

NATIONAL BANK OF GEORGIA

# *INFLATION REPORT*

II Quarter, 2007



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In QII of 2007 the level of inflation in Georgia was moderate. According to the Department of Statistics of Georgia, annual inflation in June equaled 7.3%; however the average annual inflation still remained high at 10.1%. Lower inflation rates were also reflected in the core inflation level, indicating that price stabilization occurred not at the expense of certain commodities but due to the dynamics of the general price level.

In June 2007 inflation rates in Georgia were lower than in its trade partner countries (based on weighted average data). In particular, in June annual inflation equaled 8.6% in Russia, 8.6% in Turkey, 13.0% in Ukraine, and 13.3% in Azerbaijan.

In QII of 2007 the growth of money supply was more balanced. In particular, the annual growth rate of reserve money, according to monthly average data, decreased from 31.4% in December (compared to the same period of the previous year) to 24.6% in June. In the same period cash in circulation increased by 37.9 million Lari and totaled 967.4 million Lari. Under the condition of rapid growth of deposits in the banking system, broad money (M3), including foreign currency denominated deposits, posted particularly high growth rate of 42.2%, while M2 aggregate increased by 31.5%.

The Lari exchange rate was relatively stable. In QII of 2007 the real effective exchange rate slightly appreciated (by 0.24%), compared to QI of 2007. At the same time, the same parameter also slightly depreciated (by 0.28%), compared to QII of 2006. As of the nominal effective exchange rate, it depreciated by 0.64% during the quarter and by 1.65% compared to June 2006. Accordingly, the impact of the exchange rate on inflation was negative, though insignificant.

Regarding the Lari exchange rate against different currencies, during the quarter it appreciated against the US dollar by 1.79% and depreciated against the Euro by 0.8%. Appreciation was registered against the UK pound sterling (0.5%), Swiss franc (2.7%) and the Russian ruble (1.0%), while 4% depreciation was posted against the Turkish lira.

The balance of payments represented an important source of increased aggregate demand. In QI of 2007 the current account deficit equaled a record high level of 385.8 million USD, but the financial account exceeds the current account (among other reasons due to permanently growing money remittances), which allows the country to accumulate foreign currency reserves.

The officially registered turnover of foreign trade in QII of 2007 totaled 1507.2 million USD, which exceeds the 2006 figure by 34%. Exports grew at 37%, and imports – at 33%. This was the first quarter after the Russian embargo when the growth rates of exports were higher than those of imports.

The oil prices – one of the exogenous inflation factors – exhibited a growing trend in QII of 2007. By June 30, compared to the end of March, the oil prices on the world market grew by 7.3%.

The state budget exerts a significant impact both on money demand and money supply. The growth of money demand is conducive to the increase in tax volumes, as companies and individuals need more money for settling accounts with the budget. In the first half of 2007 tax revenues of the state budget considerably increased, compared to the same period of 2006. As of the budget expenditures, which cause changes in the government deposits and thus represent one of the sources of money supply, in the first half of 2007 they tended to decrease the monetary mass. Therefore, the direct budgetary effects on the monetary mass were manifested in terms of increased money demand and decreased money supply, which reduced the inflationary pressure.

In QI of 2007 the annual growth rates of average wages exceeded the real growth of value-added per employed person by almost 17%. If we exclude such non-market sectors as public administration, the above difference will be even larger. All this affects the inflationary risks.

Under the conditions of expected growth rates of GDP and monetary mass, stable Lari/USD exchange rate, correct market expectations of

oil prices (69 USD/barrel), better-than-last-year crops, small growth of imports inflation and excluding other exogenous factors, as well as taking into account expected inflation due to the increase in gas prices, inflation, under the same monetary policy, is forecasted with 20% probability to be at the level of 5.72%-9.24%.

# 2

## Changes in Consumer Prices

According to the Department of Statistics of Georgia, the general level of consumer prices in June 2007 decreased by 0.2%, compared to May 2007. In the same period of 2006 the decrease of consumer prices was also equal to 0.2%. Accordingly, annual inflation in June remained at the 7.3% level registered in May. The average annual inflation rate decreased, but still remains high at 10.1%.

In the first 6 months of 2007, consumer prices increased by 4.1%. Price-regulated products account for 1.6 percentage points of this increase. Annual inflation (as well as inflation in the first 6 months) is no longer affected by the electricity price increases of May 2006. Starting in July, annual inflation will increase by 1-2 percentage points due to increased public transportation tariffs. It should be noted that one-time increase of regulated prices (or the relative price growth on other isolated commodities) does not represent inflation, if it does not cause changes in inflationary expectations or other fundamentals. Inflation represents the growth of the general price level, while the above-mentioned events represent a one-time increase of relative prices reflected in a one-time increase of consumer prices.

The June deflation was due not only to the price decrease of agricultural products, but also to the general price stability and even a slight price decrease. This fact is indicated by the negative value of monthly core inflation. In particular, for the products within the range of two standard deviations (96% of the total basket) core inflation equaled -0.8%, while for the products within one standard deviation range (93% of the total basket) it equaled -0.6%.

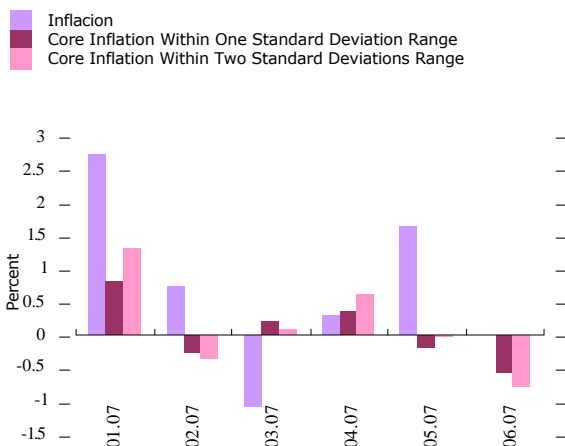
The annual core inflation rates equal 4.0% and 2.9% for the products falling within one- and two-standard-deviation range, respectively. Relatively low levels of core inflation indicate the non-monetary nature of annual inflation.

In 2007 climatic conditions more favourable for agriculture than in the previous year represent an important factor confining inflation to the moderate

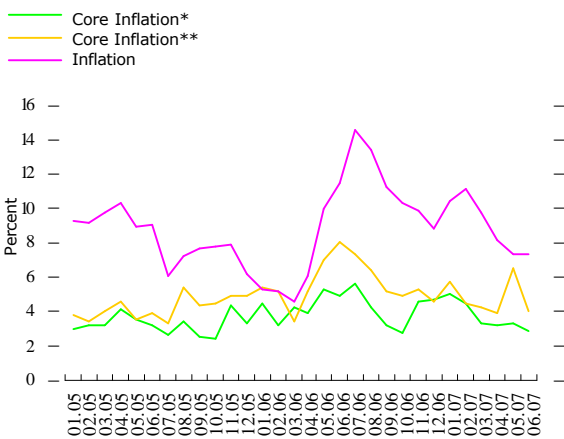
**Table 2.1**  
Increase of Prices of Commodities with Regulated Prices and Its Inflation Impact  
First Half of 2007

	Average Price Changes in Georgia	Inflation Impact
Water Fee	80%	0.40%
Garbage Collection Fee	137%	0.30%
Natural Gas Fee	32%	0.90%

**Figure 2.1**  
Monthly Inflation in the First Half of 2007



**Figure 2.2**  
Core Inflation

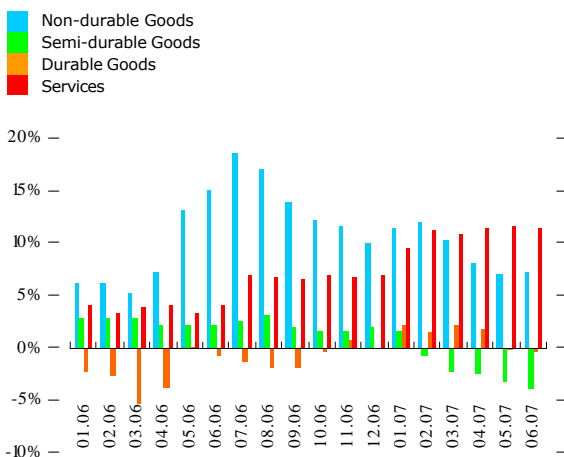


\* by products within the range of one standard deviation (~85%)  
 \*\* by products within the range of two standard deviations (~93%)

**Figure 2.3**  
Annual Growth Rates of M2 Monetary Mass (Monthly Average) and Consumer Prices



**Figure 2.4**  
Changes of Annual Inflation Rates For Commodities with Different Durability and For Services



range. However, if we take into account the increase of regulated prices, the goal of reaching the inflation target requires strict growth rate management of the monetary mass.

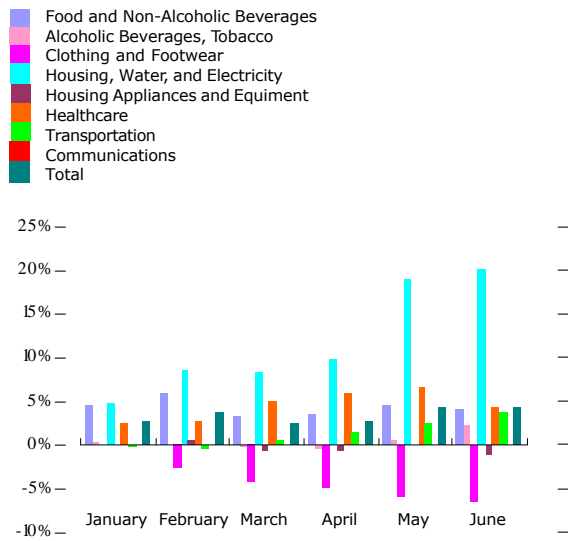
As of January 2007, the inflation rates in Georgia were lower than in its trade partner countries (based on weighted average data). In particular, annual inflation stood at 8.6% in Russia, 8.6% in Turkey, 13.0% in Ukraine, and 13.3% in Azerbaijan, while in Georgia the inflation rate equaled 7.3%.

The analysis of commodities in terms of their consumption durability shows that in June prices on non-durable, semi-durable, and durable goods decreased, while the prices on services increased. The highest annual inflation rates were posted for the non-durable goods (7.3%), while the price increase on services was even higher (11.3%). Such results are probably due to slowing down of prices on non-durable goods and the time lag in the increase of prices on services with respect to the price increase on non-durables. From December 2005 to May 2007 the prices on non-durables increased by 15.1%, while the prices on services grew by 13.4%. As for semi-durable and durable goods, in the same period their prices decreased by 4.2% and 2.0%, respectively.

