



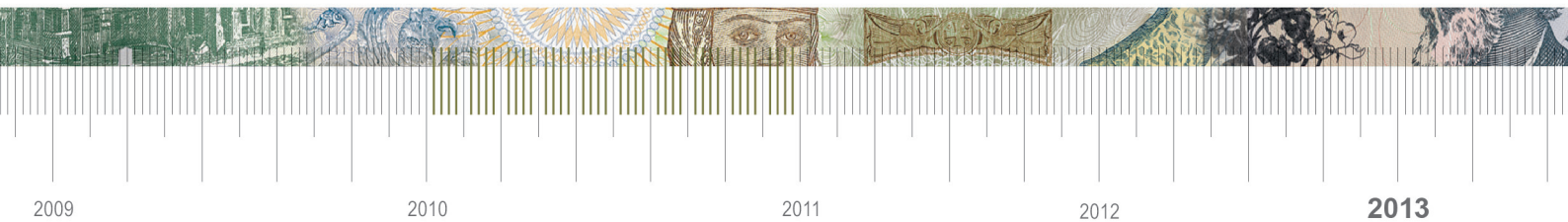
National Bank  
of Georgia

# INFLATION REPORT

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February

# 2013



## MONETARY POLICY IN GEORGIA

- The aim of the monetary policy is to maintain a low and stable inflation and thus promote macroeconomic stability, which in turn is a precondition for robust and sustainable economic growth, low interest rates and decreasing unemployment.
- CPI inflation target is set at 6% for the years 2013-2014 and 5% from year 2015. Inflation target of the National Bank of Georgia is planned to decrease gradually to 3% in the long term, parallel to the development of the economy.
- Since monetary policy decisions impact the economy with a certain time lag (4-6 quarters), the formulation of the monetary policy is done according to the inflation forecasts, in order to hit the target in medium term. The medium term horizon depends on shocks and exogenous factors that influence the rate of inflation and the aggregate demand.
- The primary tool of the monetary policy is the refinancing rate. The change of the policy rate is transmitted to the economy through market rates, exchange rate and credit activity, thus influencing the aggregate demand. The difference between the actual and the natural level of demand is the main determinant of inflation.
- Monetary policy decisions are communicated to the general public via press releases. The vision of the bank with regard to the ongoing and expected macroeconomic activity is published in the Inflation Report, in the second month of every quarter.

## CONTENTS

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1. REVIEW .....	5
2. FORECAST OF THE MACROECONOMIC ENVIRONMENT.....	7
2.1 EXTERNAL SECTOR ASSUMPTIONS .....	7
2.2 BASELINE SCENARIO OF THE MACROECONOMIC FORECAST .....	8
2.3 ALTERNATIVE SCENARIO .....	10
3. DEVELOPMENT OF CONSUMER PRICES .....	14
4. MONETARY POLICY.....	16
5. FINANCIAL MARKET AND TENDENCIES .....	19
5.1 LOANS.....	19
5.2. INTEREST RATES AND CREDIT CONDITIONS .....	20
5.3. EXCHANGE RATE .....	22
6. DOMESTIC DEMAND .....	24
7. EXTERNAL DEMAND AND BALANCE OF PAYMENTS .....	27
8. AGGREGATE OUTPUT AND LABOUR MARKET .....	29
8.1 OUTPUT .....	29
8.2 LABOUR MARKET .....	30

### BOXES

BOX 1 FORECASTING AND POLICY ANALYSIS SYSTEM (FPAS).....	12
BOX 2 MONETARY POLICY STRATEGY .....	17

### CHARTS

CHART 1.1 HEADLINE CPI INFLATION .....	5
CHART 1.2 REAL GDP GROWTH.....	6
CHART 2.1 REAL GDP ANNUAL GROWTH IN EUROZONE AND USA.....	7
CHART 2.2 ANNUAL CPI INFLATION IN EUROZONE AND USA .....	8
CHART 2.3 HEADLINE CPI INFLATION (ADJUSTED FOR SEASONALITY).....	9
CHART 2.4 BREAKDOWN OF CPI INFLATION (QUARTERLY, ANNUALIZED, ADJUSTED FOR SEASONALITY) .....	9
CHART 2.5 REAL GDP GROWTH (ADJUSTED FOR SEASONALITY).....	10
CHART 2.6 HEADLINE CPI INFLATION ACCORDING TO THE BASELINE AND ALTERNATIVE SCENARIOS (ANNUAL, ADJUSTED FOR SEASONALITY).....	10
CHART 2.7 REAL GDP GROWTH ACCORDING TO THE BASELINE AND ALTERNATIVE SCENARIOS (ANNUAL, ADJUSTED FOR SEASONALITY) .....	11

CHART 3.1 HEADLINE AND CORE INFLATION .....	14
CHART 3.2 SHARE OF FOOD PRODUCTS IN HEADLINE INFLATION .....	15
CHART 3.3 IMPORTED AND DOMESTICS GOODS INFLATION .....	15
CHART 4.1 MONETARY POLICY RATE .....	16
CHART 4.2 REFINANCING LOANS .....	17
CHART 4.3 INTERBANK MONEY MARKET .....	17
CHART 5.1 LOAN PORTFOLIO ANNUAL GROWTH RATE .....	19
CHART 5.2 RETAIL LOAN PORTFOLIO ANNUAL GROWTH RATE .....	20
CHART 5.3 INTEREST RATES ON GOVERNMENT SECURITIES .....	20
CHART 5.4 SPREAD BETWEEN THE MONETARY POLICY RATE AND THE YIELD CURVE .....	21
CHART 5.5 AVERAGE INTEREST RATES ON LOAN PORTFOLIO .....	21
CHART 5.6 INTEREST RATES ON DEPOSITS .....	22
CHART 5.7 EFFECTIVE EXCHANGE RATES (JAN 2008 = 100) .....	22
CHART 6.1 CAPITAL FORMATION ANNUAL GROWTH RATE .....	24
CHART 6.2 GDP AND FINAL CONSUMPTION REAL GROWTH RATE .....	25
CHART 6.3 STRUCTURE OF THE CONSOLIDATED BUDGET EXPENSES .....	25
CHART 6.4 GROSS SAVINGS AND CAPITAL FORMATION TO GDP .....	26
CHART 7.1 CURRENT ACCOUNT DEFICIT TO GDP .....	27
CHART 7.2 CURRENT ACCOUNT (AS A SHARE OF GDP) .....	28
CHART 8.1 SHARES OF THE MAIN SECTORS OF THE ECONOMY IN REAL GDP GROWTH RATE, 2005-2012 .....	29
CHART 8.2 REAL GROWTH RATES OF THE LARGEST SECTORS OF THE ECONOMY, 2007-2012 ...	30
CHART 8.3 LABOUR PRODUCTIVITY, AVERAGE MONTHLY SALARY AND UNIT LABOUR COST, 2009-2012 (ANNUAL PERCENTAGE CHANGE) .....	31

## **TABLES**

TABLE 2.1 BASELINE AND ALTERNATIVE SCENARIOS COMPARISON (DEVIATION FROM BASELINE SCENARIO VALUES, PERCENTAGE POINTS) .....	11
TABLE 5.1 ANNUAL CHANGE OF EFFECTIVE EXCHANGE RATES .....	23
TABLE 8.1 INDEX OF REAL VALUE ADDED PER EMPLOYEE IN 2012 Q3 COMPARED TO THE PREVI- OUS YEAR CORRESPONDING PERIOD .....	30
TABLE 8.2 INDEX OF AVERAGE NOMINAL MONTHLY SALARY IN 2012 Q3 COMPARED TO THE PREVIOUS YEAR CORRESPONDING PERIOD .....	31

