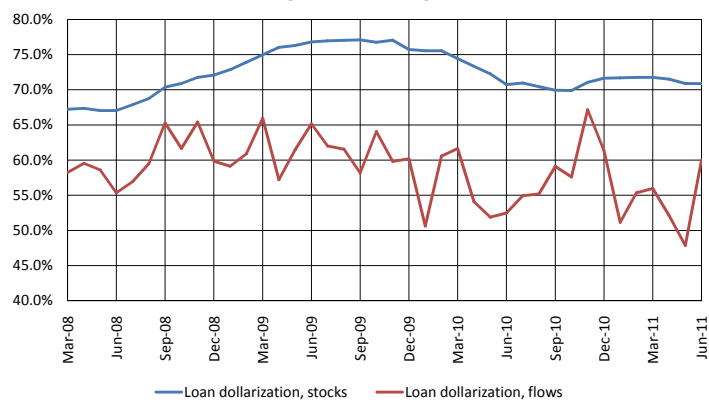
The dollarization analysis should include not only stocks but also flows, as the latter better describe the existing trends in a given period. In the reporting period the average dollarization of extended loans declined by an insignificant 1 pp to 59%. Two large loans were extended in foreign currency in the total amount of USD 150 million. Excluding these two loans, the average loan dollarization equaled 58% in the reporting period, or 2 pp lower than in the preceding period. The average dollarization rate of deposit flows in the current period rose by 0.5 pps to equal 40.8% (See Diagram 10.8). Thus, we can conclude that the attitude towards the domestic and foreign currency in the financial system did not change.

In order to determine dollarization rate in a more precise way, we exclude the exchange rate effect. Accounting for this effect, the loan dollarization declined by 5 pps, compared to December 2009 (See Diagram 10.9). The same situation stands for deposits – excluding the exchange rate effect, the dollarization is decreased by 6 pps compared to December 2009 and by 2 pps relative to the pre-crisis level of December 2007 (See Diagram 10.10).

High level of dollarization is related to the exchange-rate-induced credit risk. The dollarization is especially high in the case of long-term loans (79.5%). This exposes the financial system to a significant risk: the majority of borrowers receive revenues in the domestic currency, implying that in the event of depreciation the credit risk goes

**DIAGRAM 10.9.**

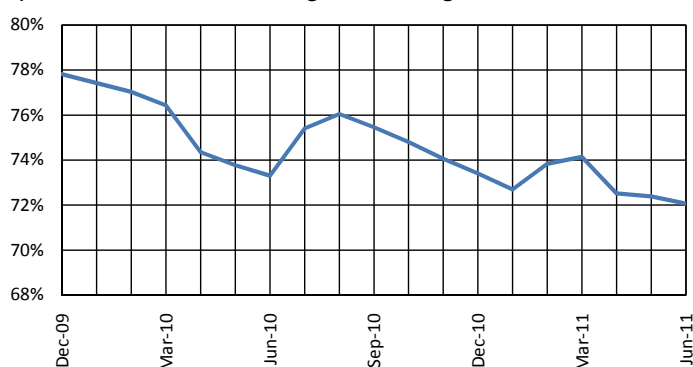
Loan Dollarization Excluding the Exchange Rate Effect



SOURCE: NBG

**DIAGRAM 10.10.**

Deposit Dollarization Excluding the Exchange Rate Effect



SOURCE: NBG

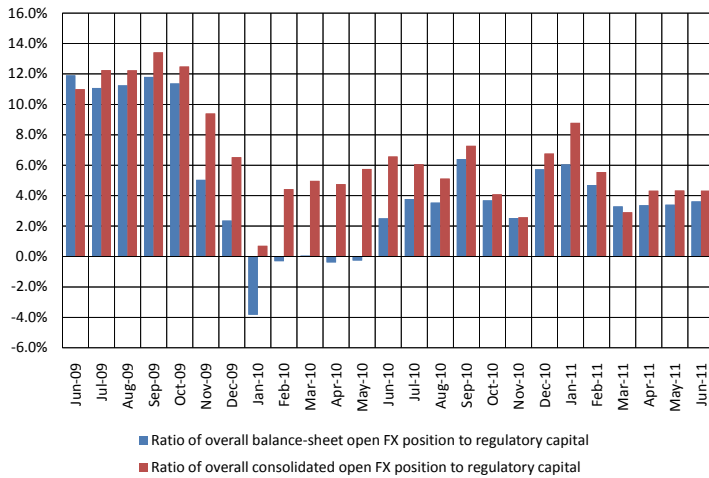
up, since the amount of outstanding liabilities expressed in the domestic currency increases.

