## NATIONAL BANK OF GEORGIA

# INFLATION REPORT



## I Quarter, 2006

## PREFACE

The key function of the National Bank of Georgia is the achievement and maintenance of price stability, meaning insurance of low level and predictable rate of inflation. Transparency of monetary policy is of great importance for the above purpose. Ensuring that economic agents are provided with precise, documentary and comprehensible information on the deliberations based on which NBG makes its decisions, as well as on its perspective trends is also very important. Hence, the economic behavior of the population will become more consistent and will facilitate the creation of reasonable inflation expectations.

Many central banks, in order to ensure transparent monetary policy, along with different activities, publish inflation review. Generally, such documents reflect the monetary views of the authority on the processes inside and outside the country that affect the price dynamics. Such documents, using popular and understandable language, explain the basis of the decisions made when carrying out the monetary policy to the wide public. It is also noteworthy that the document of the inflation review is the key communication document with the public for central banks (the number of which exceeds 20 and is permanently increasing) that carry out the inflation targeted regime.

In view of the above, for the purposes of monetary policy, NBG considered the renewal of publication of the Inflation Review reasonable. In addition, publication of such reviews is also envisaged by 2006-2009 Banking System Development Strategy. Unlike the publications in 2003, the inflation review will be prepared on a quarterly basis, and more detailed qualitative and quantitative analysis of the occurrences will be carried out. The review will also be translated into English, meeting the interests existing among international institutions towards Georgia.

#### Why Is the Stability of General Level of Prices Important?

Price stability is a very important condition for efficient allocation of existing resources. Namely, when demand (price) for the output produced by a company is increasing, the company should identify whether this is due to real increase of the demand for the produced output or it is the result of general level of prices increase generated due to demand shock. Production increase may be the rational reaction to the former situation, while for the latter - only the price increase. This means that when making consumer and investment decisions, it is important to differentiate the relative price changes from general price changes, which is guite difficult under the conditions of high and fluctuating inflation/deflation. Price stability assists the market to direct available resources to the places where they will be applied in the most efficient manner. Therefore, the price stability improves the level of households' well-fare and increases the potential of economy.

Inflation not liable to projection decreases the possibilities of implementation of long-term investments. Namely, if the inflationary anticipation is from 0 to 10% the lender, in order to insure the risk, would envisage 10% as the inflation risk premium, while the borrower, for the same purpose, would consider 0% as the inflation risk premium, which would make it impossible to carry out the investment of financial resources. In such situations the investors prefer high profitable projects that yield quick profit, and they invest their resources in the assets that are protected from inflation (for example, real estate). Inflation, liable to projection, increases the investment stimuli, which from its part, increases the level of economy and its well-fare. Along with this, the higher the inflation, the more it fluctuates.

Inflation functions as a tax on the cash under possession. It decreases the demand for cash and, respectively, causes higher transaction expenses, which could also serve as an argument in case of deflation. Therefore, high inflation – even in case if it is liable to projection, generates expenses.

Trustworthy maintenance of price stability decreases the probability of applying the resources to protect from inflation instead of their productive application. For example, under high inflation the stimulus of creation of the supply of commodities emerges as commodities tend to maintain their value more than cash or any financial asset. It is noteworthy that creation of supply does not represent an efficient investment decision as it hampers the increase of economy. The same could be noted in terms of deflation when companies and households expect the decrease of general level of prices and, respectively, try to delay the payment of investment and consumer expenditures.

Maintenance of price stability excludes significant and random redistribution of wealth and revenue, which is the case under inflationary as well as deflationary environment when price dynamics is not liable to projection (for example: redistributing effect between creditors and debtors). Generally, the unprotected stratum of society suffers the most from inflation due to limited insurance opportunities. Respectively, stable environment, in terms of general level of prices, facilitates the maintenance of social unity and stability.

Stability of general level of prices is also very important for the purposes of financial stability. Though, presently the issue –whether price stability is sufficient for guaranteeing financial stability represents a widely discussed one - it is considered to be a necessary precondition in order to achieve financial stability. Low inflation can be the reason for financial instability only if it follows high inflation and decrease of the rate of price increase is not liable to projection. Under such conditions actual, real percentage rates increase that becomes the reason for deterioration of the quality of banks credit portfolio. Though, it should also be mentioned that even in this case the real reason for financial instability is not low inflation but high inflation observed during the previous period as well as high inflation expectation for the following period.

The above arguments do not tend to prove that zero inflation indicator should be the target of efficient monetary policy. There may be named a number of arguments for this purpose, particularly: inaccuracies while computing inflation, rigidity characterizing the process of price and salary decrease, impossibility to define market negative nominal percentage rate, etc.

Finally, we recall the words of Allan Grisspe: price stability for all practical purposes means that expected change of the average price level is intangible for the decisions made by business and household.

In the countries with the level of economic development similar to Georgia, the earmarked

inflation indicator is higher, compared to the developed countries, which very often can be explained based on Balasa-Samwelson effect<sup>1</sup>. Relatively high and fluctuating inflation due to price "adjustment" effect for the countries with transitional economies, which is the case when non-market price-formation is replaced by market price-formation, is also important.

Presently, NBG defines the general level of prices stability as 5-6% of inflation indicator by the end of the year.

<sup>1</sup>Balassa-Samuelson hypothesis means that productivity or productivity increase among countries is more different in the trade sector. Based on the same theory, consumer prices are higher in the countries with high income compared to those with low income.

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4.

## INTRODUCTION



After relatively high annual inflation during the previous period the inflation dynamics in Georgia was relatively stable in quarter I of 2006, which points out that temporary character of relatively high inflation was correctly evaluated. The prices have increased by 1.5% since the beginning of 2006 and amounted to 4.6% of annual inflation by March. Core inflation reduced compared to the previous quarter that demonstrated the decrease of rate growth of the level of general prices. Concurrently, during the reporting period producers price index increased that could be explained by price increase on metal, sugar and energy carriers.

During the reporting period the tendency of significant increase of the banking sector deposits (annual 45.7%) and loans (annual 86.7%) continued. The banking sector played significant role in the formulation of domestic demand through money multiplication. Based on the month average data, in March 2006 the reserve money annual increase amounted to 27.4%, while  $M_2$  and  $M_3$ , respectively increased by 34.4% and 34.0%. Hence, NBG monetary policy in March was mainly focused to neutralize the excess liquidity.

Lari nominal exchange rate against US dollar was relatively stable in the first quarter of 2006, though, week devaluation tendency, mainly caused by seasonal factors, was observed.

In the first quarter of 2006 the Lari effective exchange rate depreciated by 4.1%, while nominal effective rate – by 3.4%. Though, both – small appreciation of nominal as well as real effective exchange rate was observed compared to the first quarter indicators of 2006– respectively 2.7% and 2%.

Current account deteriorated again that was caused due to increase in the domestic demand as well as significant rise in the price on energy carriers. It is anticipated that in the short run, under deteriorated trade conditions due to embargo imposed by Russia, the current account deficit shall further increase. Deterioration of the current account may not, along

with the increasing currency revenues anticipated from the financial account, necessarily depreciate the exchange rate.

The State Budget is still having significant impact on the consumer price index. On one hand, the budget of the country, facilitated consumer expenses through social redistribution mechanism, increased state investments, were the key source for capital formation and on the other – the arithmetic dynamics of the state budget revenues and expenditures significantly affected the fluctuation of the money.

In 2005 pretty sharp increase in nominal wages was observed (annual 27.4%), which along with 16.2% increase in labor productivity, at one sight, bears significant inflation risk. Though, excluding the public non-market sector, higher increase rate of nominal salary rate compared to that of the labor productivity - is within the acceptable limits. The existing high unemployment level, from its part, reduced the impact of salary as the inflation factor even more.

Annual GDP growth amounted to 8.9% in the fourth quarter of 2005. Despite quarterly fluctuations, economic activity during the year was high enough. Household consumption, in real terms, actually did not change in 2005, though if we take into consideration statistical discrepancy, the increase would have been significant. Government consumption sharply increased during the same period. Investments made in the fixed capital, except for the construction sphere, seemed to be still moderate enough. Medium-term economic growth will largely depend on how quickly Russia, as the key trade partner, is replaced by other countries. In whole, it is likely that lately observed high rate of economic growth will be maintained in future as well.