Since December 2006 clothing prices decreased by 6.6%. Prices on household appliances and equipment also slightly decreased. The prices on the following commodity groups have increased by approximately 4%: "food and non-alcoholic beverages," "alcoholic beverages, tobacco," "healthcare," "transport," and "communications." In the first 6 months of 2007 the highest growth was registered in the commodity group "housing, water, electricity, gas and other fuels" (20.0%), which was mainly due to the increase of natural gas, water, and garbage collection fees.



**Figure 2.5**  
Increase of Price Compared to December, 2006



**Table 2.2**  
CPI Inflation Rates by Components (%), Their Weight in the Consumption Basket (%) and CPI Impact (Percentage Points)

	12.2006	06.2007/05.2007		06.2007/06.2006		07.2006-06.2007/ 07.2005-06.2006	
	Weight	Inflation	Impact	Inflation	Impact	Inflation	Impact
Total	100.0%	-0.2%	-0.2%	7.3%	7.3%	10.1%	10.1%
Food and Non-alcoholic beverages	44.3%	-0.5%	-0.2%	8.4%	3.7%	14.9%	6.3%
Food	43.0%	-0.5%	-0.2%	8.8%	3.8%	15.4%	6.3%
Bread and Bakery	12.2%	-0.2%	0.0%	6.9%	0.8%	5.1%	0.6%
Meat and Meat Products	6.6%	-2.2%	-0.1%	-5.3%	-0.4%	7.2%	0.5%
Milk, Cheese, and Eggs	1.1%	0.8%	0.0%	2.7%	0.0%	6.8%	0.1%
Oil and fat	5.2%	-8.0%	-0.3%	-1.8%	-0.1%	17.9%	0.8%
Fruit, grapes	3.5%	0.6%	0.0%	3.2%	0.1%	3.5%	0.1%
Vegetables, Watermelons, incl. Potatoes and other Solanaceae	2.3%	13.8%	0.6%	156.2%	3.3%	68.0%	1.3%
Sugar, Jam, Honey, Syrups, Chocolate, Pastry	8.8%	-4.1%	-0.4%	0.3%	0.0%	28.5%	2.3%
Other Food Products	2.7%	-1.3%	0.0%	-12.7%	-0.4%	6.3%	0.2%
Non-alcoholic Beverages	0.6%	-0.4%	0.0%	8.8%	0.0%	7.6%	0.0%
Clothing and Footwear	1.3%	-0.2%	0.0%	-3.5%	0.0%	0.9%	0.0%
Housing, Water, Electricity, Gas, and Other Types of Energy	3.7%	1.9%	0.1%	0.0%	0.0%	-7.5%	-0.3%
Furnishings, Household Equipment and Renovation	5.0%	-0.7%	0.0%	-5.1%	-0.3%	0.9%	0.0%
Health care	10.3%	0.9%	0.1%	21.8%	2.3%	28.0%	2.6%
Transportation	3.7%	-1.2%	0.0%	1.5%	0.1%	0.9%	0.0%
Communication	8.0%	-2.1%	-0.2%	16.8%	1.2%	17.0%	1.3%
Recreation and Culture	9.0%	1.2%	0.1%	2.2%	0.2%	3.0%	0.3%
Education	4.4%	0.0%	0.0%	0.8%	0.0%	-1.5%	-0.1%
Hotels, Cafes, and Restaurants	2.7%	-0.5%	0.0%	2.1%	0.1%	-0.3%	0.0%
Miscellaneous Goods and Services	3.5%	-0.3%	0.0%	2.8%	0.1%	2.6%	0.1%
Non-durable Goods	2.4%	0.2%	0.0%	5.3%	0.1%	6.3%	0.2%
Semi-durable Goods	3.2%	0.2%	0.0%	2.8%	0.1%	3.0%	0.1%
Durable Goods	68.0%	-0.3%	-0.2%	7.3%	5.0%	11.4%	7.6%
Services	6.5%	-0.9%	-0.1%	-4.0%	-0.3%	0.1%	0.0%
	1.9%	-0.4%	0.0%	-0.4%	0.0%	0.2%	0.0%
	23.6%	0.5%	0.1%	11.3%	2.6%	8.9%	2.1%

Source: Department of Statistics and NBG data

## Box 1. Measuring Prices By Scanner Date

Similar to other countries, one of the most important tasks of the Georgian monetary policy consists in maintaining price stability. In order to succeed in this task, first of all, objective and accurate evaluation of price changes should be performed. Traditionally, the consumer price index (CPI) calculated by the Department of Statistics is most often used. Apart from the CPI, other methods and sources of information are used for estimating the price level. Each of these methods have their advantages and drawbacks.

That is why different inflation measures are necessary for conducting monetary policy most efficiently. Prompt evaluation of price dynamics is particularly important. Collecting accurate and prompt information on prices is important at trade centers, where sold commodities are registered by means of scanners. In Europe such trade centers account for approximately 60-70% of consumption.

In the recent years the number of such trade networks has increased in Georgia as well. For example, supermarket chains "Goodwill", "Populi", "Ibisi", medical stores "PSP", "Aversi", "GPC", durable goods centers "Danish House", "Elit Electronics", "Vestel", "Indesit", etc. Such registration of price dynamics provides new opportunities: advantages of electronic data against the traditionally collected data are recognized by the Statistics Departments of the EU and other countries, which have big experience in processing information from such trade centers.

The additional advantage of analyzing price dynamics on the basis of information received from such

centers is such information's transparency: any person may check its accuracy.

The main advantage of electronic data is the possibility of increase significantly the volume of goods under examination, which contributes to the accuracy of the CPI calculations. Information on prices and consumption volumes from these sources is available in real time, which makes it possible to examine the price dynamics in the current period, as well as study products substitution and introduction of new products in the consumption basket. Accordingly, forecasting of price dynamics and implementation of relevant monetary policies takes less time.

Analysis of price dynamics at large retail centers on the basis of electronic information, apart from the above-mentioned advantages, has certain drawbacks as well (for example, the information is relevant only to the customers of these centers, and not to all the residents of the country). Accordingly, it does not represent an official measure of inflation. It only provides additional information on price dynamics and improves efficiency of monetary policy.

Scanned information from the retail outlets provided new opportunities for analysis. Researchers often use it for studying supply and demand dynamics of certain products. This information is increasingly used by the central banks and departments of statistics as an alternative source for examining price changes. Furthermore, certain countries use scanned data for calculating certain components (for example, food and non-alcoholic beverages commodity group) of the consumer price index with a high level of precision.

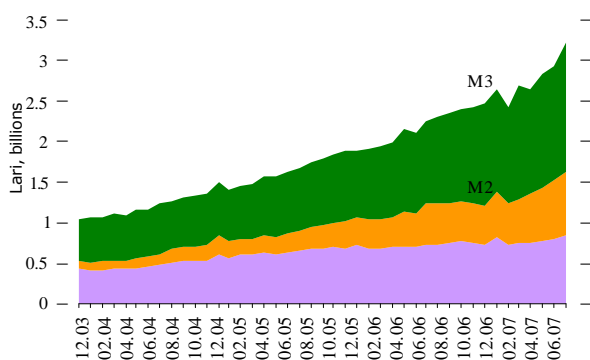
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## Inflation Factors

### 3.1. Dynamics of Monetary Aggregates

**Figure 3.1.1**  
**Broad Money**

- deposit liabilities (in foreign currency)
- cash outside of banks
- deposit liabilities (in national currency)



**Monetary Aggregates.** In the first 6 months of 2007 the reserve money aggregate grew by 114.3 million Lari (9.6%) and totaled 1307.5 million Lari by the end of June. According to monthly average data, the reserve money aggregate grew by 46.2 million Lari (3.6%) between December 2006 and June 2007.

The volumes of the NBG interventions at the TIBFEX tended to increase. The difference between the supply and demand of foreign currency at the TIBFEX was significant during the year. As a result, under the conditions of slight appreciation of the exchange rate the net NBG purchases totaled 384.3 million USD and the money supply totaled 643.5 million Lari. Meanwhile, as a result of intragovernmental currency conversion the net NBG sales of foreign currency equaled 141.4 million USD (240.1 million Lari) during the year. It can be said that the above-mentioned operations (TIBFEX operations and intragovernmental currency conversions) ultimately supplied approximately 403.4 million Lari to the economy.

The volume of governmental deposits grew since the beginning of the year to reach 679.8 million Lari by the end-June. The total growth equaled 319.5 million Lari. Such considerable growth of governmental deposits was due to the foreign currency denominated component of the deposits, which grew in the same period by 117.9 million Lari. The above-mentioned growth was largely due to the privatization proceeds of 145.6 million USD (247.3 million Lari). In the same period the single Treasury budget account increased by 136.0 million Lari.

Similar to the previous period, the NBG operations in the money market were mainly based on the auctions of the Certificates of Deposit (CDs). However, the volume of liquidity absorbed by means of this operation essentially increased. By end-June the volume of CDs in circulation was equal to 371.6 million Lari. In the accounting period the NBG repaid 1018 million Lari worth of CDs, while the value of newly issued CDs totaled 1093 million Lari. In addition, in June the NBG

**Table 3.1.1**  
**Reserve Money Dynamics**  
2007, Month Average Data

	12.06	01.07	02.07	03.07	04.07	05.07	06.07
Reserve money	1268 754	1218 235	1208 282	1185 314	1236 298	1299 819	1314 985
Money in Circulation	853 042	848 825	834 789	843 270	877 041	902 371	937 892
Bank Deposits	853 042	369 411	373 493	342 044	359 258	397 448	377 093
Required Reserves	415 712	224 227	222 223	230 922	232 818	251 264	161 124
Balances on Corresponding Accounts	194 305	145 183	151 270	111 123	126 440	146 185	215 969

**Table 3.1.2**  
**Reserve Money Dynamics**  
2007, End-Month Data

	12.06	01.07	02.07	03.07	04.07	05.07	06.07
Reserve Money	1193 231	1226 839	1200 329	1152 684	1275 289	1349 489	1307 509
Money in Circulation	929 538	834 396	840 606	857 971	893 463	922 622	967 394
Banks Deposits	263 693	392 443	359 723	294 713	381 826	426 867	340 115
Required Reserves	224 559	219 303	223 649	231 147	243 528	253 685	139 880
Balances on Corresponding Accounts	39 135	173 140	136 074	63 566	138 298	173 182	200 235