In assessing the currency risk it is important to analyze currency positions, since an open FX position shows the extent of potential losses that the financial system may incur due to changes in the exchange rate. The assessment of this situation is possible by means of analyzing the ratio of the open FX position to regulatory capital. According to the NBG's requirement, the overall balance-sheet FX position<sup>23</sup> and the overall consolidated

<sup>23</sup> Overall balance-sheet open FX position is calculated for all foreign currencies as the difference between the sum of balance-sheet long open FX positions and the sum of short open FX positions.

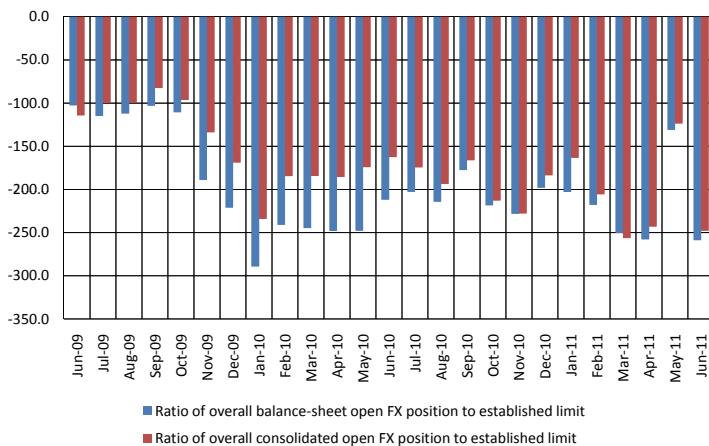


**DIAGRAM 10.11.**  
Open-FX-Position-to-Capital Ratio



SOURCE: NBG

**DIAGRAM 10.12.**  
Difference between the Open FX Position and the Established Limit (GEL millions)



SOURCE: NBG

open FX position<sup>24</sup> should not exceed 20% of the regulatory capital.

The analysis of the average monthly ratios of the open FX positions to regulatory capital shows a clear positive trend, as the ratios of overall balance-sheet and consolidated open FX positions to regulatory capital decreased from 12%-10% to

<sup>24</sup> Overall consolidated open FX position represents the maximum between the sum of on- and off-balance long open foreign currency positions and the sum of short open foreign currency positions for all foreign currencies.

6%-4%. It should also be noted that this positive trend was maintained in the reporting period. The ratio of the overall balance-sheet open FX position to regulatory capital declined from 5% in the preceding period to 4% in the reporting period (See Diagram 10.11). The same applies to the overall consolidated open FX position, which fell from 7.8% to 5.2%. The reason of these declines consisted not only in the growth of regulatory capital, but also in the reduction of open FX positions. It should be taken into account that banks increasingly use forward transactions to hedge FX positions, recorded in off-balance positions, reducing the consolidated FX position.

Similar trends are manifested for absolute amounts as well. The open positions (both balance-sheet and consolidated) were lower than the allowed limits, and the absolute differences grew for both positions. In the preceding period the overall balance-sheet open FX position fell short of the limit on average by GEL 194 million, with this difference rising to GEL 213 million in the reporting period (See Diagram 10.12). In the case of the overall consolidated open FX position, the differences in the preceding and the current periods equaled GEL 150 million and GEL 200 million, respectively.

The analysis of the general open FX position of the total financial system shows that the financial system is developing positively, which is manifested in a reduction in the (absolute) ratio of open FX position to regulatory capital. We shall proceed to analyze the currency risk for individual currencies and try to determine, what extent of losses the financial system may sustain in the case of different scenarios of exchange rate changes.