Projected increase of CPI by the end of 2006 is anticipated to be within the range of 5.5-7%, which along with the increased exogenous shocks, seems to be an acceptable indicator. The risks affecting inflation operate in both directions: price rise as well as price reduction but they are still more tending to price rise. Future developments shall define NBG monetary policy. Presently, based on the available information, it is more likely that NBG will tighten monetary policy, rather than loosen or not change.

## INFLATION DYNAMICS

Inflation dynamics in Georgia was relatively stable in the first quarter of 2006. The prices on different types of food products moving in opposite directions had key impact on price index. Core inflation indicator reduced compared to the previous quarter that indicated the decrease of the increase rate of general level of prices.

### Table 2.1 Annual Inflation Indicators<sup>1</sup>

	<u>2002</u>	2003	<u>2004</u>	2005	2006
January	4.7	5.5	5.2	9.3	5.2
February	5.3	3.7	6.2	9.2	5.1
March	5.7	3.4	6.3	9.7	4.6
April	6.5	2.1	5.6	10.3	
May	7.6	2.3	5.4	8.9	
June	5.5	4.8	3.6	9	
July	5.1	5	5.5	6.0	
August	4.7	5.1	5	7.2	
September	5.7	5.2	6	7.7	
October	5.4	4.7	7.7	7.8	
November	5.1	8.6	4.1	7.9	
December	5.4	7	7.5	6.2	

<sup>1</sup>Information Source: Stati stics Department of the Ministry of Economic Development.

#### Diagram 2.1 Annual Inflation Indicators



Diagram 2.2

**Different Indicators of CPI Inflation<sup>2</sup>** 



<sup>1</sup>"Annual 5.5% inflation" reflects CP increase at this rate in case if monthly inflation during the year, excluding seasonal factors, is similar and equals to 0.45%.

Based on the information of the Statistics Department of Georgia, during the first quarter of 2006 the consumer prices increase amounted to 1.5%. If we take into consideration the seasonal factors, the above indicator would equal to 0.7%, i.e. annual 2.8%. At the end of March annual inflation indicator amounted to 4.6%, while average annual indicator – 7.1%. During the three months of the current year CPI dynamics was mainly conditioned by movement in opposite directions of the prices on different food products. In this respect, seasonal factors, appreciation of sugar on the world market and depreciation of eggs and chicken meat due to information on the Flue as well price rise on their substitutes (for example, beef) played key role.

#### Table 2.2

Inflation (CPI) Indicators by Separate Components (percentage), Their Weights in the Consumer Basket (Percentage) and Impact on CPI (percentage Point

List of Categories	Weight	04.2005-03.2006/ 04.2004-03.2005		03.2006/	/03.2005	03.2006/12.2005		
List of Categories	Weight	Inflati- on	Impact	Inflati- on	Impact	Inflati- on	Impact	
Total	100.0	7.1	7.1	4.6	4.6	1.5	1.5	
Food and non-alcoholic drinks	42.6	7.1	3.0	4.3	1.9	2.2	1.0	
Food	41.2	6.9	2.9	4.2	1.8	2.3	0.9	
Bread and Bread products	11.4	1.0	0.1	0.8	0.1	0.2	0.0	
Meat and meat products	6.4	16.3	1.0	13.7	0.9	5.5	0.4	
Fish	0.9	19.7	0.2	10.7	0.1	4.2	0.0	
Milk, cheese, egg	5.6	7.4	0.4	9.8	0.5	-15.1	-1.0	
Oil and Fat	3.5	1.1	0.0	0.9	0.0	0.9	0.0	
Fruit, grapes	2.4	25.9	0.8	8.2	0.3	3.8	0.1	
Vegetables, gourds and other bulbous	7.8	0.7	0.1	-8.2	-0.8	13.4	1.0	
Sugar, jam, honey, syrup, chocolate, confectionary	3.1	9.1	0.3	23.6	0.7	10.3	0.3	
Other food products	0.2	5.9	0.0	4.0	0.0	0.8	0.0	
Non-alcoholic drinks	1.4	10.4	0.1	7.1	0.1	0.7	0.0	
Alcoholic drinks, Tobacco	6.2	30.8	2.2	13.4	1.1	2.3	0.2	
Cloths and footwear	5.0	2.9	0.1	5.4	0.2	1.4	0.1	
Residential house, water, electricity, gas and other means of heating	8.8	5.7	0.5	6.9	0.6	0.6	0.1	
Furniture, household items and equipment, house maintenance and repair	3.2	2.7	0.1	0.6	0.0	-0.7	0.0	
Healthcare	7.3	1.5	0.1	-0.4	0.0	2.0	0.1	
Transport	11.4	7.8	0.9	6.4	0.7	0.0	0.0	
Communications	4.3	-3.4	-0.1	-6.5	-0.3	-0.3	0.0	
Leisure, entertainment, culture	3.1	2.3	0.1	1.7	0.0	0.6	0.0	
Education	3.0	1.1	0.0	-0.9	0.0	-1.2	0.0	
Hotels, cafes and restaurants	2.9	6.8	0.2	8.2	0.2	2.1	0.1	
Different commodities and service	2.3	0.6	0.0	0.6	0.0	0.0	0.0	
Commodities of Short-term consumption	65.5	9.3	6.1	5.1	3.5	1.8	1.2	
Semi-durable commodities	6.1	2.6	0.2	2.8	0.2	0.4	0.0	
Durable commodities Service	2.3 26.1	1.0 3.2	0.0 0.8	-5.3 4.0	-0.1 1.0	-3.0 0.9	-0.1 0.2	

#### Diagram 2.3

Average Annual CPI Inflation Including Tobacco and Oil Products and Without Them



Source: Calculations of Statistics Department of the Ministry of Economy and NBG.

## Reasons of Price Rise on Sugar on Georgian and World markets

Sharp increase of the price on sugar in Georgia was the result of appreciation of the product on the world market (see the diagram reflecting the dynamics of prices on sugar in Georgia and London Commodity Exchange). Even though fundamental reasons for the above event can obviously be observed, speculative factor, among other ones, is also named to be the reason for international price rise. The mentioned above fundamental reasons are such as: lack of supplies in the USA and Asian countries, increased demand for ethanol ( fuel produced on the basis of ethyl spirit, using sugar-cane) due to growing international price on oil, limitation of sugar subsidy by European Union, etc,. Despite the fact that sugar export from Georgia is significant, it mainly accounts for re-export. The country is pure sugar-importer. The major part of the import is for in-country consumption, rather than re-export. Even if not so, and if Georgia were sugar-exporting country, under the conditions of unchangeable factors affecting the price dynamics (for example introduction of export duty), the change of the price on this particular product would impact the consumer market of Georgia. It should also be mentioned that the dynamics during the previous years demonstrate that Georgia, though with some lag, but still followed the changes on the world market. Hence, it could be straightforwardly stated that lately observed appreciation of sugar was caused by exogenous, i.e. non-monetary factors.





#### **About Measuring the Inflation**

CPI is one of the most prevalent and widely used indicators for measuring the inflation. CPI represents the indicator that is used to measure net changes of the prices on the fixed basket of goods and services that are purchased by resident households at standard frequency and amount.

Key concepts are based on the system of National Accounts (1993). Classification of Individual Consumption According to Purposes (COICOP) is used to calculate CPI.

Geographically CPI covers five biggest cities of different regions of the country. The weights are defined as the rate of population of each city to the total number of population of all the cities.

City	<u>Weight</u>
Tbilisi	0.6039
Kutaisi	0.1808
Batumi	0.0929
Gori	0.0830
Telavi	0.0394

The basis for the computations of consumer expenditure weights is the results of the survey of household budgets carried out by the Statistics Department for more than three thousand households of all socialeconomic groups. The present CPI weights are based on the structure of consumer expenditures representing the result of 2002-2003 households' survey.

CPI includes 311 commodities that based on COICOP are united under 12 big groups of commodities.

<u>Code</u>	Group	<u>Weight</u>
00	Total	1.0000
01	Food and non-alcoholic drinks	0.4263
02	Alcoholic drinks, tobacco	0.0621
03	Cloths and foot-wear	0.0497
04	Residential house, water, electricity	
	gas and other means of heating	0.0875
05	Furniture, family items and accessories,	
	house/apartment repair/maintenance	0.0319
06	Health Care	0.0730
07	Transport	0.1135
08	Communications	0.0433
09	Leisure, entertainment, culture	0.0308
10	Education	0.0296
11	Hotels, cafes, restaurants	0.0291
12	Other goods and services	0.0231

In conformity with the same classification, the commodities have been grouped by consumption durability.