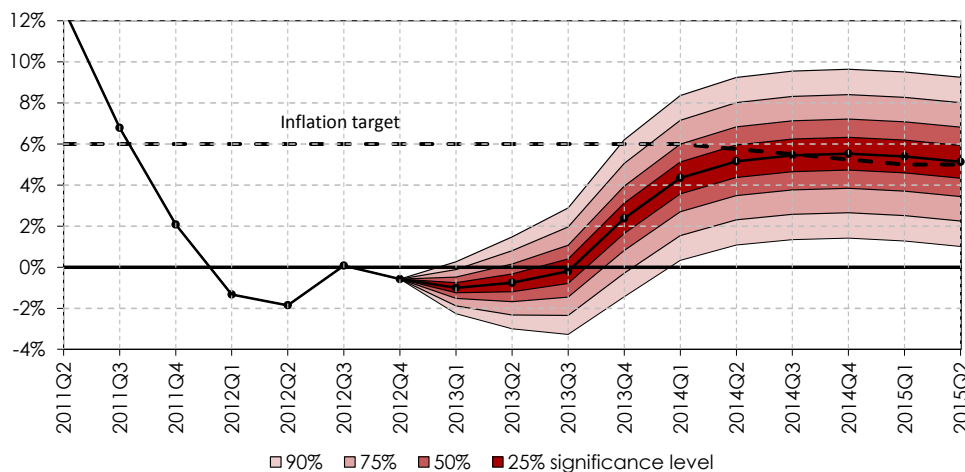
# 1. REVIEW

Economic activity in Georgia during 2012 can be positively evaluated overall, in spite of the uncertainty related to the pre-election period and its subsequent change of the government. Construction and manufacturing sectors have played an important role in the growth of output. Trade and service sectors have also grown. The level of economic activity was high during the first three quarters, largely aided by state-financed infrastructure projects. Investment and consumption were relatively hindered during the fourth quarter due to the uncertainty related to government transition.

Headline inflation has stayed below the 6% target, which is mostly caused by supply factors. Slow decline of food prices that reached record level heights in the first half of 2011 is creating an important base effect. The inflation rate has also been affected by decrease in administrated prices, lower margins for some consumer goods and overall price decline in the international markets. Slowdown of consumption and credit growth in the fourth quarter also created insufficient pressure from demand on consumer prices.

According to the NBG forecast, inflation is expected to stay below the 6% target in 2013 as well. Deflation is expected to pick up during the first quarter of current year, since utility prices will continue to decrease and there is a declining tendency in prices of food and fuels. Growth of economic activity is expected to create positive inflationary pressure on domestic prices in the second half of the year, thus facilitating the inflation to approach the target level. Consumer price index inflation is expected to hit the target in the second half of 2014, according to the current forecast (see Chart 1.1).

Chart 1.1 Headline CPI Inflation

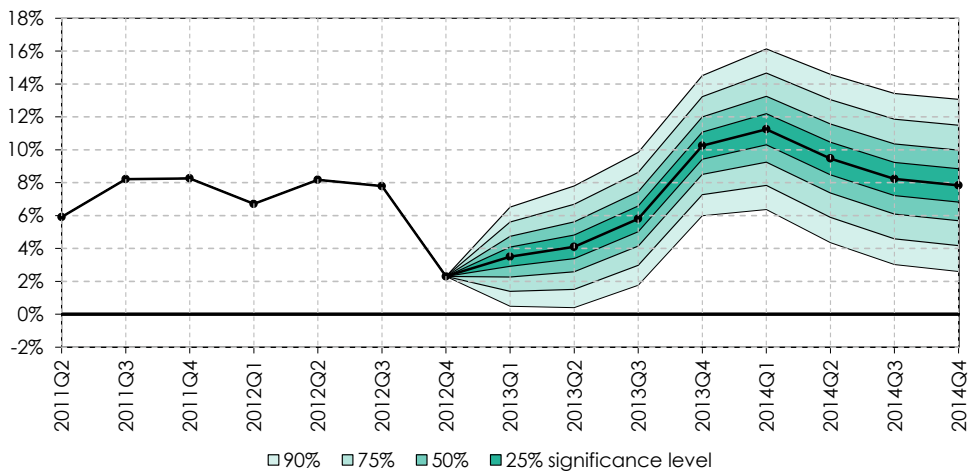


Source: National Bank of Georgia

The forecast of economic growth in 2013-2104 varies to a large extent and is largely dependent on the recovery of business and consumer confidence and effectiveness of the planned government investment projects. According to the NBG, the economy is expected to grow at a rate of 6% in 2013. This forecast is based on the expected pick-up of activity in agricultural and manufacturing sectors and continuation of growth in trade and tourism sectors.

The abovementioned forecast can change both ways. On one hand, it can change upwards due to higher investment activity or growth in net exports and on the other hand, downwards, in case of continued uncertainty or decrease in trade partners' demand.

Chart 1.2 Real GDP Growth



Source: National Bank of Georgia

Global economy is continuing to recover at a slow pace, but it is still vulnerable to risks. Business and consumer confidence indexes have improved in a number of emerging and developed economies, especially outside of Eurozone. Eurozone recorded negative economic growth in 2012 due to sovereign debt crisis and consequent fiscal consolidation. Sluggish economic growth in Europe affected Georgia through slower export and remittances growth last year. According to the current forecasts, economic growth of Europe is expected to stay sluggish. However, recent data indicate much more favorable environment for the economic growth in the US. GDP growth has topped 2% in 2012 and the unemployment rate has been declining, with the monetary policy expected to stay expansionary.

Interbank interest rates are low in developed economies due to slow economic growth and monetary stimuli and are not expected to increase according to current forecasts.

Taking current forecasts and macroeconomic analysis into account, the Monetary Policy Committee has decided to decrease the monetary policy rate by 0.5 percentage points to 4.75% on 13th of February, 2013. Loosening of the monetary policy reflects the view of the NBG concerning the forecasted inflation rate and macroeconomic indicators.

## 2. FORECAST OF THE MACROECONOMIC ENVIRONMENT

### 2.1 EXTERNAL SECTOR ASSUMPTIONS

Global economy is continuing to recover at a slow pace, but it is still vulnerable to risks. According to the recent indicators, there is an evidence for increased consumer confidence by the end of 2012, but some economic indicators still remain relatively depressed pointing to the slow pace of recovery. Business and consumer confidence indexes have improved in a number of emerging and developed economies, especially outside of Eurozone. The build-up in confidence is explained mostly by the stabilization of the production index and the service sector.

Eurozone has been contracting through 2012. After positive economic growth in 2011, real GDP has decreased by an annual 0.4% in 2012 according to Bloomberg indices (see chart 2.1). Sovereign crisis in Europe and the consequent fiscal consolidation has been the main cause of this reduction. According to the forecasts, the decreasing tendency of economic activity is going to persist through the first quarter of 2013, but gradual growth is expected thereafter.

According to the recent estimations, the growth of the US economy has been relatively faster, with the growth rate being 2.2% in 2012. Pick-up in economic activity was especially evident in the second half of the year and was aided by private consumption, net exports, and investments in the real estate market. Over the last four years, the unemployment rate was at its lowest in December 2012 (7.8%); however, uncertainty surrounding the US fiscal policy is having an adverse effect on investor confidence, thus creating risks for economic growth in the next quarters.

Sluggish growth in Eurozone is creating risks for Central and Eastern Europe, but external demand is relatively less important for the growth of the region's largest economies (Turkey, Poland, Romania). Hungary, Slovenia and Baltics are exposed to this risk the most, since their economies are dependent on exports to a significant extent. Annual real GDP growth has been 1.8% in 2012 for the region. According to the forecast, this indicator will equal 2.4% in 2013, with Turkey and Baltics propelling the growth.

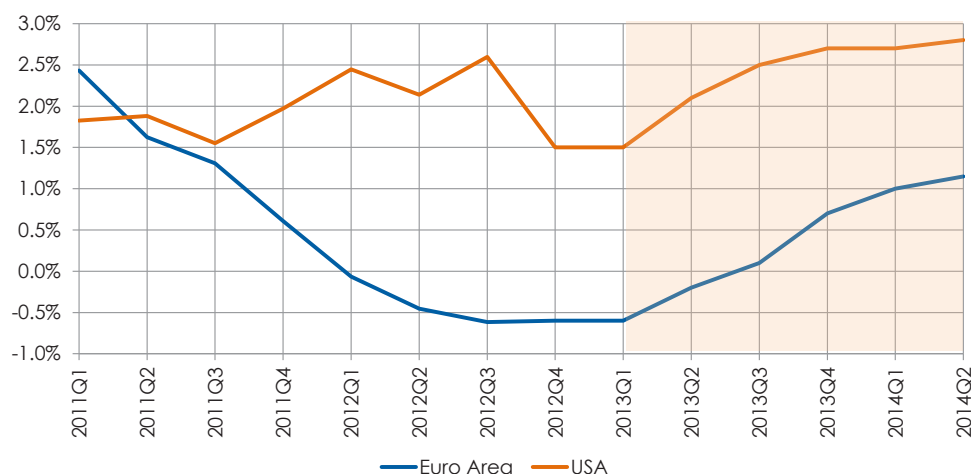
« Global economy is continuing to recover at a slow pace, but it is still vulnerable to risks.