The analysis of FX position for individual currencies shows that in the reporting period the balance-sheet US dollar position became longer

(the difference between dollar assets and liabilities widened), with the net position amounting to USD 277 million. The euro position grew shorter, equaling EUR 122 million. However, it should be noted that the positions are largely hedged with off-balance counter positions. Accordingly, the consolidated US dollar position equals only USD 61 million, while the consolidated euro position stands at EUR 0.7 million. Compared to December 2010, in June 2011 the lari appreciated 6% against the US dollar, while depreciating 2% against the

euro. The overall losses of the banking system related to repricing of FX funds in the first half of 2011 amounted to GEL 12.6 million, reducing the regulatory capital adequacy ratio by 0.1%.

As of June 2011, the consolidated long US dollar position of the banking system stood at GEL 102 million (USD 61 million). Assuming an 11% appreciation of the lari, similar to the appreciation in the reporting period, the net losses of the system will equal GEL 11 million, leading to a 0.1% decrease in the regulatory capital adequacy ratio.

# 11. LIQUIDITY RISK

Liquidity risk is the risk related to a bank’s ability to fulfill its current (expected and unexpected, caused by exogenous events) obligations in due date.

One of the important indicators of liquidity risk is the ratio of total loans to total deposits, showing relative shares of loan financing through deposits and through other funds. Since other types of financing bear higher liquidity risk, this indicator displays the amount of a bank’s liquidity risk. In the reporting period the ratio of net loans to total deposits declined from 1.3 to 1.19, pointing to a decreased liquidity risk.

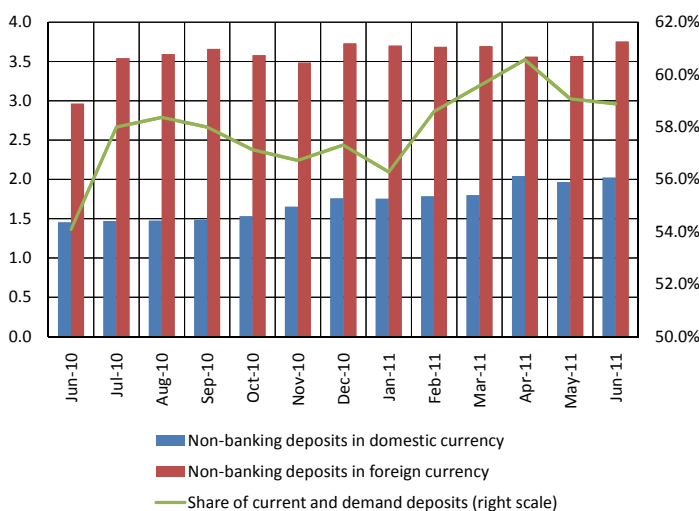
As of June 30, 2011, the current (less than one-year) assets equaled 83% of the current liabilities. Compared to the preceding year, the current liabilities of the banking system grew by GEL 1.9 billion, while the current assets rose by GEL 1.2 billion. Higher growth rate of current liabilities versus current assets has an adverse effect on the liquidity risk indicator.

In the accounting period an improvement in the credit portfolio of the banking sector, being a prerequisite of stable revenues from these assets, decreased banks’ liquidity risk (for information on loan quality, see subchapter on credit risk). On the other hand, due to stable demand for non-banking deposits on the part of the population, the risk of asset financing and asset refinancing declines. The share of current and demand deposits in the attracted deposits is quite high (See Diagram 11.1), although there is no danger of their significant reduction due to increasing economic activity and rising revenues.

Owing to the above-mentioned reasons, a large short-term liquidity gap (approximately GEL 1.75 billion) caused by the excessive amount of current and demand deposits can be considered to be a justified risk on the part of the banks under the current economic activity. However, one should also take into account the fact that almost the whole amount of time deposits attracted by the banking sector can be withdrawn before the due date. This creates additional risks in the case of liquidity risk materialization, with the banks taking a cautious approach towards the liquidity gap during the recession. Currently this indicator is continuously rising (See Diagram 11.2).