<u>Code</u>	Group	<u>Weight</u>
ND	Commodities of short-term consumption	0.6554
SD	Semi-durable commodities	0.0612
D	Durable commodities	0.0226
S	Service	0.2608

From 10 to 20 of each month, specially designated registrators record the prices on 311 types of commodities (services) in the trade outlets of the above cities. Most of the data is collected in the shops and service centers, as well as markets where the selling prices achieved as a result of negotiations are observed.

Arithmetic middling per each commodity for each city shall be computed at the initial level; Individual price indexes (rate of current month's price to the previous month's prices) shall be calculated based on the resulted average prices. Price index at the national level is average weighted index of individual indexes by cities' population and commodity expenditure weights.

Since inflation is a monetary phenomenon and represents the increase of general level of prices, it should be free of the impact of external (non-monetary) factors. Hence, for the purposes of efficient monetary policy it is important, along with CPI, to compute the inflation index that would precisely, to the possible extent, define general level of prices increase, show long-term inflation trend and make its modeling and projection possible. Core inflation index is such indicator. It reflects the dynamics of price changes conditioned by actual demand-supply, which is less distorted by fluctuations caused by temporary factors.

NBG, in order to measure core inflation, uses core inflation indexes set as a result of excluding specific products from the consumer basket (for example excluding tobacco and oil products). It also uses the indexes set as a result of excluding the products liable to sharp changes during the reporting period (for example, 10% symmetrically trimmed –core inflation excluding those products from 311 types of the consumer basket that were the most characterized by appreciation or depreciation).

Understanding of the dynamics of core inflation is also very helpful for the population and entrepreneurs in order to formulate reasonable inflationary anticipation. For example, temporarily increased prices on agricultural products due to poor yield, does not mean general price increase. Incorrect increases of retail

#### Diagram 2.<sub>4</sub> Annual CPI and core inflation



 Table 2.3

 Price Increase According to Different Indexes

Compared to the Last Year Relevant Period (percentage)

2005	2005	2005	2005	2006
<u>1 Q.</u>	<u>II Q.</u>	<u>m ų.</u>	<u>iv Q.</u>	<u>1 Q.</u>
9.4	9.4	7.0	7.3	5.0
6.3	6.1	4.4	4.6	3.7
3.0	3.3	3.2	3.8	3.2
9.0	6.9	6.2	6.8	6.0
13.0	4.7	5.8	8.0	
9.4	9.4	7.0	7.3	5.0
	2005 <u>I Q.</u> 9.4 6.3 3.0 9.0 13.0 9.4	2005         2005           IQ.         II Q.           9.4         9.4           6.3         6.1           3.0         3.3           9.0         6.9           13.0         4.7           9.4         9.4	2005         2005         2005           I         Q.         III         Q.           9.4         9.4         7.0           6.3         6.1         4.4           3.0         3.3         3.2           9.0         6.9         6.2           13.0         4.7         5.8           9.4         9.4         7.0	2005         2005         2005         2005         2005           I.O.         III Q.         III Q.         IV Q.           9.4         9.4         7.0         7.3           6.3         6.1         4.4         4.6           3.0         3.3         3.2         3.8           9.0         6.9         6.2         6.8           13.0         4.7         5.8         8.0           9.4         9.4         7.0         7.3

Diagram 2.5 Dynamics of CP and PP indexes (2005-2006)



prices by providers on non-food products or services will negatively impact selling that may result in production drop.

#### **Core Inflation**

Core inflation indicators slightly reduced during the reporting period (in the present document core inflation is applied for 10% symmetrically trimmed inflation computed based on 311 products of the consumer basket) and amounted to 3.2% in the first quarter of 2006, being 0.6 percentage points less compared to the previous quarter. The latter indicates that annual CPI inflation reduction compared to the previous quarter was the result of the reduction of general price increase rate, rather than few individual components. Lately the above core inflation indicator, despite relatively high CPI inflation was near 3%, which is important indicator for stability of general level of prices.

#### Price Indexes of Industrial Goods Producers

In the first quarter of 2006 pretty high increase of producers' price index was observed. Namely, the above indicator increased by 6.3% compared to that of December, 2005, while the increase equaled to 6.0% compared to the first quarter of the last year. The increase, to the significant extent, was conditioned by price increase in mining industry (annual- 47.6%, quarterly – 42.4%, among which metal ore extraction was respectively -81.5% and 72.4%). Production of food products appreciated by 9.4% and rubber and plastic commodities -13.4%. It should also be mentioned that chemical industry depreciated significantly (by 15%), as well as production of medical facilities, gauges, optical instruments and equipments (by 12%). Producers' price index is also interested as it provides significant information (sometimes preceding one) on CPI dynamics, and respectively, high there is high correlation between them (88.7% in 2005-2006) that is obviously demonstrated by the diagram.

Metal ore extraction was the key reason for sharp increase of producers' price index, which from its part, was conditioned by price increase on this product on the world market. Also, producers' price increase in

#### Diagram 2.6 Dynamics of PP Index (2005-2006)



#### Table 2.4

PP Index of Industrial Goods

		March, 2006	
	Compared to the <u>Previous Year</u>	Compared to December <u>2005</u>	Compared to March 2005
Industry, total	100.5	106.3	106.1
Mining Industry	97.3	142.4	147.6
Processing Industry	101.4	103.6	102.8
Electricity, Gas and Water			
Industry and Distribution	100.1	100.3	100.3

Source: Statistics Department of the Ministry of Economic Development and NBG.

#### Diagram 2.7 CPI and GDI Deflator (IV quarter of 2001=1000)



#### Table 2.5

Agriculture, Hunting

GDP Deflator Compared to the Last Year Relevant Period by Separate Types of Economic Activities in Base Prices (percentage) and Their Impact on GDP Deflator in Base Price (percentage point)

20	04	20	05	IV Q.	2005
Deflator	<u>Impact</u>	Deflator	<u>Impact</u>	<u>Deflator</u>	<u>Impact</u>
5.8	1.1	-4.8	-0.8	-2	-0.3

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Forestry and Fishery	5.8	1.1	-4.8	-0.8	-2	-0.3
Processing of Commodities						
by Households	9	0.4	-8.8	-0.4	-7.4	-0.3
Communications and Post	6.2	0.2	-4.5	-0.2	-9.2	-0.3
Public Administration, Defense	70	2.5	39.3	2.3	49.6	3.8
Other types of						
Economic Activities	1.9	1.2	3.9	2.4	3.5	2.1
GDP in Basic Prices	5.8	5.5	4	3.4	5.8	5
Net Taxes on Commodities	42.5	2.9	50.9	4.5	34.1	3
GDP in Market Prices	8.3	8.3	7.8	7.8	8	8

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food industry, which makes more than a half of the processing industry, is very important, one of the reasons of which is sugar appreciation on the world market.

#### **GDP Deflator**

Review of DGP deflator of Georgia, being the country with small and open economy, is especially important since domestic demand increase at higher rate compared to that of rational demand on the assumption of price taker principles under the conditions of unchanged exchange rate, practically is only reflected on the commodities of domestic production. Relatively high level of GDP deflator - 8% in the fourth quarter of 2005, similar to 2004-2005 was stipulated by non-monetary factors. Namely, 3.8 percentage points accounted for public administration and defense sphere<sup>1</sup>, while 3 percentage points - increase of indirect tax revenues due to improved tax administration. True, there were price reductions observed in some spheres, though in this direction, the impact was not significant enough to radically change the general picture.

<sup>1</sup>This type of economic activity is completely represented by nonmarket production. Its real evaluation is carried out by men/day or number of full-time employees. Qualitative evaluation of labor productivity shall also be taken into consideration. Nominal increase is defined by salary increase. Hence, public administration deflator does not reflect price increase provoked by monetary factors.