**Table 3.1.3**  
**Monthly Changes of Money Aggregates**  
2007, Month Average Data

	01.07	02.07	03.07	04.07	05.07	06.07
<b>Broad Money /M3/</b>	<b>2 580 571</b>	<b>2 616 443</b>	<b>2 672 403</b>	<b>2 768 753</b>	<b>2 941 231</b>	<b>3 176 052</b>
Money Mass /M2/	1 295 595	1 287 117	1 334 653	1 404 080	1 514 157	1 620 071
Cash Outside of Banks	742 375	743 895	745 340	777 280	798 758	837 951
Lari in Circulation	840 015	837 685	846 038	885 898	905 526	947 357
Deposits in National Currency	553 219	543 223	589 312	626 800	715 399	782 120
Deposits in Foreign Currency	1284 977	1329 325	1337 750	1 364 673	1427 074	1 555 981

**Table 3.1.4**  
**Monthly Changes of Money Aggregates**  
2007, End-Month Data

	01.07	02.07	03.07	04.07	05.07	06.07
<b>Broad Money /M3/</b>	<b>2 583 541</b>	<b>2 712 182</b>	<b>2 674 368</b>	<b>2 863 189</b>	<b>2 967 426</b>	<b>3 247 908</b>
Money Mass /M2/	1 297 637	1 298 772	1 365 417	1 454 927	1 536 421	1 646 161
Cash Outside of Banks	739 864	752 811	761 988	781 242	819 339	851 145
Lari in Circulation	834 396	840 606	857 971	893 463	922 622	967 394
Deposits in National Currency	557 773	545 961	603 429	673 686	717 081	795 016
Deposits in Foreign Currency	1285 905	1413 409	1308 951	1 408 262	1431 005	1 601 747

Source: NBG data

placed Treasury notes in the amount of 10 million Lari. Thus, the net volume of liquidity absorbed by the NBG through CDs and Treasury notes was 85 million Lari. As a result of NBG operations by means of monetary instruments, as of end-June, the volume of commercial banks' net liabilities changed from -254.6 million Lari (December 31, 2006) to -351.6 million Lari.

As a result of the above-mentioned monetary flows, in June 2007 the reserve money aggregate, by end-month data, stood at 1307.5 million Lari, or 114.3 million Lari more than as of December 31, 2006. The annual growth rates of reserve money, by monthly average data, decreased from 31.4% in December to 24.6% in June. In the same period, cash in circulation grew by 37.9 million Lari to a total of 967.4 million Lari.

## Broad Money

In June 2007 the M3 broad money aggregate relative to the end of last year grew by 586.2 million Lari (22%) to a total of 3.247 billion Lari. This growth was conditioned by the increase in both national currency denominated deposits (by 41.5%) and foreign currency denominated deposits (by 25.9%). From the beginning of the year deposits in foreign currency grew by 329.3 million Lari and amounted to 1.601 billion Lari by end-June; deposits in national currency grew by 233.2 million Lari to total 795.0 million Lari.

The M2 broad money grew by 18.5% (257 million Lari) in the 6 months, which was mainly conditioned by the 233.2 million Lari increase of deposits in national currency.

The annual growth rates of M3 and M2 broad money aggregates in June were 42.2% and 31.5%, respectively.

## Box 2. Required Reserves

Historically, reserve requirements were introduced in order to satisfy to a certain extent potential needs of the depositors of commercial banks. Over time required reserves lost the above-mentioned function and acquired a different one. In particular, they became an important instruments for liquidity

management. In case of excessive growth of loans, increased level of required reserves reduces the velocity of transforming deposits into loans, decreasing money supply and, accordingly, lowering prices. On the other hand, existence of required reserves, creating the need for liquidity (i.e. making money

demand more stable), increases efficiency of the monetary policy, positively affecting the stability of interest rates.

It should be noted that not only the rate of required reserves itself is important, but also the base of its calculation as well as how the requirements are maintained.

Since June 1, 2007 new regulations on required reserves for the commercial banks in Georgia have become effective. The NBG prepared a normative act on the basis of consultations with the IMF technical mission and the experts of the US Federal Reserve. Main principles and the initial version of the regulations were presented to the representatives of the commercial banks and the Georgian Banking Association.

New regulations on required reserves envisage certain changes. Among them:

- a) Reserves on deposits denominated in foreign currency will be made at the NBG in US dollars and not in the national currency. This significantly reduces risks of the Georgian banking system, in particular, foreign exchange and credit risks;
- b) Banks are no longer obliged to permanently keep required reserves on the funds attracted in national currency at the NBG. They are only required to meet the required reserves requirements on the funds

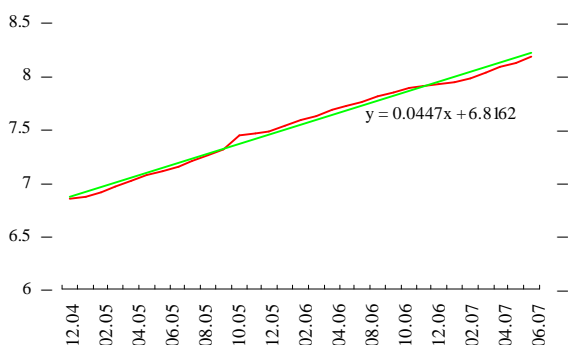
mobilized in national currency on an average two-week basis. This amendment provides commercial banks with more flexibility in managing own funds and stimulates resource trade among the banks;

c) Two-week calculation period is now 30 days ahead of two-week maintenance period. This allows commercial banks and the NBG to better forecast liquidity levels and further plan their activities;

d) Calculation method of the base of attracted funds has been changed as well. In particular, interbank deposits have been removed from the base, which is expected to prevent double taxation and promote the development of the interbank market.

Although new regulations on required reserve requirements, in particular, keeping reserves in foreign currency denominated deposits in US dollars, are more favorable for banks, commercial banks have their open foreign currency positions minimized. Thus, immediate compliance with the above-mentioned requirement will be difficult. Accordingly, new regulations envisage an 8-month transition period, during which commercial banks will gradually move to meet the new requirements completely. Automatic forms have been prepared for accounting and calculating purposes, which will facilitate the reporting process for commercial banks, as well as supervision by the controlling agency. It should be pointed out that despite the complexity of the reform, it has been quite successfully under way during the transition period.

**Figure 3.2.1**  
The Evolution of Economy Crediting  
(Logarithmic Scale)

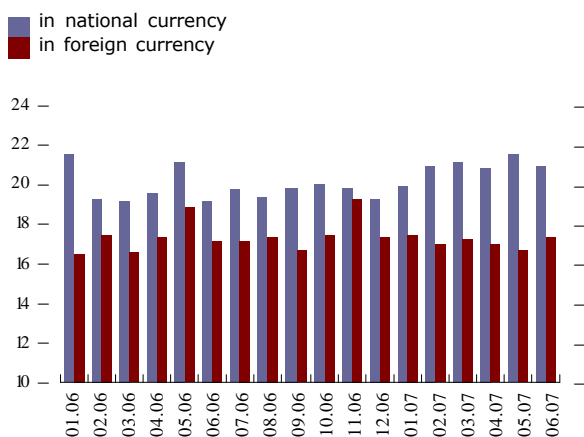


### 3.2. Dynamics of Interest Rates, Deposit Liabilities and Economy Crediting

In QII of 2007 high growth rates of extended loans by commercial banks were maintained and stood at 58.2%. As a result, the credit portfolio totaled 3 539.4 million Lari. It should be noted that since the end of 2004 the economy crediting by commercial banks manifests quite a stable increasing trend. As shown on the graph below, loans grow by 4.4% per month, which corresponds to an annual growth rate of 70%<sup>1</sup>.

<sup>1</sup> If we denote the loan growth by the equation  $Y=C(1+r)^t$ , after taking logarithms we can rewrite it as  $\ln Y=\ln C+\ln(1+r)*t$  which, for small values of  $r$ , can be approximated by  $\ln Y=\ln C+r*t$ . The latter equation corresponds to the line drawn on the graph.

**Figure 3.2.2**  
Interest Rates on Loans

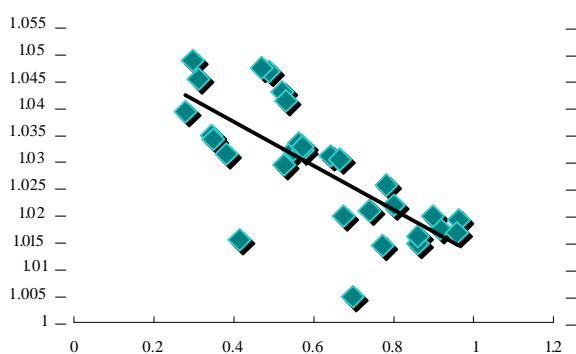


Along with the growth of credit portfolio, banks significantly expanded long-term crediting, which resulted in the increase of the share of long-term loans in total loans. By the end of QII of 2007 the share of short-term loans in total economy crediting was equal to 31.1%, decreasing from 32.9% in QII of 2006. The increase of long-term loans' share in the loans structure is explained by the banks' active policies. Banks improve risk management, which allows them to better manage long-term credit portfolios. Increase of loan maturity date reduces banks' costs associated with extending new loans and meets the economic agents' demand for long-term loans, promoting better allocation of resources.

The banks' activities on the consumer market show an upward trend, resulting in higher growth rates of loans extended to physical persons compared to those extended to legal persons. In QII of 2007 loans extended to physical persons grew by 79.1%, while loans extended to legal persons expanded by only 53.1%.

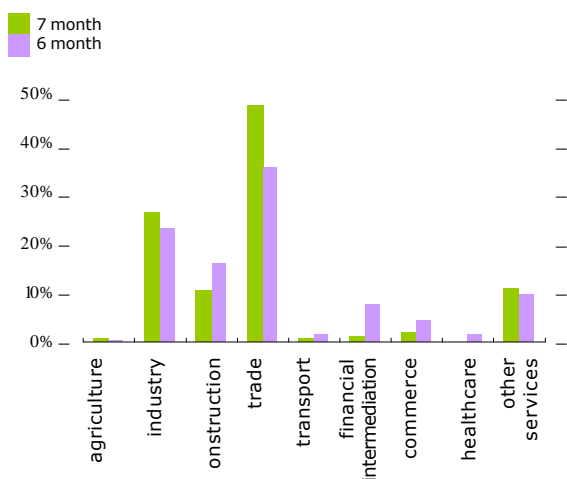
There was an upward trend in the interest rates on loans extended by the commercial banks. By end-June of 2007 the average interest rate on loans extended in Lari was 18.8%, or 0.8 percentage point higher than in the previous year. The average interest rate on loans in foreign currency made up 17.3%, or 0.2 percentage point higher than in the previous year. The increase of interest rates in both national and foreign currency denominated loans implies the increase of aggregate demand. In this situation, rapid expansion of crediting does not contain inflationary risks since the increase of interest rates contributes to the increase of real value of money.