In the case of medium-term liquidity, the gap is positive due to the impact of lari denominated assets, as banks are reluctant to provide long-term credits in the domestic currency. It should also be noted here that the FX liquidity position for less than one-year maturity is permanently negative, which, under unfavorable developments, may

**DIAGRAM 11.1.**  
Flows of Non-Banking Deposits (GEL million)



**SOURCE:** NBG

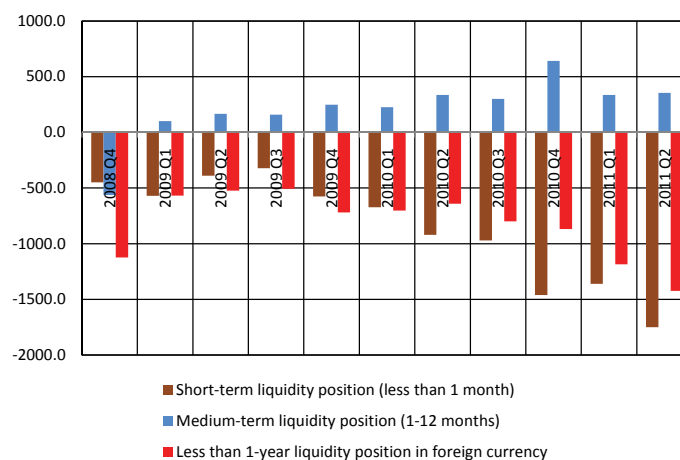
create an additional burden on the exchange rate and complicate repayment of foreign currency denominated liabilities.

One of the reasons conditioning the negative FX liquidity position for less than one-year maturity period, represents the banks' approach to liquidity adequacy requirements. The banks prefer to meet this requirement at the expense of the domestic currency (See Diagram 11.3), while investing the foreign currency into illiquid but high-income assets, largely long-term.

Fiscal inflows and outflows significantly affect liquidity of the banking system, caused by seasonality of government revenues and expenditures. In order to manage such fluctuations of liquidity, banks actively use the NBG's refinancing loans, balancing temporary liquidity deficit stemming from government operations.

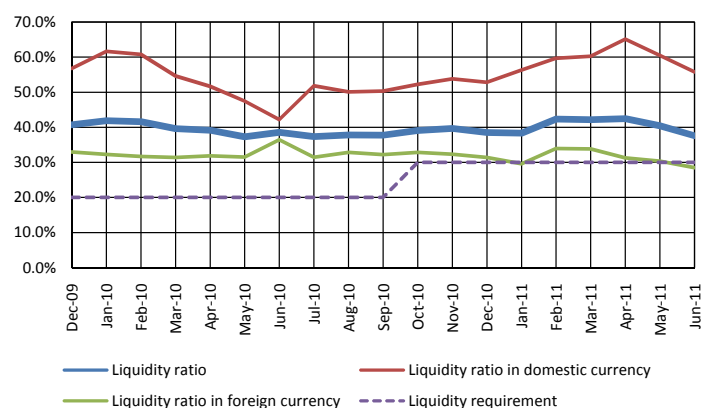
The activities conducted by the NBG in July 2011 are likely to further reduce banks' liquidity risk. In particular, according to the decision of the Monetary Policy Committee, the reserve requirements for long-term borrowings were decreased and in some cases eliminated, providing incentives to banks to seek long-term and stable financing. In general, the repayment schedule of the banking sector's borrowings is stable (See Table 11.1); as 69% of the total borrowings is attracted from international financial institutions and parent companies. On the other hand, in the event of materialization of sovereign debt risk, a new phase of crisis in the developed countries will create certain threats to the Georgian banking sector, namely, in terms of refinancing of external borrowings. Therefore, it is crucial that banks rely more on do-

**DIAGRAM 11.2.**  
Short- and Medium-Term Liquidity Positions



**SOURCE:** NBG

**DIAGRAM 11.3.**  
Liquidity Ratio



**SOURCE:** NBG

mestic resources and try to attract these resources on a relatively long-term basis. Liquidity risk will be considerably decreased if the share of deposits non-withdrawable before maturity rises. Non-residents' deposits are also an important aspect, traditionally containing a high outflow risk. Their volume almost doubled in the reporting period (to GEL 587.7 million), currently accounting for 10.2% of total deposits.