#### **Inflation Indicator and Its Perception**

Despite general level of prices stability, in our opinion, economic agents perceive inflation at higher indicator compared to official indicators. The significant reason for such approach is the fact that consumers, generally, are more sensitive to the price increase on more frequently purchased products, i.e. if two products have similar weights in the consumer basket, it is natural that price change on such products at equal rate will equally affect general level of prices, while in terms of perception - appreciation of a frequently purchased product will have more affect. In March of the current year general level of prices increased by 14.7% compared to March, 2004 (during two years), among them nondurable consumption commodities were appreciated by 19.6%, semi-durable commodities – by 4.5%, and durable goods even depreciated by 1.6%. Concurrently, during the same period, service tariffs increased by 5.4%. It is natural that the weight of nondurable consumption commodities highly exceeds that of semi-durable and durable commodities<sup>1</sup>.

Respectively, the impact on general level of prices was corresponding, though the affect was more significant in terms of perception. It should also be mentioned that appreciation of nondurable consumption commodities imposes heavy burden on population. If delay is possible when purchasing semi-durable or durable commodities, which weakens the income depreciation caused by price increase, it is practically excluded when buying nondurable consumption commodities and its price increase even more reduces the purchasing power of population.

The above factor is very important since due to incorrect perception of inflation, higher expectation compared to the actual may, from its part, cause consumer price increase. For medium and long-term perspective, when inflation expectation exceeds the target indicator of the central bank for the changes of general level of prices, achievement of general level of prices stability is associated with additional economic losses.

See the weights of the consumer basket consolidated components on p.11 of the present document

## INFLATION FACTORS

#### Diagram 3.1.1 Lari Net Supply by NBG by Monetary Instruments and Foreign Currency Exchange



#### Diagram 3.1.2

Reserve Money Dynamics 2004-2006



P	al	bl	e	з.	1	1		

2006 Reserve Money Dynamics Based on Monthly Average Data

	<u>12.05</u>	<u>01.06</u>	<u>02.06</u>	<u>03.06</u>	<u>04.06</u>
Reserve Money Money in Circulation Bank Deposits	965,679 757,856 207 823	962,173 749,525 212 648	980,628 750,025 230,602	1,010,662 764,167 246 495	994,916 776,114 218 802
Obligatory Reserves Balance on Corres-	130,669	130,971	135,858	139,980	142,765
ponding Accounts Reserve Money	77,154	81,677	94,744	106,515	76,037
Annual Increase	19.70%	22.10%	26.30%	27.40%	21.90%

#### 3.1. Monetary Aggregates

In March 2006, based on monthly average data, the reserve money annual increase amounted to 27.4%, while in conformity with M2 and M3- it was 34.4% and 34.0%, respectively. Based on the above, NBG directed its monetary policy to neutralize excess liquidity.

Based on the monthly average data in the first quarter of the current year, the reserve money growth equaled to 4.7%, while the annual growth in March to -27.4% (the analogous indicator in 2005 amounted to 19.7%).

In February, for the purpose of maintaining the citizens' trust towards banking system and avoiding possible bank crisis, NBG, as the lender of the last resort, supplied GEL 20 million. In March, in order to control money supply, NBG directed its policy towards neutralization of excess liquidity. Namely, GEL 14.55 million was withdrawn through credit auctions, average weighted rate of which equaled to 5.9%. Along with this, in order to avoid sharp fluctuations of the Lari rate \$11.3 million was sold at the currency exchange in the first quarter that facilitated the withdrawal of additional GEL 20.6 million liquidity. Total amount withdrawn by NBG in the first quarter through monetary instruments and foreign currency exchange was GEL 15.1 million.

#### **Broad money**

In March 2006, based on the monthly average data annual increase of M2 and M3 aggregates amounted to 34.4% and 34.0%, respectively that was mostly conditioned by deposit increase.

In the first quarter of 2006 deposit liabilities in national and foreign currency increased by GEL 119.2 million, of which deposits in foreign currencies increased by \$31.9 million, while GEL denominated deposits increased by 44.8 million. Along with the

#### Table 3.1.2

#### ${\bf 2006\, Dynamics\, of\, Reserve\, Money\, by\, Month\, Latest\, Data}$

	<u>12.05</u>	<u>01.06</u>	02.06	<u>03.06</u>	<u>04.06</u>
Reserve Money	1,001,45	981,8621	,003,217	978,9081	,035,131
Money in Circulation	811,400	749,215	756,571	775,443	792,910
Bank Deposits	190,051	232,647	246,646	203,466	242,221
Obligatory Reserves	129,833	133,183	137,960	139,334	143,655
ponding Accounts					
Reserve Money	60,218	99,464	108,686	64,132	98,566
Annual Increase	19.70%	26.90%	25.80%	21.00%	22.20%

#### 2004-2006

#### Diagram 3.1.<sub>3</sub> Broad Money

2004-2006



#### Table 3.1.3

#### Monthly Changes of Money Aggregates Monthly Latest Data, 2006

	01.06	02.06	03.06	04.06
Broad Money (M3) Money Supply (M2) Cash outside the Banks Cash in Circulation	<b>1,937,372</b> 1,050,325 682,176 749,215	<b>1,967,731</b> 1,052,238 688,986 756,571	<b>2,003,21</b> 1,087,516 709,102 775,443	<b>8 2,166,389</b> 1,142,254 714,856 792,910
National Currency Broad Money (M3).	368,149	363,252	378,414	427,398
Annual Increase Broad Money (M2).	35.50%	33.60%	33.80%	36.60%
Annual Increase	34.20%	30.30%	33.90%	33.40%

#### Table 3.1.4

Monthly Changes of Money Aggregates Monthly Average Data, 2006

	01.06	02.06	<u>03.06</u>	04.06
Broad Money (M3)	1,903,627	1,921,751	1,993,52	4 2,082,984
Money Supply (M2)	1,026,072	1,039,195	1,073,505	1,117,572
Cash outside the Banks	683,949	683,061	690,421	710,012
Cash in Circulation	749,405	751,361	766,587	785,728
Deposits in National Currency	342,123	356,134	383,085	407,559
Broad Money (M3), Annual Increase	32.80%	32.30%	34.00%	36.40%
Broad Money (M2), Annual Increase	29.70%	31.60%	34.40%	36.40%

reduction of cash outside banking system by GEL 27.1 million and increase of deposit liabilities, M3 broad money aggregate increased by GEL 92.0 million and M2 broad money aggregate – by GEL 17.6 million starting from the beginning of the year. Respectively, the amount of M3 aggregate amounted to GEL 2 003.2 million, and M2 – to GEL 1 087.5 million by the end of March.

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

During the reporting period increase of deposits (annual 45.7%) and loans (annual 86.7%) of the banking system was unprecedented. Along with this, interest rates on deposits increased in line with the banking system development, while on loans they decreased, which resulted in the increase of financial depth.

In the three months of the current year bank deposit liabilities increased by GEL 119.2 million (10.1%) and amounted to GEL 1 294.1 million. During the same period of time deposits in national currency increased by GEL 44.8 million, while those denominated in foreign currency increased by \$31.9 (6.8%) million from the beginning of the year and amounted to \$501.2 million by the end of March <sup>1</sup>.

Increase of interest rate on term deposits was observed in quarter I of the current year, especially in Lari denominated ones, on which the interest rate increased by 0.9 percentage points compared to quarter IV of 2005.

In QI06, high growth rate of crediting of the economy by banks continued and the loans issued to the economy accounted to GEL 1 947 million, being 86.1% more than QI data of the previous year. Note, in 2005 annual growth indicator of loans was 83.2%. Along with unprecedented loan growth, the tendency of interest rate decrease is steadily continuing.

A combination of several factors could be accounted for the decrease of interest rates on loans. Particularly,

 $<sup>^{\</sup>rm 1}$  Deposits attracted in foreign currency amounted to GEL 915.7 million in national currency.

#### Diagram 3.2.1 Term deposit volume (left bar, million GEL) and interest rates (right bar)





#### Diagram 3.2.2

Interest rates of long-term credits and share of GEL 2005-2006



#### Diagram 3.2.<sub>3</sub> Term deposit vo

Term deposit volume (left bar, million GEL) and interest rates (right bar) 2005-2006



creation of more stable macroeconomic environment for business resulted in decrease of risk premium on all kinds of loans. The rating (B for short-terms, B+ - for long-term) granted to Georgia by S&P is also a sign of business climate improvement. Furthermore, implementation of new technologies and use of good expertise promote reduction of operating costs and better risk assessment by banks. In addition, along with substantial growth of banking activities, one of the factors accounting for the decrease in interest rates, is the economy of scale characteristic for the banking sector. Keen competition in the banking sector forced the medium-size banks to consolidate in order to reduce the operating costs. Along with the growth of the financial sector, further consolidationexpansion is anticipated because due to economy of scale small banks shall become less competitive in the main fields of the banking services forcing them to specialize.