« Decreasing tendency in Eurozone economic activity is going to persist through the first quarter of 2013, but gradual growth is expected thereafter.

« Uncertainty surrounding the US fiscal policy is having an adverse effect on investor confidence, thus creating risks for economic growth in the next quarters.

« Sluggish growth in Eurozone is creating risks for Central and Eastern Europe

Chart 2.1 Real GDP Annual Growth in Eurozone and USA



Source: Eurostat

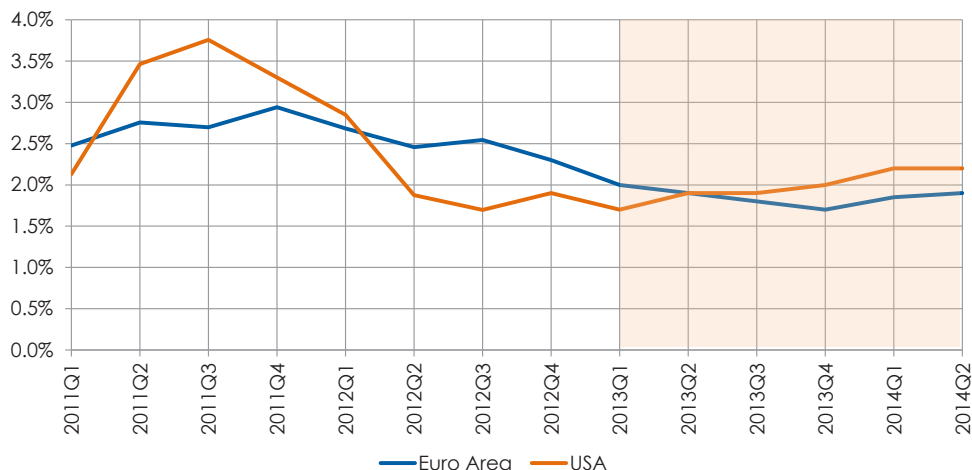
The inflation pressure has been neutralized globally by a decreasing trend in the world energy prices since November 2012. Annual inflation for OECD member countries equals 1.9% for 2012. Slack in economic activity during 2012 has not resulted in significant deflationary pressure on prices for Eurozone. Annual consumer prices inflation has averaged 2.5% in 2012, which is slightly lower than the last year indicator (see Chart 2.2). Inflation forecast for 2013 and 2014 is continuing to decrease

« Decreasing inflation trend caused by weak demand is going to persist for next years.

due to sluggish economic activity and low inflation expectations. Inflation has been declining during the last months of 2012 in the US as well, with December consumer price inflation equal to 1.7%. According to the FED the short-term interest rates will be maintained at a near zero rate until the unemployment rate goes below 6.5%. With such an unprecedented monetary policy, it is expected for the inflation to go up, not exceeding 2.5% though, according to the current forecast..

With sluggish economic activity in 2012, the European Central Bank loosened its monetary policy resulting in low short-term interest rates. European interbank interest rates are expected to stay low until 2014.

Chart 2.2 Annual CPI Inflation in Eurozone and USA



Source: OECD

The price of crude oil in December 2012 and January 2013 stood approximately at the same level as in corresponding period of the previous year. The price of a barrel was on average \$107-112 and it was reflecting the lack of global demand, which is going to persist in 2013 according to forecasts. In spite of the fact that escalated tensions in the Middle East cause the price to rise, increased supply by non-OPEC countries (USA, Canada) neutralizes the effect. Having this in mind, market participants expect the oil prices to drop slightly in the medium-term.

Euro is appreciating significantly against most of the currencies, which is a result of increased confidence in the stability of the region. ECB has also declared that it stands ready to purchase bonds issued by member states if there is a need to do so. Since the market may be overly optimistic with regards to the Eurozone recovery, Bloomberg consensus forecast for Euro US Dollar exchange rate is for it to drop to 1.32 by the end of the first quarter of 2013 and to 1.31 by the end of the year.

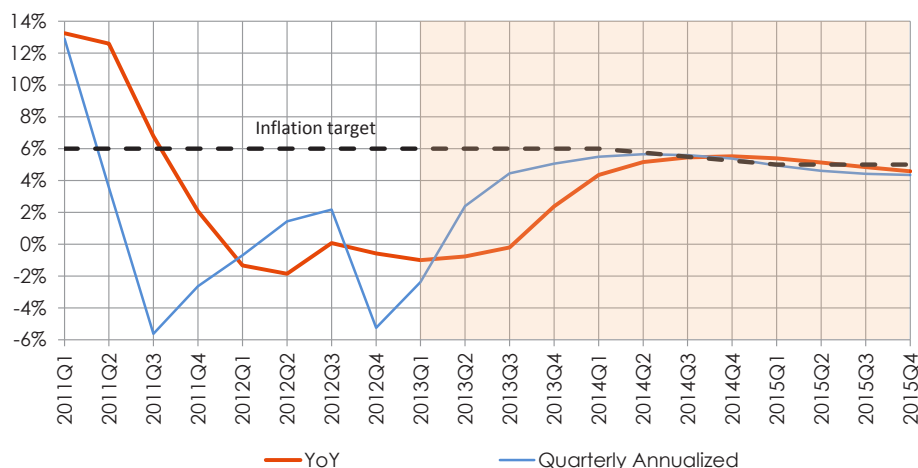
« Market participants expect the oil prices to drop slightly in the medium-term.

## 2.2 BASELINE SCENARIO OF THE MACROECONOMIC FORECAST

Consumer prices have been decreasing significantly during 2012 and the annual inflation rate equaled 0.6% in the fourth quarter (see. chart 2.3). Inflation lower than NBG target of 6% was caused by a wide array of factors. The supply side exerted significant deflationary pressure, with declining prices for food products and fuels. Another important factor that influenced the inflation rate was the decrease of utility prices. There was no inflationary pressure from the demand side because of a weakened economic activity in the fourth quarter of the year. All of these caused a significant decline of seasonally adjusted domestic inflation. (see chart 2.4).



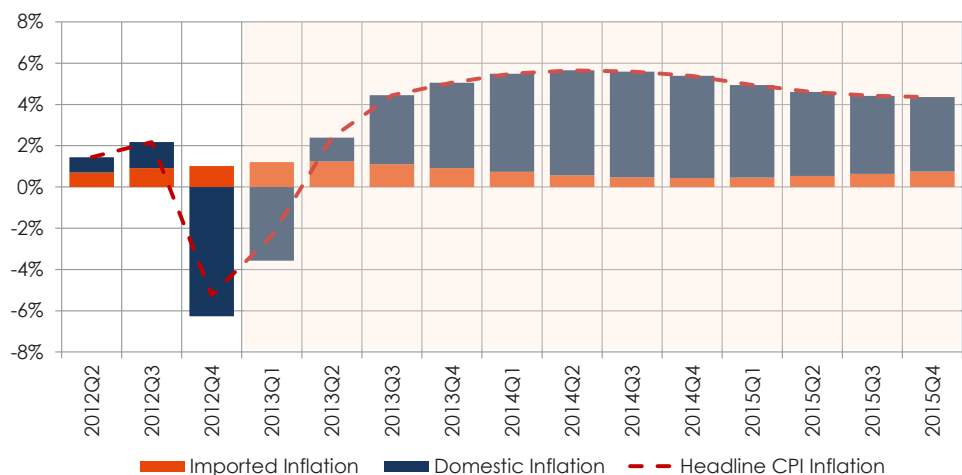
Chart 2.3 Headline CPI Inflation (adjusted for seasonality)



Source: National Bank of Georgia

Deflation was partially caused by external factors as well. The appreciation of the nominal effective exchange rate during 2012 and stability of world prices played its role in the decline of both the imported and headline inflation.