**TABLE 11.1.**  
Repayment Schedule of External Borrowings (as of December 2010)

	2011	2012 <sup>25</sup>	2013	2014	2015	2015<
Repayment of principal	34%	36%	10%	7%	3%	9%
Of which: to parent company	14%	3%	2%	4%	1%	3%
to international financial institutions	14%	10%	7%	3%	2%	6%
to other private sources	6%	23%	1%	0%	0%	0%

**SOURCE:** NBG

<sup>25</sup> For example, in Q1 2012 the outflow of GEL 136 million from the bank in g system is expected, constituting 4.6% of liquid assets.

# 12. ACTIVITIES UNDERTAKEN BY THE NATIONAL BANK OF GEORGIA

## 12.1. Monetary Policy Activities

With the view to control inflationary expectations and to avoid potential demand pressure on prices, in June 2010 the NBG started monetary policy tightening. At that time the monetary policy rate stood at 5%. At the June 24, 2010 meeting the Monetary Policy Committee increased the policy rate by unprecedented 125 basis points, further hiking it by 25 basis points to 6.5% at the next meeting. It should be noted that a policy rate hike has a lagged effect on loan interest rates. In this case the monetary policy tightening affected the real economy approximately in August 2010, when interest rates on lari denominated loans started to rise. In the same period, the growth rate of loans extended in lari slowed down.

The global developments in August-September 2010, price increases for food and fuel increased medium-term inflation risks in the world as well as in our region and in Georgia. In this regard, the necessity of further monetary policy tightening arose. The NBG responded in September-October 2010 and later in February 2011 with monetary policy rate hikes, ultimately to 8%. These changes were manifested after a certain period of time in interest rate increases for lari denominated loans and in a slowdown of expansion of lari loans.

It should be noted that by changing the monetary policy rate the NBG affects only the cost of lari denominated resources. However, a large part of banks' credit activity includes foreign currency loans. Accordingly, although the policy rate hike increased the interest rate on lari loans, it did not make any significant impact on foreign currency

loan interest rates. As a result, the difference between interest rates on loans extended in domestic and foreign currency increased. Commercial banks limited supply of lari loans, at the same time starting to expand the foreign currency denominated loan portfolio. Therefore, it became necessary to apply monetary policy tightening to foreign currency loans as well.

One of the important NBG's instruments affecting interest rates on foreign currency denominated loans represents the minimum reserve requirements. An increase in reserve requirements for funds in foreign currency raises costs of foreign currency resources, conducting to a rise in loan interest rates. With the view to apply monetary policy tightening to foreign currency loans, starting from September 2010 amendments to the "Rule on Calculation and Observance of Minimum Reserve Requirements" became effective, according to which borrowings attracted from non-residents became subject to reserve requirements. Before this date borrowings from non-residents were exempt from reserve requirements. At the end of 2010 along with rising inflation risks and expansion of foreign currency loans, the necessity of further tightening became clear. The MPC decided to gradually increase the reserve requirements for foreign currency denominated funds from 5% to 15%. The regulation became effective in January-February 2011.

Similar to the preceding years, in the reporting period one of the main directions of the NBG's activities represented improvement in efficiency of monetary policy. Significant steps were taken

in this regard. In particular, the interest rate band for overnight loans and deposits was narrowed to within the monetary policy rate +/- 1.5 pps. This change will dampen interest rate volatility in the interbank market and turn the money market into a more effective instrument of liquidity management for commercial banks. Also, the collateral base for refinancing loans was expanded, additionally comprising commercial banks' loan portfolio and/or guarantees provided by international organizations. This further increased attractiveness of refinancing loan facility for commercial banks, improving the interest rate transmission mechanism. New payment and central securities depository systems were implemented, reducing and, in the case of the CSD, completely eliminating operational risks, enhancing development of the money market and securities market. In terms of development of the securities market, one of the remarkable events represented the issuance of 2- and 5-year Treasury notes.