Credit distribution by industries shows that the credits are mostly accumulated in trade, industry and construction. Also significant share comes on physical persons. Note that most of credits except for the financial and public sectors are extended in foreign currency. The indicator of outstanding loans is especially high in agriculture, which can be accounted for the small number of credits in this industry. The indicator of outstanding loans in construction is rather low demonstrating high profitability of this sector. This is also reflected in the low risk premium on the credits given to the construction industry. During March the interest rate on the credits extended to this sector following financial intermediation was the lowest (14.5%).

#### Impact of seasonal factors on the Interest rates

Review of interest rate terms on loans is very interesting. By the end of QI06, the interest rate on short-term credits in GEL was lower than on credits in foreign currency. While on long-term credits in GEL on the contrary – higher, compared to the long-term credits in foreign currency. The latter could be the consequence of the following two factors.



The first factor comes from the economy structure. The demand on short-term credits in GEL is significantly stipulated by the liquidity demand emerging as a result of tax payments in GEL. On the other hand, long-term investments in Georgian economy are made in foreign currency, while consumer expenditure settlement is made in GEL accounting for concentrated demand on short-term credits in GEL denomination.

Another factor that could explain the changeability of the interest rates is based on the consideration of seasonal volatility trend of GEL rate by the banks. Relative changeability of interest rate of GEL and foreign currency could be used as the expectation indicator of exchange rate of the banks. In March the banks anticipated short-term appreciation of GEL, and devaluation – in the long-term period. The anticipation of GEL devaluation in the long-term period is the factor characteristic for the economy, as a whole. While anticipation of GEL appreciation in the short-term period coincides with the seasonal appreciation (from spring to summer the rate seasonally appreciates).



#### Diagram 3.2.6 Distribution of total credits and outstanding credits between legal entities and households April 1, 2006



Diagram 3.3.1

Difference between foreign currency supply-demand at Tbilisi Interbank Currency Exchange Market and NBG participation QI 2006



Diagram 3.3.2 GEL banknote exchange rate dynamics



## **3.3 Exchange Rate, Dolarization and Balance of Payment**

#### **Exchange market**

GEL exchange rate in QI 2006 was relatively stable; however, insignificant tendency of devaluation was noticeable. The same is true in regard to real and nominal effective exchange rate of GEL, however, compared to QI of the previous year these indicators showed appreciation.

Current account has deteriorated again as a result of significant increase in energy carriers along with domestic demand growth.

During QI 2005, GEL exchange rate against US dollar showed depreciation tendency. If at the beginning of the year GEL rate was 1.798, on March 31, it equaled to 1.826 corresponding to 1.56% devaluation. This parameter practically coincides with the inflation indicator of the same period that was 1.48%. GEL depreciation is associated with the traditional seasonal factors. Furthermore, compared to QI 2005, the GEL rate appreciated slightly according to the data of both the end of the period (0.5%) and the average period (0.7%). Drop on GEL demand was caused by traditional seasonal factors and, more importantly, by growing price on oil and energy carriers (basically price increase on natural gas imported from Russia), resulting in increase of demand on US dollars from the importers.

On the banknote segment GEL rate volatility was negligent (1.813-1.8186 average values during the quarter, standard deviation of 0.0107 and 0.0105, for selling and purchasing rates, respectively), demonstrating the fact that the market was not expecting dramatic volatility of GEL exchange rate.

In QI06 the depreciation trend of real effective exchange rate was obvious – if at the end of 2005, the index of real effective rate was 110.2, at the end of March it was 105.7 accounting for 4.1% devaluation. The same is true in regard to nominal effective exchange rate that in the same period devaluated by 3.4%. However, it should be noted that both nominal and real effective exchange rates slightly appreciated compared to the indicator of QI05 – 2.7 and 2%, respectively.

#### Diagram 3.3.3 Real and nominal effective exchange rate index December 1995=100



#### Diagram 3.3.4

GEL real exchange rate index against various currencies









Similar dynamic was noticeable in real exchange rate in regard to certain currencies. GEL real exchange rate against Russian ruble significantly devaluated - by 8.57% accounting for dramatic appreciation of Russian ruble and high inflation level in QI06 in Russia.

#### **Payment Balance**

In QI06 deterioration trend of current account deficit continued. Starting fromQII05 this indicator deteriorated almost 1.8-times and exceeded 140 million US dollar that is basically the consequence of trade balance deterioration.

If on average during 2005, export and import rate almost equally grew, in QI06 import grew at a preceding rate by 46%, export growth was 28%. As a result, foreign trade balance deteriorated by almost 75%, coverage coefficient of import by export in comparison with 2005 average indicator reduced by 10 percentage points and comprised 54%. Both endogenous and exogenous factors more or less similarly affected such a development of the events.

As a result of price increase on oil and oil products, as well as on the natural gas imported from Russia, the import volume of the aforementioned commodities increased by 42%, twice, respectively. Because of that 23% of total import growth in QI comes on these commodities. Increase in importation of cars by 2.3 – times also seriously influenced import growth (16% of the total growth). Contrary to that the influence of investment commodities imported volume on the import growth is still insignificant. For example, in the accounting period only the import of equipment for technical upgrading of the communications industry grew dramatically (2.5-times) and comprised 4.5% of the total import growth.

Export commodity structure demonstrated remarkable changes, in which the first place by 10% share was occupied by wine, as to non-ferrous metal scrap that steadily occupied the first position for the last 10-12 years, shifted to the fourth position with 6.4% share; price increase on nuts and walnuts world-wide accounted for significant – 2.1-times growth of this type of export volume taking 3<sup>rd</sup> position in the export commodity structure. Export volumes of mineral waters, nitrogen fertilizers and gold also grew.

#### Diagram 3.3.6

Commodity import structure





**Commodity export structure** 







In QI06 inflow of foreign capital into the country continued, basically in the form of direct foreign investments and electronic transfers. By means of various systems of electronic settlement (Western Union, Money Gram, Anelik, Caucasus Express, etc), USD 101.5 million was transferred to Georgia in QI of the current year, exceeding the indicator of the same period of 2005 by USD 24.1 million, or 31.1%. In the same period remarkable investments were made into the banking system of the country, communications, energy sector and car engineering. In terms of preliminary assessment, in QI of the current year, direct foreign investments into the country exceeded USD 90 million a significant source of exchange revenues was the credits attracted by credit organizations from abroad, which in QI grew by 78 million entirely at the expense of long-term facilities.

#### **3.4 Production Costs**

#### **Prices on oil**

In QI 2006, the prices on oil remained high on the international market that was adequately reflected on the prices of fuel in Georgia. By the end of QI06, one barrel raw oil cost USD 70 demonstrating 5.5% growth from the beginning of the year.

In QI06, dramatic increase of raw oil price created threat to macroeconomic stability in the world. The main reason for that is increase in demand on energy resources world-wide, which by OPEC (Organization of Petroleum Exporting Countries) forecast will not decrease in the foreseeable future. Furthermore, due to unstable geopolitical situation in some countries of the Middle East, in particular, possible military actions between Iran and the USA, the world fears that the large oil producer countries will suspend raw export either partially or entirely. In general, steady growth of oil prices is conditioned by the problems in oil fineries emerged as a result of natural calamities of 2005 in the USA, which are not operating at full capacity yet. The aforementioned factors conditioned the increase of one barrel oil price to USD 70 at the end of QI06, which accounts to 5.5% growth from the beginning of the year.

Interesting to note, despite the record price rise on oil on the international market, the demand on oil in comparison with the supply grew at a higher rate in some of the big countries (USA, China, and India).