Chart 2.4 Breakdown of CPI Inflation (quarterly, annualized, adjusted for seasonality)



Source: National Bank of Georgia

« Domestic inflation has a significant contribution to the dynamics of the quarterly inflation

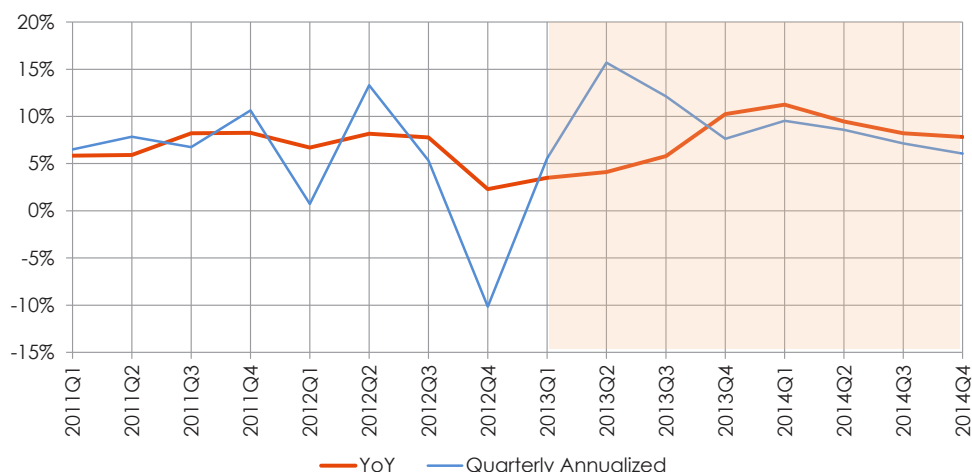
According to the forecast, the rate of inflation will stay negative during the first half of 2013 despite the growth of consumer prices. Headline inflation will approach the target only in the second half of 2014 (see chart 2.3). The reasons for negative inflation in the first quarter are decreased utility prices and persistence of the declining trend in food prices. However, the expected pick-up of economic activity in the second half of the current year will promote domestic prices and facilitate the rate of inflation to approach the target (see chart 2.4). The NBG target of the inflation rate will be decreased to 5% in 2015.

According to the leading indicators, economic activity has slowed down considerably in the fourth quarter of 2012 (see chart 2.5) and a preliminary estimate of real GDP growth for that period is 2.5%. This has been caused by weakened demand (see chart 2.6) due to political uncertainty related to the transition of government and a slowdown of activity in the financial sector. Demand for loans has decreased and commercial banks tend to decrease their risk appetite. Investors expecting government priorities and legislative changes can be seen as the main factor causing a temporary decline in demand of business loans. Current slowdown of economic activity is notable given high level of growth during the first three quarters of the year, which was to some extent propelled by state financed infrastructure projects.

« Annual inflation rate is going to stay low in 2013 and will reach the target in the second half of 2014.

« Slowdown of activity in the financial sector was mainly caused by a decrease in demand for loans and partially by the banks choosing to take on less risk.

Chart 2.5 Real GDP Growth (adjusted for seasonality)



Source: National Bank of Georgia

Forecast of economic growth in 2013-14 is positive in spite of a temporary slowdown of economic activity. According to the current forecast, real GDP growth is expected to reach 6.0% in 2013 (see chart 2.5). This forecast is largely based on the positive developments that are likely to occur in the agricultural and manufacturing sectors. It also assumes that the trade and tourism sectors will continue their growing path (see chart 2.6).

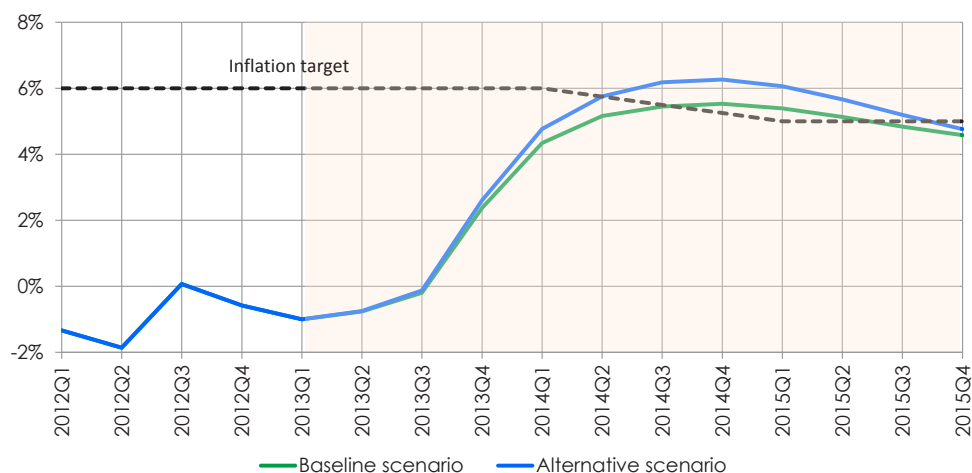
« Forecast for real GDP growth in 2013 is still positive in spite of low economic growth in the fourth quarter of 2012.

Domestic demand is expected to be lifted gradually together with the recovery of consumer confidence and receding of uncertainty. Demand will be also positively affected by the implementation of the agricultural programs announced by the government and maintenance of large infrastructure projects.

### 2.3 ALTERNATIVE SCENARIO

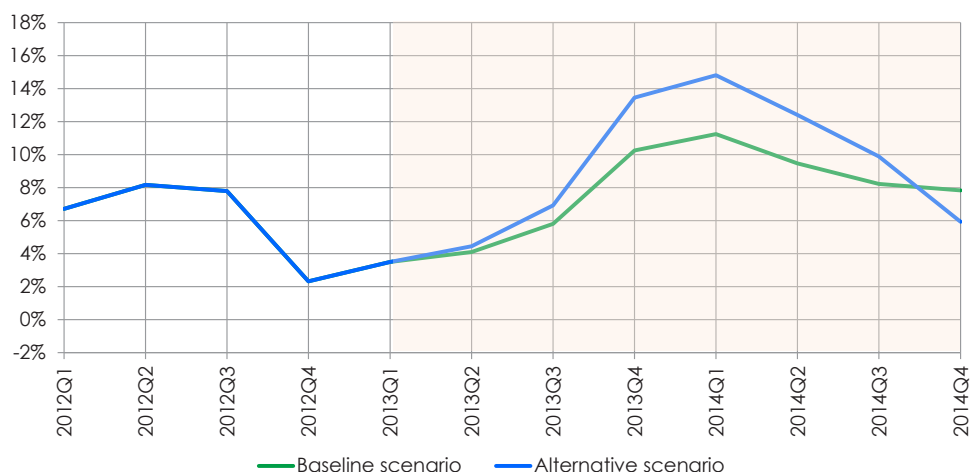
Alternative forecast scenario assumes a higher level of investment activity and growth of net exports with respect to the baseline scenario. Additional investments can have a significant impact on the economic growth forecast, but their expected volume and time horizon are subject to large variations. Therefore, their effect is accounted for in the alternative scenario only.

Chart 2.6 Headline CPI Inflation according to the Baseline and Alternative Scenarios (annual, adjusted for seasonality)



Source: National Bank of Georgia

Chart 2.7 Real GDP Growth according to the Baseline and Alternative Scenarios (annual, adjusted for seasonality)



Source: National Bank of Georgia

Alternative scenario assumes an additional inflow of investments on the scale of 1.5% of GDP compared to the baseline scenario. High volume of investments has a positive impact on GDP growth and yields an additional 1.2 percentage points of real GDP growth compared to the baseline case (see chart 2.8), but a relatively slight influence on consumer price inflation. (see chart 2.7). Real GDP growth reaches 7.1% in 2013 and the CPI inflation hits the target in six quarters time according to this scenario. High volume of investments promotes appreciation of GEL exchange rate and creates excess demand, which calls for corresponding changes in monetary policy. Thus, the effects of the exchange rate and monetary policy partially compensate for inflationary pressure of excess demand and increase macroeconomic stability. Simulation result is shown in terms of percentage point deviations from the baseline case (see table 2.1).