## 12.2. Supervision Policy Measures

The NBG continues regulation of financial institutions in line with risk-based supervision principles, which in turn requires assessment of risk profiles of individual financial institutions. Increasing complexity of banking activities requires closer relations and better communication between bank supervisors and external auditors. For this purpose starting from October 2010 the Rule on external audit of commercial banks was introduced. The Rule was prepared on the basis of "International Auditing Standards" published by the International Auditing and Assurance Standards Board (IAASB) and the International Federation of Accountants, drawing heavily on best international practices. Based on the Rule on external audit,

the NBG obtains detailed information, in line with the IFRS, on banks' provisioning policies, financial reporting to parent bank and holding companies, which greatly assists supervisors in assessing risk profile of the accountable bank.

In the reporting period the NBG introduced amendments to commercial banks' capital adequacy requirements. In particular, from June 2010 the Treasury bills issued by the Ministry of Finance and claims secured by these T-bills were reclassified into the 0% risk-weighted category, while the risk coefficient for FX-risk-weighted assets was increased from 50% to 75%.

Recent developments in the international banking system clearly manifested necessity of improvement in commercial banks' liquidity management, which in turn was followed by the changes introduced by the Basel Committee on Banking Supervision, the so-called "Basel 3" project. The NBG continues to work in this direction, planning to prepare special regulations on assessment and management of commercial banks' liquidity risk. Starting from January 1, 2011, the average liquidity ratio was increased to 30% from 20%.

Along with prudential regulation of the financial system the NBG's priority still remains strengthening of market discipline in the country and protection of consumers rights in the financial sector. In this regard, it is critical that users of the banking sectors have comprehensive information on banking products, which in turn promotes use of financial products and decreases credit risk. Starting from June 1, 2011 the Rule "On Provision of Necessary Information to Users of Commercial Banks' Services" became effective, regulating issues related to regular provision of comprehensive, necessary, clear, correct, and timely information by commercial banks to individuals contracting a

loan or using deposit services. The Rule is applied to all types of consumer credit agreements with individuals, including overdrafts and issuance of credit cards, when the total amount of credit exceeds GEL 300 and is less than GEL 50,000 (or its equivalent in another currency). With the view of promoting competition in the banking sector the NBG ordered commercial banks to limit the penalty for advance loan repayment to the amount of 2% of the outstanding loan balance.



## BOX. PROTECTION OF CONSUMERS' RIGHTS

According to Decree #35/04 of the President of the NBG dated May 13, 2011, the "Rule on Provision of Necessary Information to Users of Commercial Banks' Services" was approved and became effective starting from June 1, 2011. The Rule regulates the issues related to regular provision of comprehensive, necessary, clear, correct, and timely information by commercial banks to individuals contracting a loan or using deposit services.

Necessity of such type of regulation was conditioned by formation of the Georgian retail financial market and its rapid growth in the recent years, which was manifested in a development of new retail banking products. At present most of the 19 banks operating in Georgia have retail market-oriented products. Under intense competition among banks various new and complex financial products and technologies are being offered to the market. The sector's development is going on faster than the level of public awareness with regard to the financial issues. In addition, commercial banks did not pay proper attention to provision of detailed and comprehensive information on their products, focusing more on product sales. Therefore, consumers found difficulties in choosing products which would be the most optimal and useful for their needs. Availability of free and timely information stipulated by the above-mentioned Rule represents a prerequisite for conscious and informed decision-making by consumers.

Preparation of the Rule was aimed at strengthening market discipline, enhancing growth of economic efficiency in the consumer market of the financial sector, ensuring banks' responsible ap-

proach in provision of banking services, promoting transparent and competitive environment, and protecting consumers' rights to the extent possible. The Rule ensures transparency of information related to banking products, which in turn will significantly facilitate consumers' informed decision-making in financial issues, promote active use of financial products, and raise awareness of financial issues and confidence towards banks. The Rule will help commercial banks to reduce credit risk, make use of, and develop, competitive advantages.