#### Diagram 3.4.2

Dynamics of international oil price and oil product prices in Georgia December 2003=1



#### Table 3.4.1

Nominal and real growth of consolidated budget revenues of QI06 compared to QI05

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	Nominal <u>growth</u>	Real growth*
Gross revenues and grants	41.40	34.70
Gross revenues	42.70	35.90
Tax revenues	29.40	23.20
Income	14.40	8.90
Profit	59.30	51.70
VAT	30.60	24.40
excise	11.00	5.70
customs	33.80	27.50
social	29.30	23.10
property	76.20	67.80
gambling business	-37.60	-40.50
other taxes	110.60	100.60

\*real growth is deflated in compliance with annual inflation of QI06 (NBG) Note that the price on basic oil products in Georgia went up too. Particularly, during 2005 the price on petrol went up by 15%, and by 18% on diesel.

Notably, the growth of oil price on the world market in 2006 significantly exceeded the rate of fuel price increase in Georgia. The difference is basically due to high excise tax. This is one of the factors that mitigated the influence of volatility of international prices on oil products on the Georgian market. Particularly, because the excise tax in the price of oil products unlike VAT is defined as a fixed amount, volatility of international price on oil products affects only part of the price (without excise tax).

#### Taxes

The indicators of 2006 State Budget plan were successfully accomplished. In accordance with the reference information, the revenues exceeded the forecast by GEL 49.4 million. In QI of 2006 the governmental accounts in terms of monthly average indicators grew by GEL 23 million.

According to the reference information of QI06, the revenues and grants of the consolidated budget comprised GEL 834.9 million, and own revenues (gross revenues without grants) – GEL 827.6 million In QI06, real (taking into consideration inflation) growth of own revenues of the consolidated budget compared to QI05 comprised 35.9%, and tax revenue real growth – 32.2%.

Improvement of tax administration means that more and more commodities and services have become subject to taxation. Correspondingly, the prices on commodities and services go up. On the other hand, improvement of the tax administration that will be followed by improvement of entrepreneurial environment (entrepreneurs enjoying equal conditions, decrease in informal taxes, arranging public infrastructure, etc.) shall influence price reduction. Hence, in the long-term period, improvement of the tax administration (in the conditions of prudential tax rate, as it is in Georgia today) has a positive impact on the prices and economic growth, and in the short-term period – it can trigger single time price rise.

Note, 2006 State Budget planned indicators were successfully accomplished. According to reference

#### Diagram 3.4.3 Consolidated budget by tax revenue types Oll2006



#### Diagram 3.4.4

**Tax revenues of the consolidated budget** 2005-QI2006



information, the revenues are GEL 49.4 million more than planned, and tax revenues –GEL 33.4 million more. Except for excise tax, the revenues gained from other types of taxes significantly exceeded the plan. The revenues generated from VAT, profit, social and customs taxes substantially grew, particularly, real growth compared to the same period of 2005 comprised 24%, 52%, 23% and 27%, respectively.

Improvement of tax administration is well reflected in the dynamics of revenues of Customs and Tax Departments. Customs Department revenues in QI06 in comparison with the same indicator of the previous year exceeded by 35.3%, and the revenues of the Tax Department went up by 25.8%. Remarkable growth of tax collection by the Customs Department demonstrates improvement of administration of import taxation confirmed by the mirror analysis of the data on import from Turkey to Georgia. Particularly, starting from QII04 (including QI06) the information on the registered import from Turkey to Georgia of the Statistics services of both Georgia and Turkey is not very different, while there used to be a serious discrepancy<sup>1</sup> (however, note, information on export registered by Customs Department is still significantly (several times) different from the data of the Turkish party. Perhaps, this is so because Georgian Customs office pays less attention to the registration of export since it is not the budget replenishment source by customs tax.

Non-tax and capital revenues entered the budget in excess to the planned diagrams. Particularly, as a result of state property privatization GEL 38.7 million was collected instead of planned GEL 28 million Nontax revenues comprised GEL 179.3 million instead of planned GEL 163.4 million Among non-tax revenues the license amount for cellular communications network is worth mentioning, it was GEL 72 million and the NBG profit – GEL 51 million (instead of planned GEL 40 million).

Dramatic growth of State Budget revenues conditioned growth of expenditures. Of which, the expenses incurred for the remuneration of workers and servants comprised GEL 79.6 million in QI06 being GEL 23.7 million more than the similar indicator of the previous year.

While reviewing government transactions, it is interesting to look at the ratio of budget receipts and

 $<sup>^{\</sup>rm 1}$  Both import and export volumes registered by Georgian side was less than the data offered by the Turkish side.

#### Table 3.4.<sub>2</sub> Import data (FOB-prices) from Turkey to Georgia

2001	2002	2003	2004	2005	2006 I-II
				r	nonths
99781	818541	021531	921762	68860	38248
1440491	00621	1550681	987382	268427	30558
1.4	1.2	1.5	1.0	1.0	0.8
	2001 99781 1440491 1.4	2001 2002 99781 818541 144049100621 1.4 1.2	2001 2002 2003 99781 81854 102153 1 1440491006211550681 1.4 1.2 1.5	2001 2002 2003 2004 99781 81854 102153 1921762 1440491006211550681987382 1.4 1.2 1.5 1.0	2001 2002 2003 2004 2005 99781 81854102153192176268860 144049100621155068198738268427 1.4 1.2 1.5 1.0 1.0

#### Table 3.4.3

Annual growth rate of real value added and nominal wage/salary per employee 2005

	value added real growth (%)	nominal growth of wages/ salaries (%)
agriculture	14.4	25.7
industry	11.7	14.7
construction	15.7	-11.8
trade	9.4	24.4
hotels/restaurants	28.8	16.5
transport/communications	15.6	41.8
financial intermediation	36.8	13.7
real estate transactions	18.1	27.3
public administration, defense	0.7	80.8
education	19.4	6.0
healthcare	-0.6	6.1
other services	19.1	61.5
total	16.2	27.4

#### Diagram 3.4.5

#### Average monthly salary and value added per employee



\*real salary is calculated by correction of CPI.

payments, by means of which it is possible to create either excess liquidity in circulation or contrary to it, deficit.

In QI 2006, the government accounts by average monthly indicator went up by GEL 23 million Furthermore, by currency transactions the budget gained USD 12 million net inflow that equals to approximately GEL 22 million The aforementioned money flows accounts for lari supply to the circulation, however, accumulation of the amounts on the government deposits and utilization of monetary instruments by the NBG neutralized the mentioned pressure.

#### Labor productivity, wages

2005 witnessed quite a remarkable growth of nominal wages (annual 27.4%) that along with 16.2% labor productivity growth contains significant inflation risk. However, excluding state non-market sector, there is not significant deviation between the rates of labor productivity and nominal wage growth.

According to 2005 data, value added level and dynamics per employee significantly differ by industries. In this regard, the lowest indicators are in agriculture and education. The highest – in construction, hotels and restaurants, also transport and communications sectors.

In 2005, as compared to the previous year, real value added per employee the most grew in financial intermediation, hotels and restaurants, 37 and 20%, respectively. Quite high growth was noticeable in other sectors too, except for the healthcare. In the whole economy, real growth of value added generated per employee equaled to 16.2%.

2005 witnessed quite a remarkable growth of salaries/ wages. During the year, average monthly salary/wage (excluding taxes) comprised GEL 152.2. Nominal annual growth – 27.4% along with 16.2% labor productivity growth, at one glance, contains significant inflation risk. However, excluding such non-market sectors as public administration and defense, where nominal salary growth is unprecedentedly high – 81%, while labor productivity increased only by 0.7%, nominal salary/wage growth rate in the economy comprises 19%, and 16.6% - labor productivity.

#### Diagram 3.5.<sub>1</sub> Real quarterly growth rate of the GDP



Diagram 3.5.2

Real quarterly growth rate of the GDP without agriculture, household production processing and public administration, in basic prices



#### Diagram 3.5.3

Real half-year growth rate in regard to the previous quarter of the period by processing industry and main market sectors of services in basic prices, seasonally adjusted



Hence, the differential between nominal salary/wage growth and labor productivity instead of initial 11.2 percentage points comprised only 2.4 percentage points. This indicator is quite acceptable. In addition, in regard to potential inflation risks, the probability of impact of increased wages/salaries in the government sector on the private sector is also worth mentioning that is significantly reduced by high unemployment rate.

#### 3.5 Production and demand<sup>1</sup>

Annual GDP growth in QIV05 comprised 8.9%. Despite the quarterly volatility, economic activity during the year, on the whole, was high enough. Household consumption in 2005 in real terms has not actually changed, but if we take into consideration statistical discrepancy, the growth might have been significant. State consumption during the same period remarkably went up but the share of investments in the fixed capital was still modest.