**Figure 3.2.3**  
Correlation Between the Relative Price and Relative Quantity of Loans Extended in National and Foreign Currency

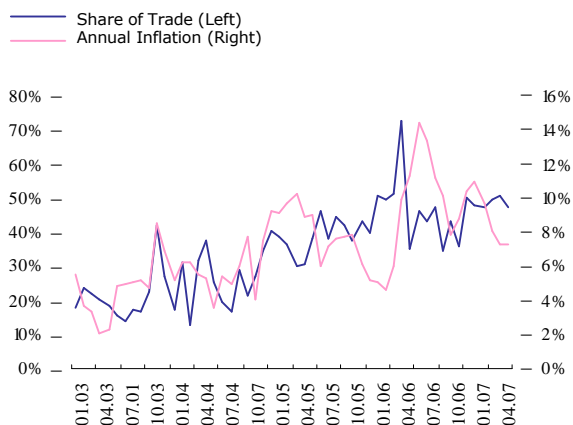


It is interesting to point out that interest rates on loans extended in national currency increase faster than interest rates on foreign currency denominated loans. This fact is explained by the currency structure of loan supply. On the graph below, the vertical axis depicts the ratio of interest rates on national currency denominated loans to the interest rates on loans in foreign currency during one month. The horizontal axis shows the ratio of the volume of loans in national currency to that of loans in foreign currency extended in the analogous period. There is a strong negative correlation between the relative loan price and relative loan volumes, which corresponds to the demand curve. Based on these data, we can conclude that the curve of relative demand for loans is stable, whereas the supply curve is changing. Changes in the

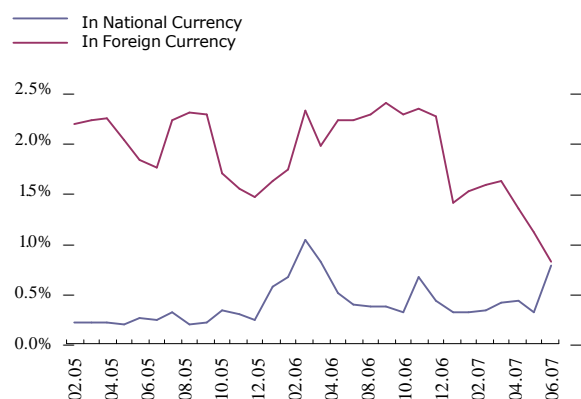
**Figure 3.2.4**  
Loans by Sectors



**Figure 3.2.5**  
Trade Loans and Inflation



**Figure 3.2.6**  
The Share of Overdue Liabilities



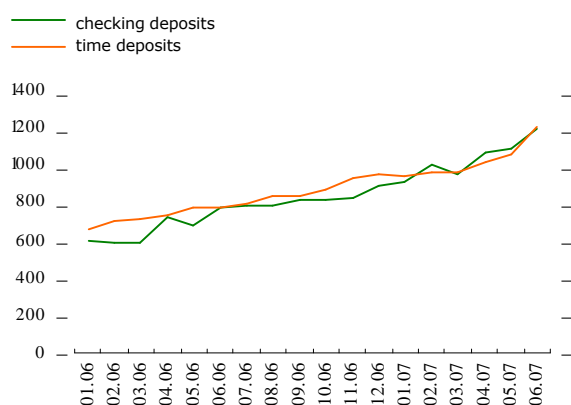
supply curve may be caused by increased expectations of the Lari depreciation and excessive volumes of foreign currency in the banking system. Increased expectations of the Lari devaluation is less likely, since in the last years the Lari exchange rate steadily appreciated, which positively affected the expectations of the Lari appreciation. The Georgian banking system successfully attracted foreign capital, which resulted in large volumes of foreign currency and caused a subsequent leftward shift of the relative supply curve of loans. Ultimately, the interest rates on national currency denominated loans increased more than the interest rates on loans in foreign currency, while there was a more rapid growth of loans extended in foreign currency.

Certain changes occurred in the distribution of loans across the sectors of the economy, showing a relative decrease in crediting of highly concentrated economic sectors. As a result, the credit portfolio became more diversified. The share of loans extended in the construction sector significantly increased. Loans expansion also took place in commerce, healthcare, financial intermediation, transportation, and communications sectors.

It should be pointed out that loans extended to the trade sector do not grow as fast as they used to in the previous years. As a result, the share of loans to the trade sector dropped. Such changes in the loans distribution may be regarded as one of the indicators of decreasing inflationary pressure. As shown on the graph, there exists a strong correlation between the loans extended to the trade sector and the inflation level. Such correlation is mainly conditioned by the fact that loans tend to be procyclical, and rapid growth of the volume of loans is associated with the sector expansion. In turn, one of the reasons for increased activities in the trade sector are high consumer prices.

The share of overdue liabilities dropped to 0.8% of total loans by the end of QII of 2007. The same share at the end of QII of 2006 equaled 1.9%. Decrease of overdue liabilities indicates lower risks in the banking sector. It should be noted that the volumes of overdue liabilities in national currency and in foreign currency equaled each other. Before, overdue liabilities denominated in foreign currency always exceed those in national currency. It was due to the fact that banks more actively used foreign currency for high-risk segments of the credit market. Equalization of overdue liabilities in national and foreign currency was mainly achieved at the expense of reducing overdue

**Figure 3.2.7**  
Deposit Liabilities

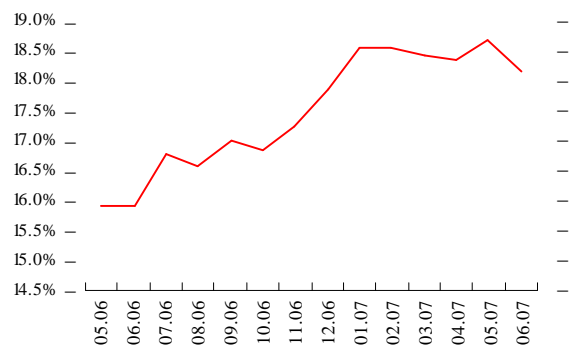


liabilities in foreign currency (although there was also a slight increase of overdue liabilities in national currency). During one year overdue liabilities in foreign currency decreased from 2.2% to 0.8%.

At the end of QII of 2007 deposits attracted by the commercial banks grew by 54.1% year-on-year to a total of 2 396.8 million Lari. Checking deposits increased by 53.6%, while time deposits grew by 54.7%. It should be noted that the share of checking deposits in total deposit liabilities does not undergo radical changes and fluctuates around the approximate level of 50%.

Deposits of legal persons increased by 62.3%, while physical persons' deposits grew only by 45.3%. It should be pointed out the share of legal persons' deposits in the banking system is not subject to significant fluctuations. Legal persons increase their deposits at the expense of foreign currency (87.5% annual growth), while physical persons – at the expense of national currency (115.5% annual growth).

**Figure 3.2.8**  
Share of Mortgage Loans in Total Loans

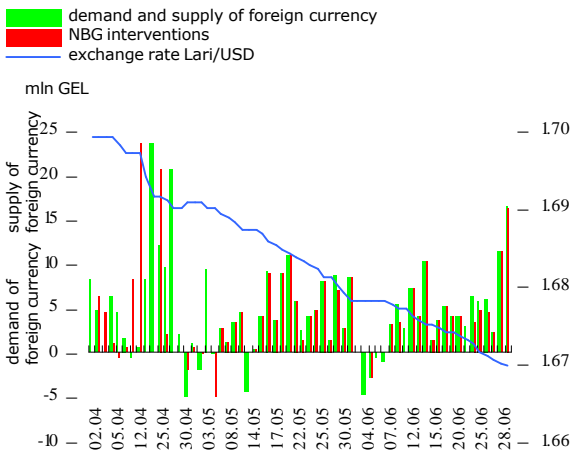


The Georgian real estate market has been rapidly developing. It gradually assumes financial market's functions as well and presents alternative investment opportunities. These opportunities are further promoted by the fact that the stock exchange is illiquid. There also exists a certain distrust towards financial institutions and different financial instruments. In the recent year prices on real estate were growing rapidly. The expectations of economic agents are bullish. Drastic changes of price dynamics might bring about essential risks and transmit them to the financial markets.

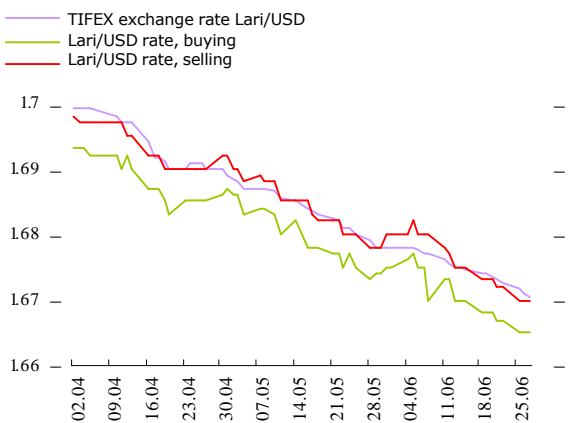
The share of mortgage loans in the total loans has been significantly increasing during 2006. In the first half of 2007 the growth was balanced and mortgage loans were increasing at the rates similar to the whole credit portfolio. This fact reflects to a certain extent the developments in the real estate market, the evolution of which became more balanced. During last year the growth rates of prices on apartments slowed down. At the end of QII of 2007 the price increase equaled 27.0%, while at the end of QII of 2006 it amounted to 36.5%. Growth rates of rent payments also dropped. At the end of QII of 2007 the rent value increased by 22.9%, while at the end of 2006 it grew by 30.2%. Only 16% of mortgage loans are extended in the national currency.