Table 2.1 Baseline and Alternative Scenarios Comparison (deviation from Baseline Scenario values, percentage points)

	Inflation	Real GDP Growth	Monetary Policy Rate
2012 Q4	0.0%	0.0%	0.00%
2013 Q1	0.0%	0.0%	0.00%
2013 Q2	0.0%	0.3%	0.04%
2013 Q3	0.1%	1.1%	0.15%
2013 Q4	0.2%	3.2%	0.44%
2014 Q1	0.4%	3.6%	0.64%
2014 Q2	0.6%	2.9%	0.64%
2014 Q3	0.7%	1.7%	0.51%
2014 Q4	0.7%	-1.9%	0.23%

Source: National Bank of Georgia

## FORECASTING AND POLICY ANALYSIS SYSTEM (FPAS)

Since monetary policy affects the economy with a time lag, macroeconomic forecasts and forward looking economic analysis are key to effective implementation of monetary policy. Forecasting requires the synthesis of economic modeling, analysis of past and current trends and expert judgment.

The NBG forecasting and monetary policy analysis system incorporates several analytical tools, which can be classified into three categories: short-term forecasting instruments, medium term forecasting tool (core model) and additional satellite models. The latter provide evaluation of current economic position and are used for forming expert judgments.

Short-term forecasting instruments incorporate Bayesian vector autoregression (BVAR), error correction (ECM) and factor models. BVAR model is a multivariate time series system that is capable of estimating parameters reasonably well even with scarce amount of data based on prior information about their probability distributions. The ECM is attached to the vector autoregression by testing theoretical assumptions empirically. It accounts for both long-term cointegrating relationship between the non-stationary variables and short-term deviations from this relationship. Factor model is based on principal components approach and is used for forecasting GDP on a quarterly basis. Short-term forecasts (one-two quarters) of main macroeconomic variables are based on the output of these models and expert judgment. The results are utilized further for medium-term forecasting.

Core model is the main part of the system. It is a semi-structural model and is based on the new Keynesian approach. The model is balanced by empirical qualities and dynamic stochastic general equilibrium approach. It takes both micro-economic foundations and market expectations into account making it forward looking and useful for monetary policy in terms simulating possible outcomes. The model equations are structural and each one of them is meaningful in terms of economic theory. The model was designed to meet modern policy requirements and to have special characteristics to fit the Georgian economy but at the same time to be easily operable and manageable.

The NBG monetary policy is modeled endogenously as one of the factors of macroeconomic environment and hence, the model incorporates current and expected stance of the central bank. Monetary policy rule is based on the Taylor Rule and is in accordance with the objective defined by the Organic Law.

The specification of the monetary policy rule ensures that the policy rate changes to a greater extent in response to deviation of expected inflation from the target ( $\pi_{t+4}^e - \pi^{tar}$ ) and to a lesser extent in response to the GDP gap ( $\hat{Y}_t$ ). However, since the risks of macroeconomic forecast are large, interest rates do not change immediately and have certain inertia. The monetary policy rule has the following functional specification:

$$i_t = \gamma_1 i_{t-1} + (1 - \gamma_1) [i_t^N + \gamma_2 (\pi_{t+4}^e - \pi^{tar}) + \gamma_3 \hat{Y}_t]$$

The monetary policy rate is at its neutral level ( $i_t^N$ ) in equilibrium, when the economy is not subject to shocks from either supply or demand sides.  $\gamma_2$  parameter is the elasticity of the policy rate with respect to deviations from the inflation target, and  $\gamma_3$  – w.r.t. GDP gap.  $\gamma_2$  is much larger than  $\gamma_3$  in line with the NBG mandate. The parameters are calibrated according to the analysis of historical data, but they can be changed in time due to new events and data.

### Demand Side

**GDP gap** ( $\hat{Y}$ ) – excess aggregate demand, is considered to be the sum of excess domestic demand and net exports. This representation gives possibility to model each component separately.

The main determinants of excess domestic demand ( $\hat{D}$ ) are real effective interest rate gap ( $\hat{r}^{eff}$ ), country risk premium ( $prem$ ), economic agents' budget constraints stemming from the balance sheet effect ( $\hat{Y} - \hat{D} - \alpha_c \hat{Z}$ ) and fiscal impulse ( $G$ ). Current demand is also affected by its past value, expectations and shocks ( $\varepsilon^D$ ).

Excess domestic demand equation:

$$\hat{D}_t = \alpha_1 \hat{D}_{t-1} + \alpha_2 \hat{D}_{t+1} - \alpha_3 (\hat{r}_t^{eff} + \alpha_4 prem_t) + \alpha_5 (\hat{Y}_t - \hat{D}_t - \alpha_c \hat{Z}_t) + \alpha_7 G_t + \varepsilon_t^D$$

**Net export gap** ( $\hat{X}$ ) is a function of excess domestic demand ( $\hat{X}$ ), real exchange rate gap ( $\hat{Z}$ ), excess foreign demand ( $\hat{Y}^*$ ) and shocks ( $\varepsilon^*$ ) affecting foreign demand.

Excess net external demand equation:

$$\hat{X}_t = \delta_1 \hat{X}_{t-1} - \delta_2 \hat{D}_t + \delta_3 \hat{Z}_t + \delta_4 \hat{Y}_t^* + \varepsilon_t^X$$

Domestic demand gap has a negative effect since when domestic demand increases it causes import to increase and thus leads to net export reduction. On the other hand, real exchange rate positively affects the net export gap- depreciation of national currency makes domestic products more competitive in the foreign market and supports export growth. Moreover, high excess foreign demand improves trade balance through increased demand on domestically produced goods from abroad.

## Supply side

Consumer price inflation is modeled as a sum of domestic ( $\pi^D$ ) and imported ( $\pi^M$ ) inflations.

**Domestic inflation** is modeled through the Phillips curve and is influenced by excess domestic demand, real exchange rate gap, imported inflation, inflation expectations, which are formed as a weighted average of past information ( $\pi_{t-1}^D$ ) and rational expectations ( $\pi^e$ ), and supply shocks ( $\varepsilon^{\pi^D}$ ).

Phillips curve for domestic inflation:

$$\pi_t^D = \beta_1 \pi_t^M + (1 - \beta_1)[\beta_3 \pi_{t-1}^D + (1 - \beta_3)\pi_t^e] + \beta_4 \hat{D}_t + \beta_5 \hat{Z}_t + \varepsilon_t^{\pi^D}$$

Growth of excess domestic demand exerts inflationary pressure thus, increasing domestic inflation. On the other hand, real exchange rate depreciation is closely linked to the supply side causing the production factor prices to go up and thus increasing the production price.

**Imported inflation** is modeled as a function of foreign inflation ( $\pi^*$ ), nominal exchange rate ( $S$ ), the rate at which the domestic productivity is catching up with the productivity of trade partners (approximated by the real exchange rate trend ( $\bar{Z}$ )) and shocks ( $\varepsilon^{\pi^M}$ ).

Imported inflation equation:

$$\pi_t^M = \beta_6 \pi_{t-1}^M + (1 - \beta_6) [\Delta S_t + \pi_t^* - \Delta \bar{Z}_t] + \varepsilon_t^{\pi^M}$$

Nominal exchange rate is modeled via **uncovered interest rate parity**, which is essentially a no-arbitrage assumption stating that short-term risk-adjusted yields should be same in both domestic and foreign capital markets:

$$i_t - i_t^* = 4 * (S_t^e - S_t) + prem_t$$

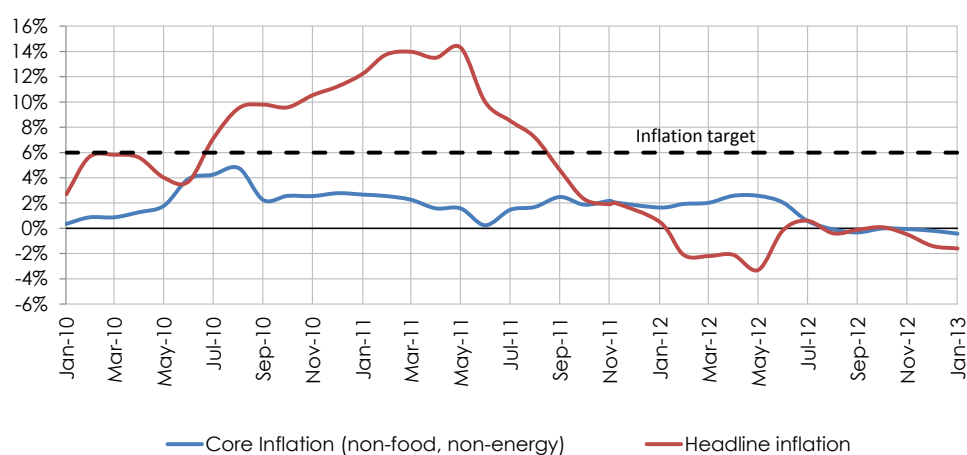
The model also enables estimating equilibrium levels of GDP, interest and exchange rates endogenously. These are of great importance for evaluating respective gaps, since they describe the economy in steady state and are unobservable.