#### Production

In QIV05, real annual GDP growth comprised 8.9%. In case of a country with a developing economy like in Georgia, reviewing GDP indicators only generally to analyze fundamental trends of the monetary policy goals and the economic development in the short-term period is less informative. Hence, the analysis of market and non-market segments of GDP is important. Particularly, more than 2/3 of agriculture in Georgia is taken up by products produced for nonmarket, own final consumption. Respectively, dynamics of this segment of the GDP is less connected with money demand. It is also important to notice that change in demand in the short-term period affects price on agricultural products and not the real volume<sup>2</sup> of the produced products that, on its part, significantly depends on natural climatic conditions. Hence, for the monetary policy reasons, to study the GDP dynamics in the period from quarter to quarter, agricultural sector is not informative enough. The same is true in regard to household production processing field that on the one hand, is closely

 <sup>1</sup> Information source on GDP and its components is Department of Statistics at the Ministry of Economic Development.
 <sup>2</sup> However, note, price increase on agricultural products as a result of demand growth can lead to the stimulation of agricultural activities.

Diagram 3.5.4 Inventory growth, in current prices, seasonally adjusted



#### Table 3.5.1

Real ann	ual growth of GDP	(%	) and impact on the economic
growth (	percentage points	s) by	economic activities

	20	04	20	05
	<u>growth</u>	<u>impact</u>	<u>growth</u>	<u>impact</u>
agriculture, hunting and forestry, fishery	-7.9	-1.5	12	2
mining industry processing industry	-19.9 11.6	-0.2 1	-13.5 14.3	-0.1 1.2
generation and distribution of	-4	-0.2	5	0.2
electricity, natural das and water production processing by households construction	-1.7 35.9	-0.1 2.3	12.5 22.3	0.5 1.8
trade; repair of cars, household	8.2	1.1	3.4	0.4
hotels and restaurants	3.2	0.1	16.4	0.4
transport, auxiliary and additional transport activities communication and post financial intermediation	3.7	0.4	5.7	0.5
	17 7	0.6 0.1	29.5 52.2	1.1 0.7
real estate transactions, leasing and	13.2	0.8	9.9	0.6
commercial services public administration education	9.7 1.8	0.3 0.1	-6.1 13.5 3 7	-0.4 0.5
other communal, social and personal	4.2 6.5	0.2	3.7	0.1
services hired services in households indirect evaluation or application or	1.5	0.2	24.9	0.1
financial intermediation in business	-7.9	0.1	57.6	-0.4
activities GDP in basic prices (+) taxes on products (-) subsidies GDP in market prices	5.6 8.3 -0.8 5.9	5.3 0.6 0 5.9	10.1 1 0.5 9.3	9.3 0.1 0 9.3

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connected with agriculture dynamics and, on the other, its non-market segment even compared to agriculture is relatively large-scale. As to the public administration, it is entirely presented<sup>1</sup> as non-market products and hence, excluding the GDP from this sector is also expedient. However, it is important to remember that dynamics of the country's budget, in general, taking into consideration still a high level of dolarization in Georgia, is one of the main factors in regard to demand on lari.

In case of exclusion of agriculture, household production processing and public administration from the GDP, the picture is slightly different. Quarterly dynamics of the GDP is more asymmetric , and growth rate of QIV05 comprised 2.9%, annual – 9.5%.

While reviewing economic growth by sectors, it is obvious that general economic activity was strong in the first half of 2005, when the economic growth was conditioned by many sectors. In the second half the picture becomes more controversial. On the one hand, the processing industry dramatically grew conditioned basically by foreign demand growth. In addition, economic growth continued in the communications field. On the other hand, negative indicators of the economic growth were noticeable in such field as transport, trade, construction, network of hotels and restaurants.

Noticeably, inventory change dynamics in economy was in compliance with the conclusion made above. In particular, in the second half of 2004 and first half of 2005 supply growth rate slowed down that could be considered as an indicator of strong demand. Concurrently, along with other factors it should be taken into consideration that for the last years, the works carried out within large energy projects significantly influenced the formation of inventories.

To review actual volume of Georgia's economy in regard to its potential, evaluation of production capacity utilization levels is worth considering. Since July 2004 no survey was carried out in this direction. As of July 2004, this indicator, on average, was 44%. Obviously, in the conditions when the response from the economy on the increased demand from HII04

<sup>&</sup>lt;sup>1</sup> In most of public administration and education sphere collective and individual services are rendered through non-market supply and its volume is measured by the costs incurred for supplying these services. Concurrently, real volume change of the mentioned supply is mostly calculated by means of labor costs (spent men-days or number of full-time employees).

#### Table 3.5.2

### $\label{eq:sessment} Assessment of production capacity utilization level ``(without seasonal adjustments, \%)$

	<u>1997</u>	<u>07.2001</u>	<u>03.2002</u>	07.2004
to 25% from 25% to 50% from 50% to 75% more than 75% total average utilization	25	28.0 41.6 22.7 7.6 100 39	31.4 38.9 21.7 8.0 100 38	22.4 38.4 27.5 11.7 100 44

Source: Status of Entrepreneurship in Georgia, 2004, July.

#### Table 3.5.3

Distribution of production capacity utilization level by economic activities (without seasonal adjustments, %) July. 2004

	industry tr	ade comi ca	muni- o ations s	ther e ectors	nterprises, total
to 25%	24.4	19.9	12.7	26.0	22.4
from 25% to 50%	50.1	34.6	37.1	33.1	38.4
from 50% to 75%	18.6	31.2	32.1	29.7	27.5
more than 75%	6.9	14.4	18.1	11.1	11.7
total	100	100	100	100	100
average utilization	38	47	51	44	44

Source: Status of Entrepreneurship in Georgia, 2004, July.

#### Diagram 3.5.5 Household consumption



<sup>1</sup> Production capacity utilization is a ratio (without replacement of fixed assets or improvement by repair) between possible production of products (commodities or services) by a given enterprise in a nominal working time and actual production. was not as much increased prices but real growth of supply (see: GDP deflator, p. 13), determining role in it was played by putting free capacities into production. Correspondingly, the utilization level had to be increased. However, naturally, it is difficult to calculate how the condition will change and to determine which level and what rate of this indicator, in general, will be desirable. In this regard it is worth mentioning that the smaller and more open the country's economy is, the weaker is connection with capacity utilization levels and inflation<sup>1</sup>. Furthermore, in the domestic consumption the share of locally produced agricultural products is big, whose real supply as mentioned above, in the short-term period is fixed and practically entirely depends on the non-monetary factors. It is also important to determine what share of unutilized production capacities comes on the products whose supply against foreign and domestic demand change on the whole is somehow elastic. At today's stage of the transitional period, significant part of enterprises (their capacities) is supposed to be uncompetitive. Hence, the indicator of non-inflationary level of capacity utilization used in the economically developed countries that is approximately at the level of 4/5 is not comparable for Georgia.

Despite the difficulties mentioned above, it is obvious that evaluation of capacity utilization rate will make the monetary policy in the medium-term perspective more efficient provided that stability of the general level of prices is ensured.

#### **Household Consumption**

In 2005 compared to previous year, household consumption increased nominally by 8.4%. If we consider that annual average inflation for the same period was almost the same, practically we will get zero growth in real terms. However, due to statistical discrepancy, it is probable that the growth was much more impressive. This is obvious by the indicators of retail sales (practically being entirely part of consumer expenditure) and imports. Another important argument in this direction is the growth of consumer expenditure in the household expenditure structure for the last two years. This tendency significantly differs from the previous years when the share of consumer expenditure demonstrated downward trend. Growth of the share of consumer expenditure was basically consequence of fiscal policy expressed in redistribution

<sup>&</sup>lt;sup>1</sup>C. Alan Garner. "Capacity Utilization and U.S. Inflation". Federal reserve Bank of Kansas City – p. 6-8; Economic review – fourth quarter 1994-p.6-8.

#### Diagram 3.5.6

Consumption expenditure share in the household expenditure structure



Diagram 3.5.7 Consolidated budget expenditure and net crediting and among them government consumption (in current prices)



Diagram 3.5.8 Investments in fixed capital by construction and nonconstruction sectors (in current prices)



of the revenues from high income layers to lowincome layers.