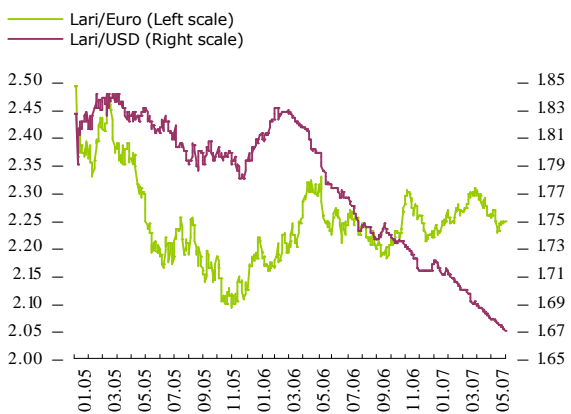
**Figure 3.3.1**  
**Difference Between Supply and Demand of Foreign Currency at the TIBFEX and the NBG Interventions**  
 QII of 2007



**Figure 3.3.2**  
**Dynamics of the Lari Banknote Exchange Rate**  
 QII of 2007



**Figure 3.3.3**  
**Lari Exchange Rate Dynamics Against the Euro and the US Dollar**  
 2005-2007



Source: NBG Data

### 3.3. Foreign Exchange Rates, Dollarization, and the Balance of Payments

#### Foreign Exchange Market

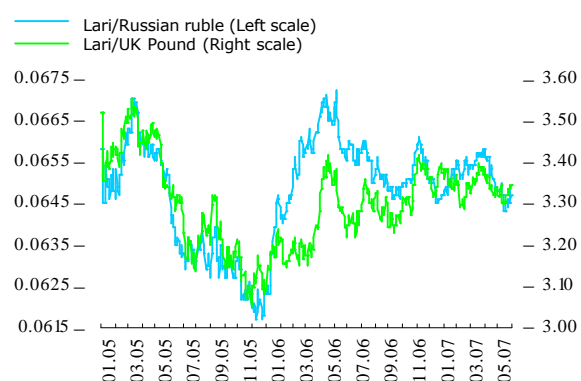
The long lasting upward trend of the Lari exchange rate against the US dollar was maintained throughout QII of 2007. At the beginning of the quarter the exchange rate equaled 1.7, and by June 30 it dropped to 1.6695, which corresponds to 1.79% appreciation. At the same time, the Lari exchange rate appreciated, compared to QII of 2006, both by end-period data (5.84%) and by average-period data (6.59%), which is similar to the developments in QI of 2007 – 6.95% and 5.69% appreciation, respectively.

Compared to QI of 2007, in the accounting period the difference between the supply and demand of foreign currency at the TIBFEX considerably increased. In particular, while in QI of 2007 the volume of foreign currency supply equaled 220.7 million USD and that of foreign currency demand – 105.7 million USD, in the accounting period the same parameters totaled 328.6 million USD and 45.8 million USD, respectively. At the same time, compared to the previous year the volume of the foreign currency supply by the commercial banks grew by 80% (QI of 2006 – 193.1 million USD), while foreign currency demand dropped by 21.6% (QI of 2006 – 58.4 million USD). Under these circumstances the volume of NBG interventions soared. In particular, in the accounting period the NBG purchased 256.4 million USD, or 164% more than in QII of 2006 (97.2 million USD). Meanwhile, the foreign currency sales by the NBG contracted approximately 2.2 times to made up 10.5 million USD (QI of 2006 – 22.9 million USD). Similar to the previous periods, the NBG interventions were directed against drastic fluctuations in the Lari exchange rate dynamics, which was ultimately reflected in the national currency appreciation.

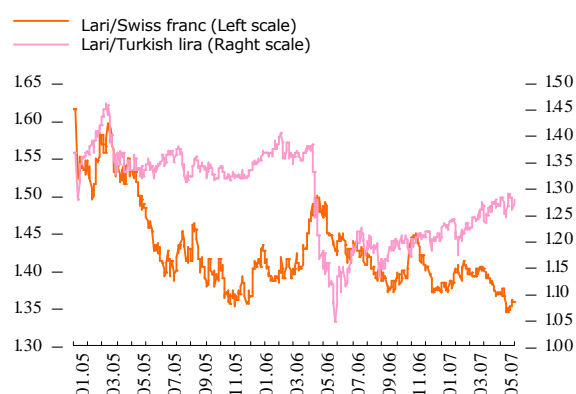
The dynamics of the banknote exchange rate was similar to the TIBFEX Lari exchange rate dynamics, while the spread between the buying and selling rates in the accounting period was relatively low (average values during the quarter – 1.6788 and 1.6838; standard deviations – 0.008454 and 0.008326 for buying and selling rates, respectively), which indicates the fact that the foreign exchange market was stable in the accounting period.

The Lari exchange rate against the Euro was traditionally determined by the above-mentioned depreciation

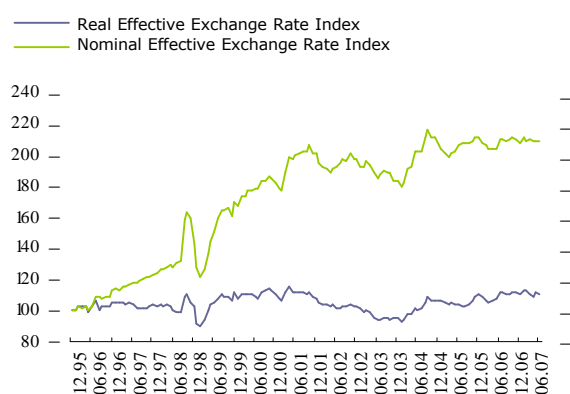
**Figure 3.3.4**  
Dynamics of the Lari Exchange Rate Against the Russian Ruble  
and the UK Pound Sterling  
2005-2007



**Figure 3.3.5**  
Dynamics of the Lari Exchange Rate Against the Swiss Franc and  
the Turkish Lira  
2005-2007



**Figure 3.3.6**  
The Lari Nominal and Real Effective Exchange Rate Indices  
(December 1995 = 100)



Source: NBG Data

of the US dollar against the Lari as well as by the dynamics of the US dollar exchange rate against the Euro. Accordingly, during the quarter the Lari exchange rate against the Euro insignificantly depreciated by 0.8%. As shown on the graphs below, the Lari exchange rate dynamics varied against other foreign currencies. Thus, it appreciated against the UK pound sterling by 0.5%, depreciated against the Turkish lira by 4%, and appreciated against the Russian ruble by 1%. The Lari exchange rate appreciated against the Swiss franc by 2.7%.

## Real Exchange Rate

In QII of 2007 the real effective exchange rate insignificantly appreciated (by 0.24%), compared to QI of 2007. At the same time, the same parameter slightly depreciated (by 0.28%), compared to QII of 2006. As of the nominal effective exchange rate, it depreciated by 0.64% during the quarter, while depreciating by 1.65% with respect to June 2006.

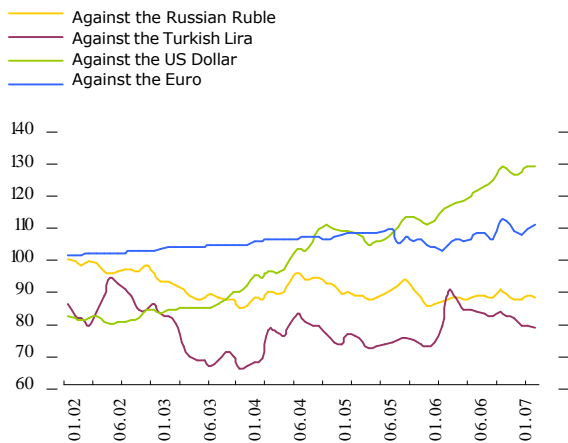
Regarding the dynamics of the Lari real exchange rate against different currencies, the situation was mixed. During the quarter the Lari real exchange rate appreciated against the Euro (1.36%), the Russian ruble (0.72%), and the US dollar (2.13%), whereas it depreciated against the Turkish Lira by 4.21%.

## The Balance of Payments

All components of the balance of payments (BoP) are not yet available for QII of 2007. Therefore, the analysis will be based on QI BoP data as well as on QII foreign trade data and certain components of the BoP.

Due to the Russian embargo in QII-III of 2007, Georgian trade deficit grew larger than expected, which led to the deterioration of the current account. This was particularly visible in QII, when the current account deficit grew by 142%, compared to the same period of 2005. The situation somewhat improved in QIV, when the current account deficit only grew by 18%, compared to QIV of 2005. However, in QI of 2007 significant growth rates of the current account deficit were registered again – the latter almost doubled with respect to QI of 2006 to a total of 385.8 million USD, posting a record high level in 2000-2007.

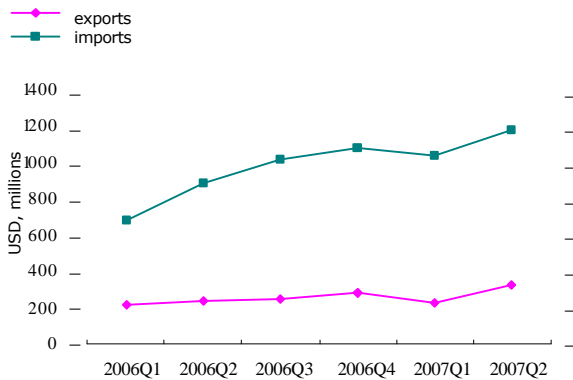
**Figure 3.3.7**  
**The Index of the Lari Real Exchange Rate Against Different Currencies**  
 December 1995=100



Source: NBG Data

In QI of 2007 the current account deficit was still conditioned by the trade deficit, while the latter was negatively influenced by the doubled price of Russian natural gas imports resulting in 102% increase in the value of natural gas imports from QI of 2006 (56.6 million USD) to QI of 2007 (114.2 million USD). Apart from this direct effect of higher gas prices, there were also indirect effects on the trade balance. In particular, increased prices of gas imports pushed up production costs, thus making exports more expensive and, obviously, less competitive. Domestic production costs were also negatively affected, which created more favourable conditions for imports. All of the above deteriorates the trade balance. However, what drives imports the most is the increased domestic demand fueled by growing foreign investments (especially FDIs, which were twice as high in QI of 2007 as they were in QI of 2006).

**Figure 3.3.8**  
**Official Foreign Trade Data**



Officially registered foreign trade turnover in QII of 2007 totaled 1507.2 million USD, which is 34% higher than it was in the same quarter of 2006. Exports grew by 37%, and imports - by 33%. After the Russian embargo it was the first quarter when the growth rates of exports were higher than those of imports. Compared to QI of 2007, exports increased by 44%.