### 3. DEVELOPMENT OF CONSUMER PRICES

The decline of overall price level has continued during the fourth quarter of 2012 according to the National Statistics Office of Georgia. Consumer prices declined by 0.1% during this period when compared to the third quarter of 2012, with seasonally adjusted inflation having declined even more. The change of overall price level has declined from -0.1% in the third quarter to -1.4% by the end of 2012. The decline has extended to January 2013, with inflation indicator standing at -1.6%. As one can see headline inflation is at a significantly lower level than the NBG target, which is 6% in medium-term. Core inflation (excluding foods and fuels) has also been declining and stood at -0.4% by the end of January (see chart 3.1).

« Inflation in January 2013, standing at -1.6%, is at a significantly lower level than the NBG target.

Chart 3.1 Headline and Core Inflation



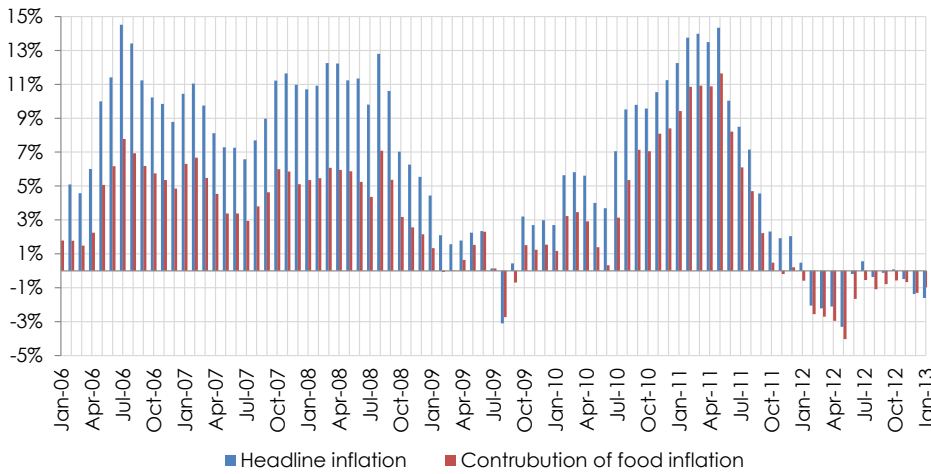
Source: National Bank of Georgia

The decline of consumer price index and headline inflation deviating from the target have been largely caused by supply side factors, but demand factors have also contributed to decreasing prices recently.

Food product prices have experienced significant growth by the end of 2010 and in 2011 both worldwide and in the region due to poor harvest. This growth was temporary and the trend was expected reverse with the harvest improving. However, price elasticity is usually lower when the prices are declining compared to the case when the prices are increasing and the continuing declining trend affected the current levels of inflation rate. Food products were cheaper by annual 3.1% in January, contributing approximately -1.0 percentage points to headline inflation (see chart 3.2).

« Inflation being significantly below target is largely caused by base effect created by decline of food product prices.

Chart 3.2 Share of Food Products in Headline Inflation



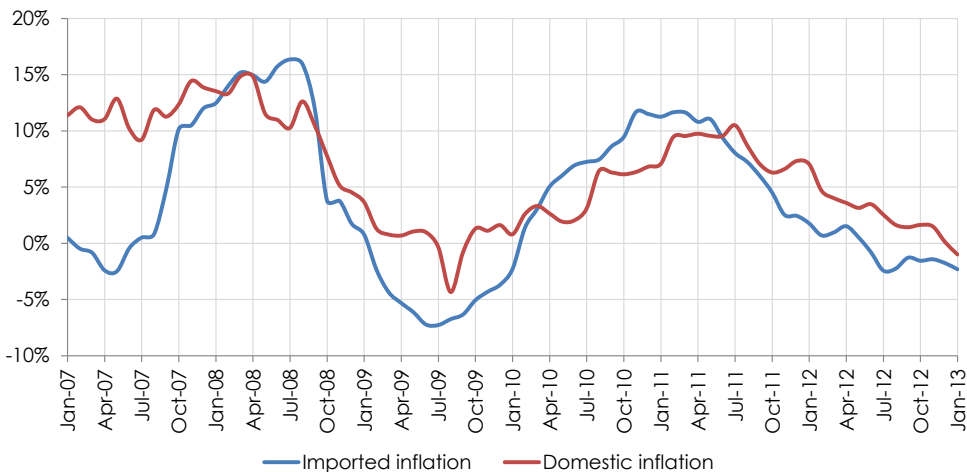
Source: GeoStat and National Bank of Georgia

The price of the cleaning service in Tbilisi has been reduced in the fourth quarter of 2012 significantly affecting the headline inflation indicator. The cleaning tariff was reduced by an annual 27.4% and contributed -0.3 percentage points to inflation rate. Electricity tariff was also decreased in January 2013 and it also contributed -0.3 percentage points to inflation in January. The planned cut of gas tariffs in 2013 will also create an additional base effect for the next year's inflation rate.

In terms of imported goods inflation it is worth noting that low inflation rates have been prevalent in our main trade partner countries – Azerbaijan, Armenia and Ukraine. Growth of imported goods prices has exhibited a downward trend since June 2011 and switched to deflation by then end of second quarter 2012. The trend continued in both third and fourth quarters with deflation rate increasing. Annual change in overall price level for imported goods stood at -2.3% by the end of January and the contribution of imported inflation to headline inflation was equal to -0.5 percentage points (see chart 3.3).

« The effect of price dynamics in the trade partner countries is quite strong on changes of general price level in the country. A negative growth rates were observed in prices of imported and tradable goods.

Chart 3.3 Imported and Domestic Goods Inflation



Source: GeoStat and National Bank of Georgia

As mentioned above, a low inflation rate has been facilitated by both supply and demand factors. Core inflation rate has decreased drastically after June 2012 and has been hovering around a zero percent level by the end of the year.

Services prices have also exhibited a declining trend after the first half of 2012, which can be possibly explained by a weak demand pressure. Aggregate demand was partially affected by fiscal consolidation and exchange rate appreciation during previous years. Monetary policy has been loosened in response to these and the policy rate has been gradually decreased to stimulate the demand. Such monetary policy was in line with existing forecasts, according to which inflation rate was to start growing from the second half of 2012 and hit the target by the beginning of 2013. However, uncertainty has weakened economic activity since then and hindered the transmission of monetary policy to the real economy.