As already mentioned above, according to the Rule, banks should ensure timely provision of comprehensive information, which should be correct, understandable, and necessary for decision-making. Accordingly, before concluding an agreement with a consumer, a bank should provide information on important terms of the agreement and, if needed, provide detailed explanation of each term.

The Rule defines obligatory contract information, which comprises such important terms as nominal and effective interest rate, costs related to the use of a loan and a deposit, information on exchange rate risk, commission fees for advance loan repayment, penalties and compensations, information on possible changes in the terms of agreement, forms for filing a claim in case of dissatisfaction, etc. Agreements must have a preface containing particularly important terms of agreement. In addition, banks are obliged to have standard procedures for receiving and reviewing consumers' claims, accept and respond to consumers' claims in an unobstructed way. Furthermore, the

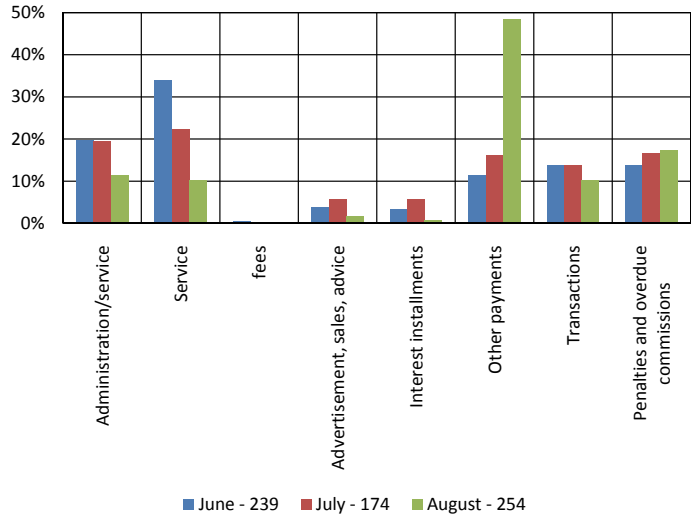
information on received claims should be submitted to the NBG on a monthly basis.

Shortly before introducing the Rule, in May 2011 the NBG created a division for protection of consumers' rights. The division, in the framework of the above Rule, monitors protection of consumers' rights in the consumer market of the banking sector, analyzes and publishes statistical data on this topic, responds to the hot line – 2 406 406 – and provides necessary information. The division also administers the web page [www.nbg.gov.ge/cp](http://www.nbg.gov.ge/cp) created particularly for consumers and aimed at raising public awareness of financial issues and providing information related to protection of consumers' rights to the general public. The web page is regularly updated with information on the consumer market of the banking sector. The page also contains information on main banking products, their specifications, benefits and risks, and consumers' rights. In addition, the page includes various statistical data and surveys.

It is important to note that as a result of active communication with the public the division for protection of consumers' rights may identify important problems, and it is quite likely that some of these problems may serve as the foundation for future legislative initiatives.

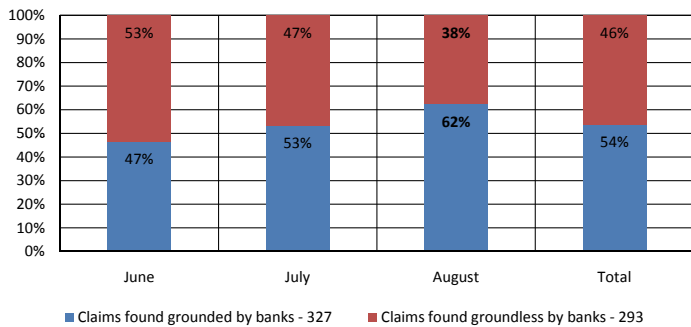
The diagram below shows statistical data on consumers' claims received by commercial banks in June-August 2011.