Top ten of trade partner countries changed, both in exports and imports. Russia lost its first place in Georgian imports (QI of 2007) as well - in QII of 2007 it was in the third place, after Turkey and Ukraine. In QII of 2007, the top ten of partner countries in imports is shown in table 3.3.1:

**Table 3.3.1**  
**The Top Ten of Partner Countries in Imports (USD, Millions)**  
 2007, Q2

	2006Q1	2006Q2	2006Q3	2006Q4	2007Q1	2007Q2
Imports, Total	682.5	887.1	1023.2	1085	1044.5	1183.8
Of Which:						
Turkey	77.7	121.2	144.9	178.8	136.2	167.5
Ukraine	51.1	71.9	98.4	98.8	92.4	133.1
Russia	128.2	141.6	140.9	148	168.5	129.6
Germany	68.1	92.2	86.3	104.6	86.3	92.6
Azerbaijan	50.2	82.9	86	99.3	75.6	90
UAE	21.2	22.4	25.8	39.6	42.4	45.5
China	17.4	23.5	29.1	33.3	41.5	45.2
USA	27.1	30.1	28.5	44	35.5	39.7
Italy	15.1	23.5	33.7	29.9	25.3	37
Bulgaria	26.8	32.8	33.8	22.1	38.5	35.5
Other Countries	199.6	245	315.7	286.7	302.3	368.1

Turkey assumed the role of main partner for Georgian exports after the Russian embargo. This was particularly manifest in QII of 2007, when the growth rate of exports to Turkey increased by 77%. The higher rate of exports growth was registered for Azerbaijan, with total exports volumes reaching 41.5 million USD in QII of 2007. USA and Bulgaria followed in the top ten exports partners list, with approximately the same volumes. As for Russia, it took the last place in the top ten list, mainly due to ferroalloys exports.

In QII of 2007, the list of top ten partner countries in exports was as shown in table 3.3.2:

Certain changes occurred in the list of main trade items. The list of top ten exports items is shown in table 3.3.3:

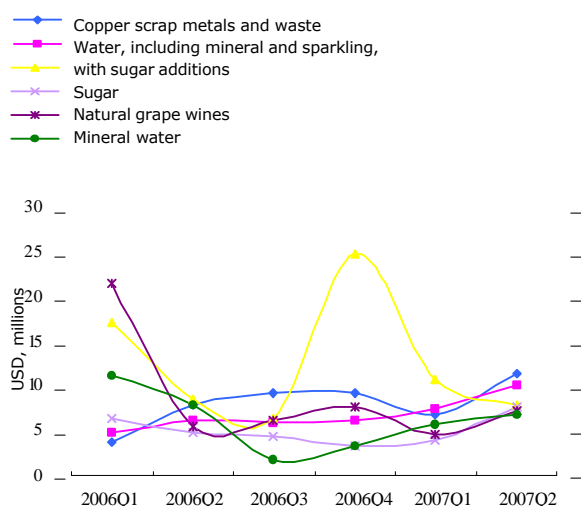
**Table 3.3.2**  
The Top Ten of Partner Countries in Exports (USD, Millions)  
2007, Q2

	2006Q1	2006Q2	2006Q3	2006Q4	2007Q1	2007Q2
Exports, Total	221.4	236.0	248.3	286.8	225.2	323.4
Of Which:						
Turkey	17.3	27.3	36.6	43.7	35.8	48.3
Azerbaijan	14.6	20.2	22.4	34.9	22.2	41.5
USA	15.6	12.5	23.9	6.8	10.6	23.6
Bulgaria	11.6	20.2	18.3	12.2	7.9	22.3
Armenia	12.4	20.8	18.2	22.2	21.5	22.2
Ukraine	12.8	14.0	14.7	15.5	17.0	21.0
Turkmenistan	25.7	34.0	8.7	3.4	1.2	20.1
Canada	10.1	12.0	12.8	14.0	9.5	14.5
UAE	0.9	2.4	9.4	10.2	1.8	11.0
Russia	43.8	10.0	13.1	8.7	13.3	10.4
Other Countries	56.6	62.7	70.0	115.2	84.4	88.3

**Table 3.3.3**  
Main Export Items (USD, millions)

	2006Q1	2006Q2	2006Q3	2006Q4	2007Q1	2007Q2
Exports, Total	221.4	236.0	248.3	286.8	225.2	323.4
Of Which:						
Ferroalloys	19.6	20.1	30.2	19.9	18.1	33.9
Black Scrap Metals and Waste	13.5	20.3	19.5	19.1	20.8	30.2
Copper Ore and Concentrates	10.2	23.0	21.6	24.7	21.0	24.0
Cars	4.5	9.5	15.5	21.2	13.1	20.0
Portland Cement	4.1	7.4	7.9	9.4	9.2	17.5
Fertilizers, Mineral or Chemical, Nitrogenous	10.0	9.0	13.5	14.2	14.3	14.5
Gold, Crude or Semi-processed, or Gold Sand	11.1	11.8	12.5	13.9	9.4	14.5
Ethyl Spirits, under 80% Concentration, Alcoholic Beverages	8.4	5.3	8.4	8.0	11.6	14.3
Petroleum Oils and Oils Produced From Bituminous Minerals, Crude	5.9	3.0	7.6	8.9	3.0	12.2
Airplanes	15.5	25.4	8.9			11.7
Other Products	118.6	101.2	102.8	147.6	104.7	130.7

**Figure 3.3.9**  
Goods Exports Dynamics



As we can see, ferroalloys were in the first place in QII of 2007 as well as in the first half of 2007. Black scrap metals moved to the second place, posting a 50% increase compared to the same quarter of 2006. Copper ore took the third place (6.2% of total exports), while cars were in the fourth place, completely due to re-exports. The last place in the top ten exports items list is occupied by airplanes exports. It should be noted that this exports item was not present at all in overall exports during the previous two quarters.

Outside of the top ten list remained such important commodities as mineral water with and without sugar, natural grape wines, sugar, walnuts and hazelnuts, copper and aluminum scrap metals. The graph below show the exports dynamics of these commodities by quarters. Depicted fluctuations of hazelnuts are explained by the seasonal nature of this product, while the rest show upward trends in the recent period.

The top ten imports are shown in table 3.3.4:

The commodity group of petroleum oils and products is still on top, accounting for 11% of total imports. Cars moved up to the second place, while the natural gas item dropped from the first place in QI to the third place in QII, accounting for slightly more than 5% of total imports. Imports of ferrous metal products increased considerably, which is explained by the construction boom in Georgia. The volume of medication imports is relatively stable, showing a slight increase compared to the same quarter of 2006 and a 4.1 million USD decrease against QI of 2007.

In QII of 2007 237.0 thousand of foreign citizens entered Georgia, or 36% more than in the same quarter of 2006. This fact allows us to expect a considerable growth in the exports of tourist services. In the same period, 335.6 thousand Georgian citizens went abroad, exceeding the same number in QI of 2006 by 24%. However, the number of Georgian citizens leaving the country exceeds the number of those returning, which indicates that the number of Georgian citizens going abroad to work is still increasing.

In 2007 the volume of money remittances grew considerably, largely compensating for the current account deficit. In QII of 2007 189 million USD was transferred to Georgia - 61.5% more than in the same quarter of 2006. In the first 6 months of 2007 the overall volume of money remittances totaled 352.8 million USD, or 61.5% more than in the first half of

**Table 3.3.4**  
**Main Import Items (USD, millions)**

	2006Q1	2006Q2	2006Q3	2006Q4	2007Q1	2007Q2
Total Imports	682.5	887.1	1 023.2	1 085.0	1 044.5	1 183.8
Of Which:						
Petroleum Oils and Petroleum Products	80.8	122.5	142.1	97.7	97	131.2
Cars	65.5	72.8	70.2	86.9	79.1	88.5
Petroleum Gases and Other Gaseous Hydrocarbons	57.4	44.7	40.6	70.4	115.7	60.5
Ferrous Metal Products	0.8	1.4	3.7	6.3	21.2	49.2
Medicaments	25.4	31.1	25.5	32.6	36.5	32.4
Radio-Broadcast and Television Receivers	8.1	12.5	18.6	19.6	13.9	29.8
Wheat and Meslin	16.9	20.7	26.9	34.5	26.4	26.9
Computers and Parts Thereof	8	10.3	14.2	14	14.1	20.1
Sugar	11	16.4	22.4	15.8	12.6	19.5
Wire, Made of Carbonic Steel, Without Further Processing	6.2	8.9	11	7	19.3	15.4
Other Goods	402.6	546	648	700.2	608.6	710.4

2006. Russia's attempts to restrict money remittances from its territory to Georgia failed, as almost two thirds of total money remittances through the banking system came from Russia. The United States is the second country on the list, from which 48.3 million USD was transferred to Georgia, or 14% of total money remittances. The shares of other countries are not large, with Spain and Greece accounting for 3% each of total remittances.

By preliminary data, the current account deficit in QII of 2007 amounts to 350 million USD. The deficit financing is still effected at the expense of FDIs. In QII the government's external debt was reduced. In particular, old debt of 40 million USD was repaid, comprising debt to Turkmenistan (17 million), IMF (10 million), etc. New loans received by the governmental sector in QII of 2007 make up only 19.6 million USD, including loans from the World Bank (8 million), EBRD (4.6 million), the Government of Germany (4 million), etc. It should be noted that in QII there was no additional financing from the IMF.

### Box 3. Optimal Monetary and Fiscal Policy Under Large Financial Inflows

In recent years the Georgian economy benefited from large foreign capital inflows, which essentially reduced the financial deficit experienced by the country over the years. Financial inflows are mainly channeled through the FDIs, also promoting technology transfer to the country.

Despite various positive factors, large capital inflows also create certain negative risks. Among them are the distortion of macroeconomic stability, increased inflationary risks, lower competitiveness of the export sectors and increased dependency on foreign factors. The most serious risk consists in overheating of the economy and the national currency appreciation to such a level which could not be sustained once large capital inflows end.

In general, the more balanced is the macroeconomic policy, the easier it is to avoid risks from capital inflows. On the other hand, under unbalanced macroeconomic policy, for example, when tight monetary policy is accompanied by excessive fiscal expansion, existing risks are promptly actualized.

There are three types of instruments which could be used by an open economy under large financial inflows: i) sterilizing interventions; ii) appreciation of the nominal exchange rate; and iii) fiscal contraction. The optimal selection of these policies depends on the reasons for fiscal inflows, of which there could be three:

**1. Increase in money demand within the country.** It should be noted that in transition economies under deregulation processes increase of money demand may be expected. In this case low levels of sterilization are allowed, the nominal exchange rate appreciates, but the real exchange rate does not change (since demand affects both the exchange rate and prices). In this case fiscal intervention is not needed. It is remarkable that increase in money demand ensures that non-sterilized interventions do not cause inflation. However, under these conditions rapid growth of bank crediting takes place, which may create risks for financial stability. In this case, it is recommended that the central bank tighten its supervision policies.