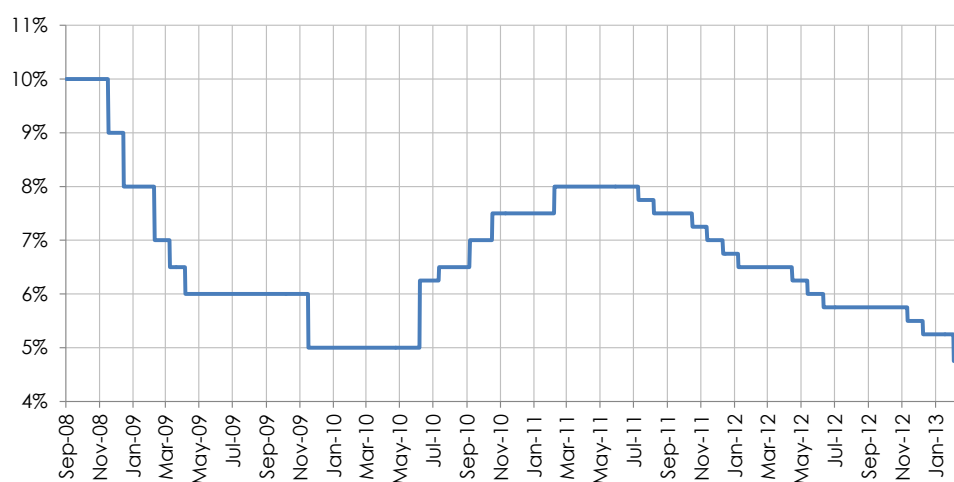
« Elections-related uncertainty has weakened the transmission of expansionary monetary policy to the real economy and caused the aggregate demand to decline since the second half of 2012.



## 4. MONETARY POLICY

The National Bank of Georgia started loosening the monetary policy from July 2011 and cut the monetary policy rate by 2.25 percentage points from 8.0% to 5.75% during the next 12 months. In the fourth quarter the NBG continued to loosen monetary policy as risks of undershooting the target increased in the second half of 2012 and cut the policy rate by another 0.5 percentage points during November and December.

Chart 4.1 Monetary Policy Rate



Source: National Bank of Georgia

The first Monetary Policy Committee meeting of 2013 was held on 13th of February and the policy rate was cut further down to 4.75% according to its decision. This decision was based on the existing inflation forecast and the macroeconomic analysis of the events ongoing both in Georgia and outside its borders. According to preliminary estimates, economic activity has slowed down during the fourth quarter, thus negatively affecting the level of prices. According to current forecasts, aggregate demand is expected to pick up again in 2013. Higher growth is particularly likely in the second half of the year and that will gravitate the inflation rate towards the target. It is also important that commercial bank lending activity has slowed down since August last year. The growth rate of loan portfolios has declined despite ample liquidity and capital of the banking sector, thus weakening the aggregate demand. The influence of the external sector also needs to be considered since the growth of exports and remittances has been relatively low during the past year due to decline of economic activity in Europe.

According to the NBG, the current inflation forecast has declined compared to the previous forecast and is expected to stay below the target during the year. The decision to loosen monetary policy has been taken given these forecasts and factors.

Demand for refinancing loans has been high during the fourth quarter as banks actively used the refinancing instrument to manage short-term liquidity. Interbank interest rates have been stable and hover around the monetary policy rate since the market has been sufficiently active and volatility due to excess liquidity is minimal. At the current stage, the level of liquidity is expected to stay such that there will be no need for the NBG for additional sterilization.

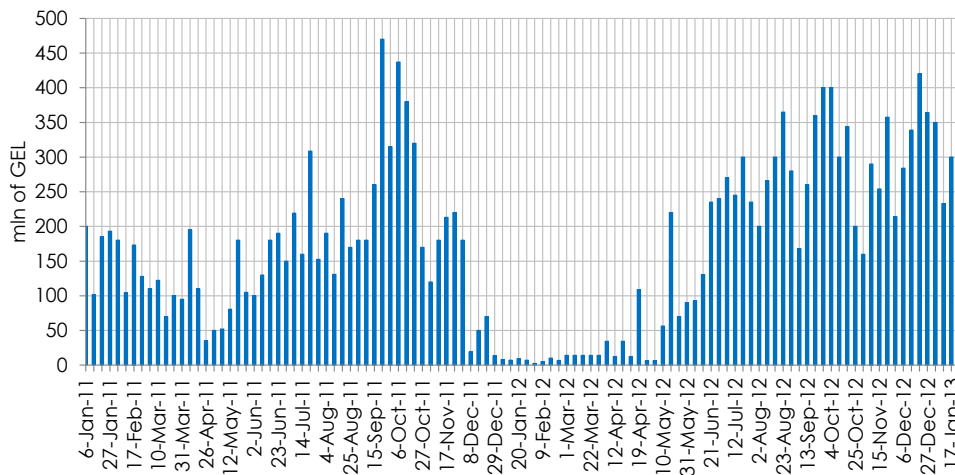
« The NBG continued to loosen monetary policy in February 2013.

« Interbank money market rates hover around the monetary policy rate.

« Current level of banking sector liquidity ensures that there is no need for additional sterilization.

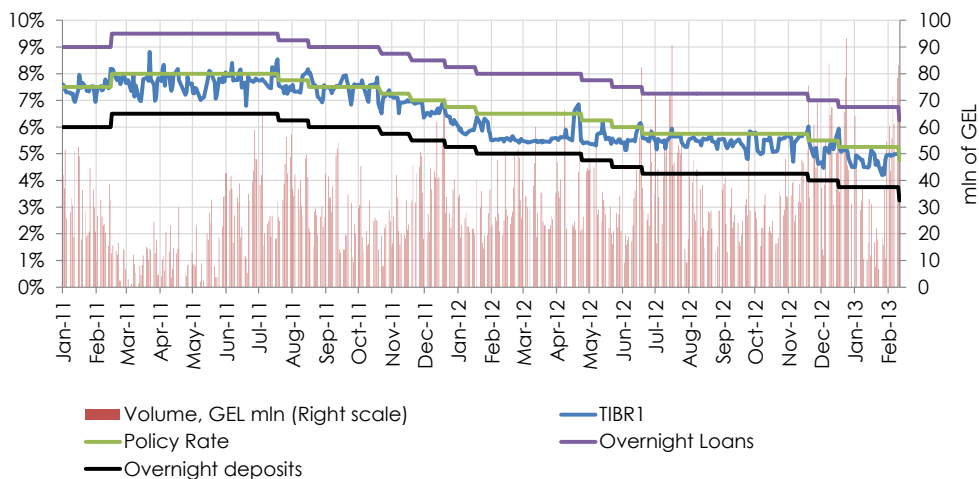


Chart 4.2 Refinancing Loans



Source: National Bank of Georgia

Chart 4.3 Interbank Money Market



Source: National Bank of Georgia

## MONETARY POLICY STRATEGY

The National Bank of Georgia started active communication of its monetary policy from 2013. The NBG resorts to inflation targeting regime to conduct monetary policy similarly to most of the major central banks. Under this regime, inflation target is announced well in advance thus increasing the transparency of the monetary policy and making it easier to communicate with the general public. The NBG set inflation target at 6% for 2013-2014 and 5% for 2015.

Communication becomes even more significant in inflation targeting regime, since communication plays a decisive role in forming appropriate public expectations and guiding them accordingly. Timely and effective communication of the NBG's objectives, strategy and analysis of the economic condition makes it easier for the general public to form expectations and enhances predictability of the monetary policy decisions. Hence, utilization of various communication channels and their refinement stands as one of the NBG's important priority. Regular meetings with analysts are planned to be held from 2013 in order to provide detailed information about the forecasts and decisions taken. Analysts will be presented to a renewed inflation report, which will become the main tool for communicating monetary policy. The new format of the inflation report is focused on forecasts and their analysis.

The NBG is also preparing a public monetary policy strategy document in order to improve the communication of monetary policy. This strategy document will introduce the public to the main principles of monetary policy in Georgia and potential venues for its development. The document reflects upon the basis for monetary policy decisions and instruments used to achieve the objectives set.

Monetary policy strategy describes the inflation targeting regime that is in place since 2009 in Georgia, its advantages and the conditions needed to hold for the regime to function successfully. The document stresses the importance of inflation forecast in terms of formulating the monetary policy decisions since the changes of monetary policy instrument are transmitted to the economy with a time lag and affect future inflation rate.

Under liberalized capital account, inflation targeting regime requires a floating exchange rate regime, which is optimal for the Georgian economy. The floating exchange rate regime performs a shock absorbing function and mitigates the impact of external shocks on the real economy.

The NBG has implemented crucial reform of its exchange rate policy to support the development of the foreign exchange (FX) market and in 2009 introduced currency auction, a new instrument for intervening in the FX market.

Currency auction is the only existing instrument the NBG can use to intervene in the FX market. Interventions in the FX market are essential due to specifics of the Georgian economy. The need to intervene may arise due to the small size of the Georgian FX market and capital flow volatility and serves the purpose of smoothening excessive short-term volatilities of the exchange rate. It should be stressed that the NBG does not have an exchange rate target.