**DIAGRAM 12.1.**  
Registered Consumer Claims at Commercial Banks by Topics



SOURCE: NBG

**DIAGRAM 12.2.**  
Reviewed Consumer Claims by Commercial Banks



SOURCE: NBG

# 13. FINANCIAL SOUNDNESS INDICATORS

Period	Jun-11	May-11	Apr-11	Mar-11	Feb-11	Jan-11	Dec-10	Nov-10	Oct-10	Sep-10	Aug-10	Jul-10
Loans, total	6,900,715	6,515,506	6,362,415	6,358,648	6,240,675	6,342,370	6,260,705	6,025,656	5,776,241	5,844,348	5,865,899	5,793,591
Overdue loans	170,660	192,905	181,116	188,513	183,471	180,070	173,967	203,094	204,307	202,458	226,863	201,599
Of which:												
Loan loss provisioning reserves	576,510	588,951	576,364	585,399	591,684	604,607	587,491	621,183	633,489	645,298	663,573	657,246
Revenues	936,780	770,440	605,239	447,273	289,673	150,585	1,553,053	1,389,735	1,242,548	1,117,687	983,655	853,960
Net Profit	119,140	98,204	81,368	43,981	10,724	12,321	156,270	158,629	121,429	95,285	71,640	59,582
Shareholders' equity	1,835,114	1,810,915	1,796,082	1,750,948	1,718,728	1,801,253	1,787,647	1,770,187	1,722,799	1,696,523	1,650,915	1,636,566
Tier 1 capital	1,476,171	1,470,021	1,472,988	1,468,652	1,469,043	1,547,346	1,389,035	1,393,657	1,383,949	1,383,251	1,360,865	1,358,051
Of which:												
Regulatory capital	2,048,205	2,017,439	2,011,523	1,981,253	1,902,924	1,863,996	1,765,864	1,783,011	1,731,939	1,706,195	1,672,665	1,656,598
Total assets with less than 1-year maturity	2,918,425	2,980,434	2,903,859	2,922,105	3,193,323	3,106,953	2,805,684	2,736,743	2,875,385	2,944,115	2,846,902	2,783,095
In domestic currency	976,339	1,066,357	1,072,037	942,816	1,051,722	1,077,163	970,890	917,568	856,537	836,795	749,739	776,750
Of which:												
In foreign currency	1,942,085	1,914,078	1,831,821	1,979,288	2,141,602	2,029,790	1,834,794	1,819,175	2,018,848	2,107,320	2,097,163	2,006,345
Total liabilities with less than 1-year maturity	4,667,893	4,328,801	4,318,956	4,283,156	4,282,879	4,301,287	4,267,064	4,037,955	3,710,749	3,915,439	3,862,459	3,771,920
In domestic currency	2,223,709	2,114,206	2,094,469	1,928,990	1,984,314	2,031,859	1,971,119	1,786,162	1,606,266	1,637,371	1,606,640	1,628,445
Of which:												
In foreign currency	2,444,184	2,214,595	2,224,466	2,354,166	2,298,565	2,269,429	2,295,944	2,251,794	2,104,483	2,278,068	2,255,819	2,143,475
Tangible and intangible assets	901,280	895,713	894,366	889,988	883,332	883,243	885,147	834,303	823,879	825,868	826,037	824,580
Total NPLs	713,981	759,320	741,036	757,417	768,462	803,132	784,287	855,132	862,584	883,462	896,461	908,651
NPL reserves	372,522	397,961	391,277	402,731	409,538	423,630	408,027	450,896	468,279	483,257	497,606	493,189
Balance-sheet open FX position	466,589	(142,635)	39,329	83,047	(4,040)	231,188	248,613	235,538	5,438	19,231	128,635	18,421
Consolidated open FX position	109,222	60,724	43,779	37,663	64,175	119,126	142,303	60,788	46,500	56,836	89,821	72,936
Regulatory capital adequacy ratio	16.5	17.2	17.5	17.3	16.8	16.3	17.4	18.2	18.5	18.2	18	18
assets (ROA)	2.2	2.2	2.3	1.6	0.6	1.4	1.7	1.9	1.6	1.4	1.2	1.2
Return on: equity (ROE)	13.3	13.8	13.8	10	3.7	8.2	9.6	10.7	9.1	8	6.8	6.6

SOURCE: NBG





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