**2. Temporary external factors.** It should be pointed out that in Georgia’s neighboring countries large financial inflows are taking place, which may support the assertion that capital inflows to Georgia are conditioned by external factors. In this case appreciation of the nominal exchange rate is not expedient, since capital inflows due to temporary external factors are not sustainable. Under these conditions the long-term real exchange rate does not change (since capital productivity does not change) and through the appreciation of the nominal exchange rate the real exchange rate will move away from its long-term level, resulting in further fluctuations of the exchange rate and prices. Accordingly, full sterilization represents an optimal policy, which is frequently the case in transition countries. Only then it becomes possible to use fiscal contraction as a supplementary policy to mitigate inflationary risks.

**3. Productivity growth.** In this case the real exchange rate appreciates, which may be the result of appreciation of the nominal exchange rate and increase of prices on non-tradable goods. Under this scenario it is recommended to appreciate the nominal exchange rate and conduct limited sterilizations. In this case fiscal contraction is the most important. Especially, if the level of capital inflows is very high and there exists a risk that the economy will overheat and fail to absorb financial inflows efficiently. In this case, increase of aggregate demand through fiscal policies is not desired.

To determine the nature of capital inflows, we can use the following table where each reason is described with the relevant attributes.

Indicator	Increase in Money Demand	External Factor	Increase of capital productivity within the country
Inflation	Decreases	Increases	Increases
Exchange Rate	Appreciates	Appreciates	Appreciates
Interest Rates	Increase	Decrease	Increase
Real Estate Prices	Decrease	Increase	Increase
Bank Credit	May increase	May increase	Increases
FDIs	Uncertain	Uncertain	Increases
Portfolio Investments, Credits to Commercial Banks	Increase, especially short-term	Increase, especially short-term	Increase, steadily

*Table is based on the article by Haque, Mathieson and Sharma (1997).*

The above table shows that the the growth of capital productivity may be the main cause of increased capital inflows in Georgia. For example, increased money demand is excluded since in this case we ought to have deflation. Also, external factors are not relevant since there is an upward trend in interest rates in the recent period.

Therefore, a number of factors indicate that in the recent period capital inflows are conditioned by productivity growth within the country. Under these circumstances it is imperative to have a balanced coordination of monetary and fiscal policies. Monetary policy should not hinder the appreciation of the nominal exchange rate, while the fiscal policy should be less expansionary and subject to monetary policy. Otherwise, the risks of inflation and economy overheating may increase further.

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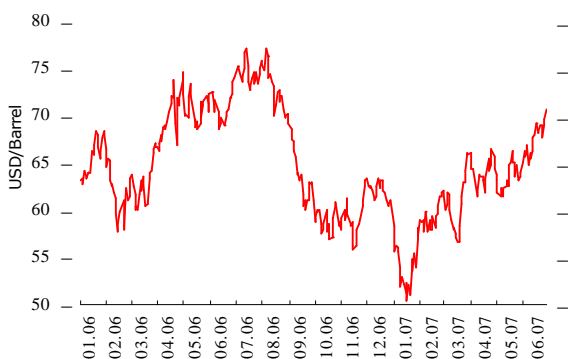
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**Figure 3.4.1**  
Dynamics of Oil Prices



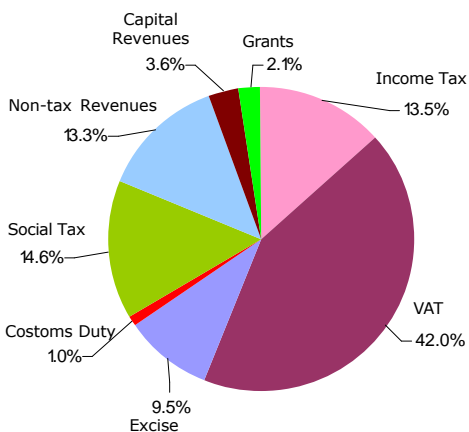
Source: Bloomberg

**Table 3.4.1**  
Nominal and Real Growth of State Budget Revenues in the First Half of 2007 Compared To the Same Period of 2006 (Percentage)

	Nominal Growth	Real Growth*
Total Revenues and Grants	33.5	22.6
Total Revenues	32.5	21.6
Tax Revenues	43.7	31.9
Income Tax	84.3	69.2
VAT	51.9	39.5
Excise	32.8	21.9
Customs Duty	-74.1	-76.2
Social Tax	43.5	31.7
Non-tax Revenues	7.8	-1.1
Capital Revenues	-31.0	-36.7
Grants	114.6	97.0

\* Real growth is deflated by the average annual inflation of the first 6 months of 2007

**Figure 3.4.2**  
Total State Budget Revenues by Category  
First Half of 2007



Source: Ministry of Finance

### 3.4. Production Costs

#### Dynamics of Oil Prices

In QII of 2007 the dynamics of oil prices showed an upward trend, differing from higher fluctuations of the previous quarter. In the accounting period oil prices posted relatively high growth rates, and by June 30 they grew by 7.3%, compared to end-March.

#### Budget

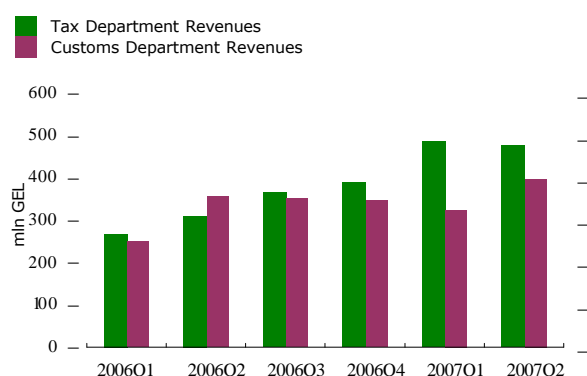
According to preliminary data for the first half of 2007, state budget revenues and grants totaled 2072.2 million Lari, and own revenues - 2029 million Lari. The planned targets were fulfilled in both items at 101.7%. In the same period tax revenues amounted to 1679.7 million Lari, while the planned target equaled 1651.3 million Lari. Income tax revenues made up 806.4 million Lari. Compared to the first half of 2006, nominal growth of tax revenues was equal to 43.7%, while real growth (adjusted for inflation) stood at 31.9%.

During January-June 2007 planned targets of tax revenues were actually fulfilled at 101.7%. The share of tax revenues in the state budget revenues and grants increased to 81.1%, compared to 75.3% in the first three months of 2007 and 75.5% in the first half of 2006.

In the first half of 2007 state budget revenues were increased by almost every type of taxes, except the customs duty. In particular, revenues from the income tax drastically increased by 84.3%, VAT - by 51.9%, excise tax - by 32.8%, social tax - by 43.5%. Targets were met for every type of taxes. Strengthened tax administration along with economic growth conditioned significant increase of budget revenues.

The new Customs Code became effective on January 1, 2007, whereas the Law "On Customs Duty" expired and its provisions were incorporated into the Customs Code in the form of amendments and addenda. The customs duty rates since September 2006 are 0%, 5%, and 12%. Almost 90% of items are subject to 0% customs duty. The seasonal customs fee has been abolished. The reduction in customs duty rates significantly conditioned the fact that in the first half of 2007 revenues from the customs duty made up only 21.5 million Lari, against 83.1 million Lari of the previous year.

**Figure 3.4.3**  
State Budget Revenues By Sources



**Table 3.4.2**  
Real Value-Added Per Employee and Nominal Average Monthly Wages in QI of 2007, Compared To QI of 2006 (Percentage)

	Real Value-Added	Nominal Wages
Agriculture	93.7	134.8
Industry	106.8	138.4
Construction	74.8	166.4
Trade	110.3	106.1
Hotels and Restaurants	58.0	131.1
Transport, Communications	131.0	112.8
Financial Intermediation	122.4	120.3
Public Administration, Defense	108.4	130.5
Education	103.3	117.7
Healthcare	134.8	151.5
Total	103.4	120.1

Source: Department of Statistics

Improvements in tax administration are particularly manifest in the drastic increase of revenues by tax and customs agencies. Thus, the Tax Department collected 66.6% (383.7 million Lari) more, and the Customs Department - 21.4% (115.4 million Lari) more in tax revenues, compared to the same period of 2006. The Tax Department fulfilled its revenue target at 101.9%, and the Customs Department - at 101.5%.

In the first half of 2007 the state budget deficit was planned at the level of 93.9 million Lari. However, higher revenues and lower expenditures resulted in surpluses of 23.5 million Lari. At the same time, 49.6 million Lari was received from external sources for long-term investment projects. As a result of accumulation of idle circulating funds<sup>1</sup>, account balances at the Treasury as of July 1, 2007 increased by 78.9 million Lari compared to January 1, 2007.

As regards the consolidated budget (sum of the state and territorial entities' budgets), total revenues and grants amounted to 2488.9 million Lari, of which own revenues equaled 2445.4 million Lari and tax revenues - 1992.7 million Lari. Revenues exceeded expenditures by 159.5 million Lari. In the first half of 2007 budget expenditures made in foreign currency exceeded governmental revenues and foreign credits received in foreign currency by approximately 60 million USD. This reduced the monetary mass in circulation. In addition, overall volumes of governmental deposits increased by approximately 211 million Lari<sup>2</sup>. In this regard, the fiscal policy did not contribute to inflation.

## Labor Productivity, Wages

In QI of 2007 a drastic increase in the average wages was registered. Nominal wages grew by 20.1%. Considerable growth of wages was observed in most sectors of the economy. In QI of 2007 average monthly wages (after taxes) stood at 206.1 Lari<sup>3</sup>.

In QI of 2007 real growth of value-added per employed equaled 3.4%<sup>4</sup>, compared to QI of 2006. In particular, high growth rates were manifested in

<sup>1</sup> The amount of returned budgetary funds in the previous year amounted to 3.8 million Lari.

<sup>2</sup> Excluding 123 million Lari received on June 29 from privatization proceeds.

<sup>3</sup> Data based on Household Survey.

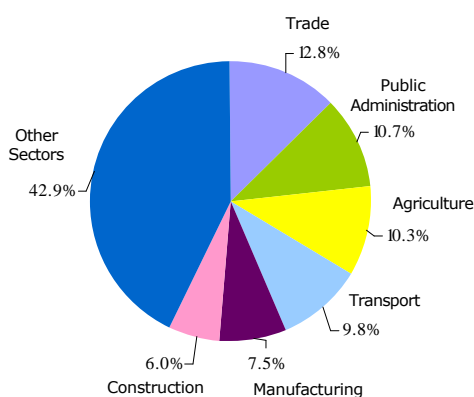
<sup>4</sup> Preliminary data.