#### **Government Consumption**

Government sector has had the most significant impact on the formation of domestic demand lately. On the one hand, growth of budget expenditures caused growth mostly private consumer and public consumer<sup>1</sup>, as well as investment demand. Concurrently, in the conditions of high level of dolarization, sharp growth of budget administration, resulted in unprecedented high demand from the budget as the most significant consumer of the national currency and conditioned "to disperse" into financial (non-income) transactions of the significant part of the emitted money supply. On the whole, if in 2004-2005 the money supply growth rate were approximately the same as in the previous years, it would cause sharp restriction of domestic demand. Hence, exceptionally high rate of money supply growth on the whole did not mean that these facilities would be directed to finance domestic demand. Furthermore, note, large scale inflow of foreign capital in the country also significantly influenced money supply growth. Money emitted as a result of this factor would unanimously increase domestic demand.

#### Investments

Rate of nominal annual growth of investments made in the fixed capital in 2005 equaled to 13%, which taking into consideration tentative growth rate of prices and depreciation costs, is not a very high indicator. The growth was basically conditioned by construction expenditure in the government and private sectors, while construction works in large energy products dropped. According to current calculations, in 2005 residential housing construction dramatically went up, the reason for which even taking into consideration the increase in prices for construction costs was the record growth of real estate prices. As a result, investment resource including banking sector participation was directed into one of the most profitable sector of economy today, which is not considered to be a productive asset<sup>2</sup>.

 <sup>1</sup> Budget expenditures belong to government consumption excluding investment costs, transfers of social type (pensions, allowances) and expenditure incurred for debt repayment-servicing.
 <sup>2</sup> Inflation report, 2003, May – bank of England. – p.26.



## FORECAST FOR THE FORESEEABLE FUTURE

Medium-term period economic growth significantly depends on the fact how rapidly Russia, as the key trade partner, will be replaced by other countries. However, high rate of the economic growth of the late period is anticipated to continue.

By the end of 2006, inflation forecast indicator will be within 5.5.-7%, which along with exogenous shocks is an acceptable indicator. The risks affecting the inflation is distributed in the direction of both price rise and price fall, however, it is more oriented toward rise. Respectively, the direction of the monetary policy of the National Bank of Georgia will depend on the further development of the events. However, it is more anticipated that the NBG will tighten monetary policy rather than loosen or not change.

#### Diagram 4.1





#### Diagram 4.2

wine export to Russia, Ukraine and the rest of countries by registered trade 2000-Q106



#### **Economic Growth**

By expert assessment, in 2005 half of the GDP growth was conditioned by expansion of foreign demand. Accordingly, in future the dynamics of the economic growth will significantly depend on the export.

Despite the fact that scrap metal export volume tends to reduce significantly conditioned by the reduction of scrap metal supplies in the country, it is worth to note that scrap is asset produced in the past and hence, only the services related with its export will probably affect the GDP dynamics. So, direct effect of scrap export on impediment of the GDP growth will be negligent, though it will affect hard currency receipts. On the other hand, restriction of wine, other alcohol beverages and mineral waters export due to Russia's embargo will seriously affect both hard currency receipts and GDP growth dynamics. The impact of only this factor on the GDP annual growth in 2006, considering the pessimistic scenario for the remaining three guarters that takes into consideration zero replacement effect, unregistered export and maximum scale of use of locally produced products for the intermediate consumption will be no more than 1.7 percentage point. According to more optimistic calculations, the impact is significantly lower, however no less than 0.8 percentage point. It is compounded by the economic problems caused by restriction of agricultural product export to Russia.

It is anticipated that high economic growth rate of the last period will be retained in the future. How

Table 4.1
Largest export groups in Georgia by registered export

	January-March		January-March,	
	2005		2006	
	mln	% to	mln	% to
	USD	total	USD	total
registered export of commodities, total	170.3	100	210.4	100
natural grapes wine	13.2	7.8	21.5	10.2
ferrous alloys	21.4	12.6	19.6	9.3
nuts and walnuts	8	4.7	17	8.1
non-ferrous metal scrap	28	16.5	13.5	6.4
mineral waters	5.3	3.1	11.2	5.3
gold unprocessed or semi-processed	6.3	3.7	11.1	5.3
copper ores and concentrates	14	8.2	10.2	4.8
nitrogen fertilizers	4.9	2.9	10	4.7
non-denaturated ethyl alcohol and alcohol beverages	5.6	3.3	8.4	4
sugar	9.7	5.7	6.3	3
the rest of products	53.8	31.6	81.6	38.8

Diagram 4.3 Inflation forecast 2005-2006



significant the impact the Russia's embargo will be on the economic growth rate depends on how rapidly and completely Russian market will be replaced by other markets. However, obviously, in case of success, due to increased competition, in the long term period, Georgia's economy will be stronger and more diversified than it is today.

#### **Inflation forecast**

Along with planned growth of the GDP and money supply, without significant volatility of the exchange rate, taking into consideration market expectation of oil prices, worse harvest than last year, slight growth of imported inflation and without other possible exogenous factors, in the conditions of unchanged monetary policy anticipated inflation will look as follows<sup>1</sup>.

According to modeling forecast, in December of the current year, annual inflation with 10% probability will change from 5.55% to 6.95%.

On the basis of presently available information in the direction of price rise, we can identify such risks<sup>2</sup> as significant growth of credit (if it is transformed into high consumer expenditure), possible complications in regard to the Bird flu, increased domestic demand as a result of planned expansive fiscal policy in the second half of the year, higher than expected price increase on energy carriers and bad climatic conditions. In the direction of price reduction the impact of the following factors is to be taken into consideration: price reduction on some of the agricultural products as a result of weakening demand from Russia, reduction of excise rate on cigarettes, etc. Note, despite the difficulty of risk assessment, its impact is more likely to be significant in the direction of price increase rather than decrease.

Along with political statements it is compounded by potentially severe inflationary anticipation from the population that is additionally conditioned by incorrect perception of inflation, proceeding from relative price rise on frequently consumed commodities (e.g. sugar and petrol). (See: Exhibit: Inflation and Its Perception).

<sup>&</sup>lt;sup>1</sup> For additional information on inflation forecast modeling, see: A. Mestvirishvili, T. Mdivnishvili. Inflation simulation and forecasting for Georgia.//"Bank" - N3(20)-2004.

<sup>&</sup>lt;sup>2</sup> Proceeding from the model structure, it is impossible to envisage all the risks in the model.

On the basis of mentioned above, in the mid-term period National Bank of Georgia will most probably tighten the policy rather than retain the same or loosen it. While in the short-term period, the new information will be carefully studied, and will result in the relevant decision from the monetary policy.

#### **Inflation forecast model**

To make the inflation forecast, the NBG applies the Error Correction Method and the equation looks as follows:	p <sup>food</sup> – fruit and vegetable prices;		
	p <sup>imp</sup> – import price change by weighted import share;		
$\begin{split} \delta p = &0.082 \delta e + 0.066 \delta e_{,1} + 0.061 \delta m_{,1} + 0.05 \delta m_{,2} + 0.01 \delta p^{\text{oil}} + \\ &+ 0.014 \delta p^{\text{food}} + 0.21 \delta p_{,1}^{\text{imp}} + 0.015 \text{ecm} - 0.005 \text{DUM1} + \\ &+ 0.003 \text{DUM4} - 0.006 \text{DUM5} - 0.004 \text{DUM6} + 0.004 \text{DUM12} + \\ &+ 0.096 \text{D9812} + 0.033 \text{D0311}, \end{split}$	<ul> <li>DUMn – dummy variable, for n month to exclude seasonality;</li> <li>D9812 – dummy variable to exclude Russia crisis;</li> <li>D0311 – dummy variable to exclude November 2003;</li> <li>ecm – variable describing long-term equilibrium and</li> </ul>		
Where:	looks like the following:		
p – inflation; m – money supply; e – GEL-USD exchange rate:	ecm=p <sub>-1</sub> -0.32e <sub>-1</sub> -0.68m <sub>-1</sub> +1.22y <sub>-1</sub> -7.59,		
p <sup>oil</sup> – oil average price in the world;	Where y is GDP.		

"Inflation Report" was prepared for publishing at National Bank of Georgia

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