**Table 3.4.3**  
Georgian Gross Domestic Product By Sectors

	2006			QI of 2007		
	GDP Share	Growth	Impact on GDP Growth <sup>1</sup>	GDP Share	Growth	Impact on GDP Growth <sup>1</sup>
Agriculture, Forestry, Fishing	11.3%	-9.6%	-1.4%	10.3%	-6.5%	-0.7%
Mining and quarrying	1.0%	20.8%	0.2%	0.9%	27.8%	0.3%
Manufacturing	8.6%	22.2%	1.9%	7.5%	9.4%	0.8%
Electricity, gas and water supply	2.7%	14.2%	0.4%	2.9%	6.8%	0.2%
Processing products by household	2.5%	2.3%	0.1%	2.2%	13.2%	0.3%
Construction	6.8%	9.8%	0.8%	6.0%	12.1%	0.8%
Trade services, Repair services	13.6%	19.8%	2.4%	12.8%	13.9%	1.9%
Restaurant and Hotel services	2.2%	11.9%	0.3%	2.1%	4.7%	0.1%
Transport and storage	8.0%	14.6%	1.2%	9.8%	23.2%	1.9%
Communications	3.5%	12.0%	0.5%	3.3%	5.6%	0.2%
Financial intermediation	2.3%	39.4%	0.8%	2.3%	18.2%	0.4%
Real estate, renting and business activities	3.2%	11.0%	0.3%	2.8%	10.4%	0.3%
Imputed rent of own occupied dwellings	2.4%	-1.3%	0.0%	2.6%	6.9%	0.2%
Public administration and defense	8.6%	-1.3%	-0.1%	10.7%	10.8%	0.9%
Education	3.6%	6.6%	0.2%	3.2%	2.8%	0.1%
Health care and social Services	4.3%	14.1%	0.5%	3.7%	16.1%	0.7%
Other community, social and personal service activities	3.4%	11.5%	0.4%	4.2%	3.1%	0.1%
Private households with employed persons	0.1%	7.9%	0.0%	0.1%	3.3%	0.0%
(-) FISIM adjustment	-0.9%	-6.9%	0.1%	-1.2%	136.5%	-1.2%
(=)Gross Domestic Product at basic prices	87.4%	9.6%	8.5%	86.0%	8.6%	7.5%
(+) Taxes on products	13.1%	6.9%	0.8%	14.5%	27.2%	3.6%
(-) Subsidies on products	-0.4%	-11.0%	0.1%	-0.6%	2.1%	0.0%
(=)Gross domestic product at market prices	100.0%	9.4%	9.4%	100.0%	11.4%	11.4%

Source: Calculations are based on the Department of Statistics data.

**Figure 3.5.1**  
The Largest Sectors' Share in the GDP\*  
QI of 2007

transport and communications, financial intermediation, healthcare, and trade sectors. However, it should be noted that real growth of value-added per employed in QI of 2007 is contrasted to 2005-2006 trends, when growth rates reached double-digit levels.

In QI of 2007 annual growth rates of average wages exceeded the real growth of value-added per employed by 17%. If we exclude such a non-market sector as public administration, the above difference will be even larger. All this indicates the presence of inflationary risks.

### 3.5. Production and Demand

#### Production<sup>1</sup>

In QI of 2007 Georgian gross domestic product at current market prices totaled 3 409.1 million Lari. GDP per capita amounts to 776 Lari. Due to seasonal factors, the first quarter traditionally shows the lowest results, thus, comparison with the annual quarterly GDP growth rate of 2006 is incorrect. Compared to QI of 2006, GDP growth in QI of 2007 was 11.4%.

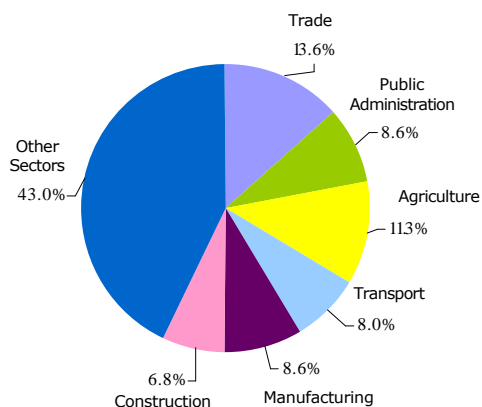
Sectoral review of economic growth shows that in QI of 2007 positive growth rates were registered almost in every sector, compared to QI of 2006. "Transport" and "financial intermediation" should be particularly mentioned with growth rates amounting to 23.2% and 18.2%, respectively. At first sight, climatic conditions in 2007 are better than in 2006. According to the Department of Statistics, the real value-added in agriculture decreased by 6.5%, compared to the same Quarter of 2006.

#### Household Consumption

In QI of 2007 household consumption grew by 7.7% in nominal terms, compared to QI of 2006. Accounting for inflation, we may assert that real consumption virtually did not change. However, it should be pointed out that due to high statistical errors in GDP calculations by production and expenditure methods it is difficult to make accurate conclusions. In QI of 2006 the ratio of statistical error to GDP equaled

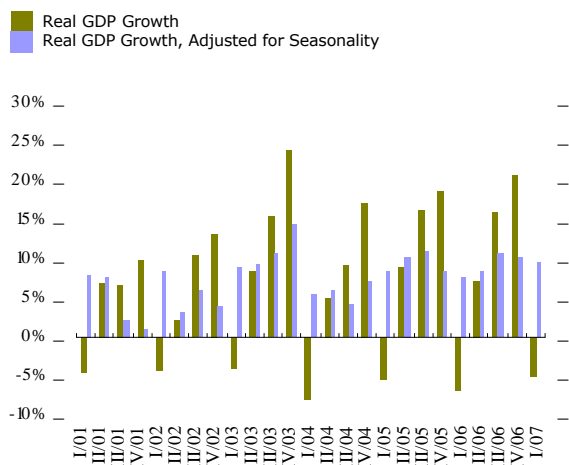
<sup>1</sup> Preliminary data.

**Figure 3.5.2**  
**GDP Share of the Same Sectors\***  
 Q1 of 2007/Other Sectors  
 2006

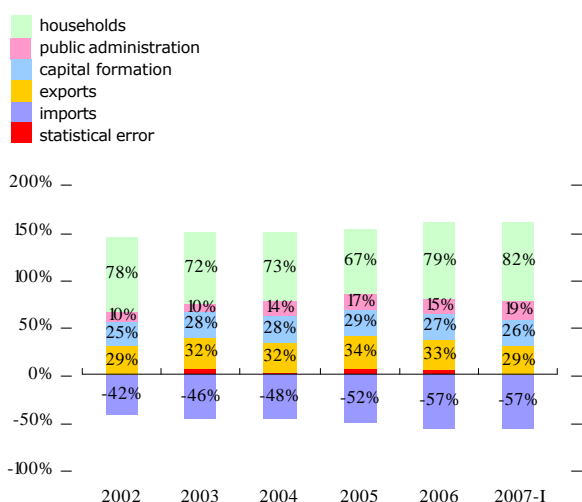


\* In order to calculate the GDP growth impact for each sector, the growth rate at a given time interval is multiplied by the sector's share in the GDP of the previous period. Such calculations do not provide absolutely accurate results, but they are quite close to reality and suitable for having an understanding on the GDP impact for each sector.

**Figure 3.5.3**  
**Quarterly GDP Growth Rates With Respect to the Average Annual GDP Growth Rates of the Previous Year**



**Figure 3.5.4**  
**Uses of Imports and Domestic Production (GDP, %)**



10.8%, while in Q1 of 2007 - 0.4%. Thus, it is quite likely that household consumption grew more than by 7.7%.

## Government Expenditures

In Q1 of 2007 government expenditures increased in nominal terms by 19.4% with respect to the previous quarter. In comparison to Q1 of 2006 the growth rate equaled 90.5%. The main part of government expenditures affects domestic demand. However, it should be noted that a share of government expenditures after currency conversion is spent on imports. In Q1 of 2007, at the request of the Government of Georgia, the NBG performed a currency conversion worth 128.4 million USD, which exceeds the respective level of 2006 3.7 times. Currency conversion accounted for one third of total government expenditures.

## Investments

In Q1 of 2007 total capital formation equaled 899.4 million Lari, or 17.7% more than in the same quarter of 2006. However, this figure fell behind the nominal GDP growth rate (20.3%). Accordingly, the share of investments in the GDP decreased from 27.0% in Q1 of 2006 to 26.4% in Q1 of 2007.

In the accounting period the FDIs totaled 286.3 million USD, which is 1.96 times higher than in Q1 of 2006. Drastic increase of foreign investments in the country is the result of improved business environment and successful privatization process.

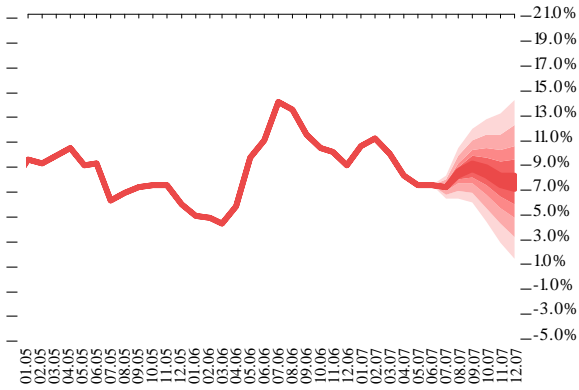
The main flow of FDIs stemmed from the following countries: Denmark (28.8%), Turkey (13.0%), Netherlands (11.4%), United Kingdom (9.9%), Virgin Islands (9.0%), USA (5.2%), Russia (5.0%) and Azerbaijan (4.5%).

Considerable growth of FDIs was one of the main reasons causing high demand for national currency and Lari appreciation at the foreign exchange market. Investments inflow also allowed households to maintain high growth rates of consumption, which promoted the GDP growth.

# Inflation Forecasts

# 4

**Figure 4.1**  
Inflation Forecast  
2005-2007



Under conditions of expected growth rates of GDP and monetary mass, stable Lari/USD exchange rate, correct market expectations of oil prices (69 USD/barrel), better-than-last-year crops, small growth rates of imports inflation and excluding other exogenous factors, as well as taking into account expected inflation due to the increase in gas prices, inflation forecasts, under the same monetary policy, look as shown on figure 4.1:

The graph shows that, the annual inflation in December 2007 is forecasted with 20% probability to be at the level of 5.72%-9.24%.

„Inflation Report“ was prepared for publishing at National Bank of Georgia

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