Monetary policy has become more efficient due to the switch to the inflation targeting regime and the activation of the NBG monetary policy instruments in 2010. Refinancing loans, standing facilities and reserve requirements have facilitated utilization of GEL resources by the banks and development of the interbank money market. Establishment of a securities trading platform in the Bloomberg system has also played an important role in deepening of the money market by mitigating operational and credit risks. These reforms resulted in a lower volatility of short-term money market rates and improved transmission of the monetary policy decisions to the real economy.

To promote further growth of larization, the NBG approved the regulation about standard certificates of deposit of the commercial banks in 2012, which enables the banks to issue standard certificates in GEL. The certificates are similar to time deposits, but the owners can sell the certificates before maturity without the consent of the issuing bank, while the funds still stay with the bank. The NBG is also promoting popularization of loans with floating interest rate that will further stimulate the usage of GEL resources.

The strategy also describes the importance of monetary policy communication and venues for its future development. This will facilitate formation of appropriate inflation expectations and improved transparency.

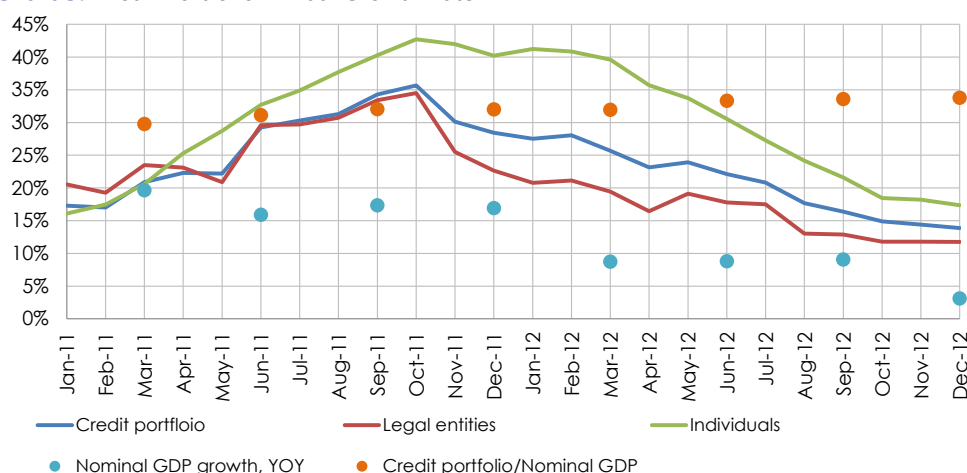
Monetary policy strategy will be available for general public in the nearest future. Additional information regarding the topics discussed in the strategy can be found on the monetary policy part of the NBG official web page which has been recently reviewed.

## 5. FINANCIAL MARKET AND TENDENCIES

### 5.1 LOANS

Credit activity has declined in the fourth quarter of 2012 together with slowdown of economic activity. Annual growth of the outstanding loan portfolio stood at 13.9% in December 2012 (see chart 5.1). According to the credit conditions survey, significant changes are not to be expected during the first quarter of 2013, but consumer and business loans volume is expected to grow in the second half of the year along with economic activity picking up.

Chart 5.1 Loan Portfolio Annual Growth Rate



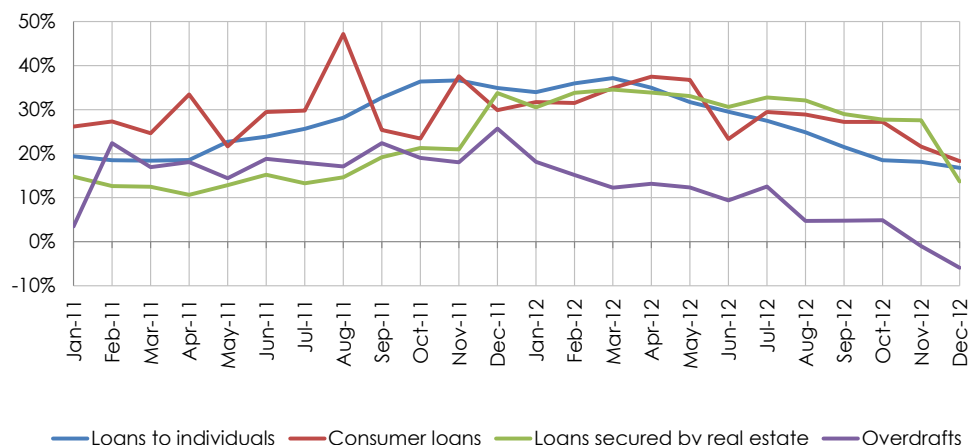
Source: National Bank of Georgia

According to the credit conditions survey, decline in demand for business loans was evident in the fourth quarter of 2012, which is characteristic of transitional political environment. Investor expectations of legislative changes and settling of the government priorities was mentioned as the primary reason for decline in business loans demand in the survey. Demand is also negatively affected by existing expectation for the interest rates to go down dramatically. The slowdown of loan portfolio growth was also partly caused by the banks decreased appetite for risk. Pre-election uncertainty has continued into the period after the elections and as well and has been reflected in the strategies of major banks.

« According to the credit conditions survey, decline of the credit activity was caused primarily by the decrease of demand.

Retail loans portfolio growth stood at 17% in the fourth quarter of 2012 (see chart 5.2), with significant reductions in the growth rates of consumer and mortgage loans. This trend could be explained by the general public's expectations for the prices and interest rates to go down.

Chart 5.2 Retail Loan Portfolio Annual Growth Rate



Source: National Bank of Georgia

The share of non-performing loans (NPL) increased by 1.5 percentage points during the fourth quarter of 2012 compared to the previous quarter and stood at 9.3%. The growth of NPLs was attributable to the foreign currency denominated loans, for which the indicator stood at 2 percentage points. By the end of December share of NPLs in FX loans was equal to 9.5% and the same indicator stood at 8.8% for GEL denominated loans.

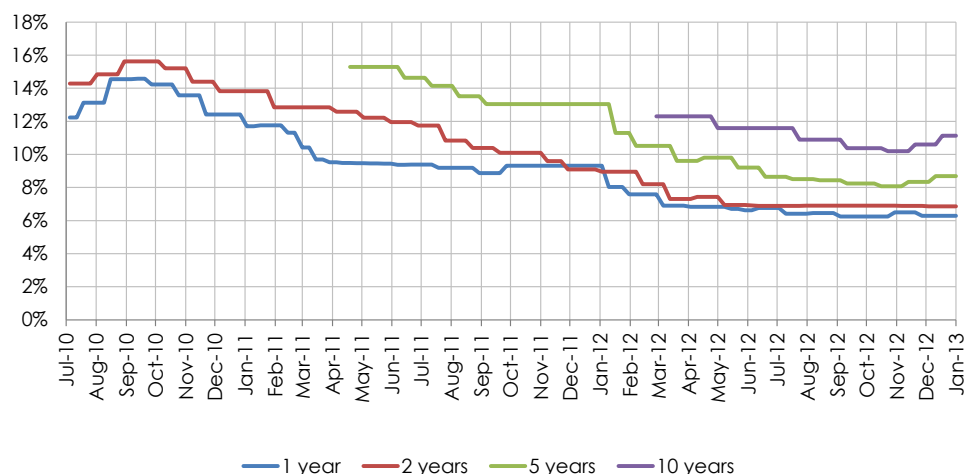
« The share of non-performing loans increased by 1.5 percentage points during the fourth quarter of 2012 compared to the previous quarter and stood at 9.3%.

## 5.2. INTEREST RATES AND CREDIT CONDITIONS

The NBG has cut its policy rate by 0.5 percentage points down to 5.2% since during the fourth quarter of 2012 based on the inflation forecast and analysis of the macroeconomic environment. Since changes in monetary policy are transmitted to the real economy with a time lag, the loosening of the monetary policy has not been fully reflected yet. Yields on government securities exhibited a declining trend during the year, but slight increase was evident in the fourth quarter, which could be attributed to the prevailing uncertainty.

« The loosening of the monetary policy has not been fully reflected in the economy yet.

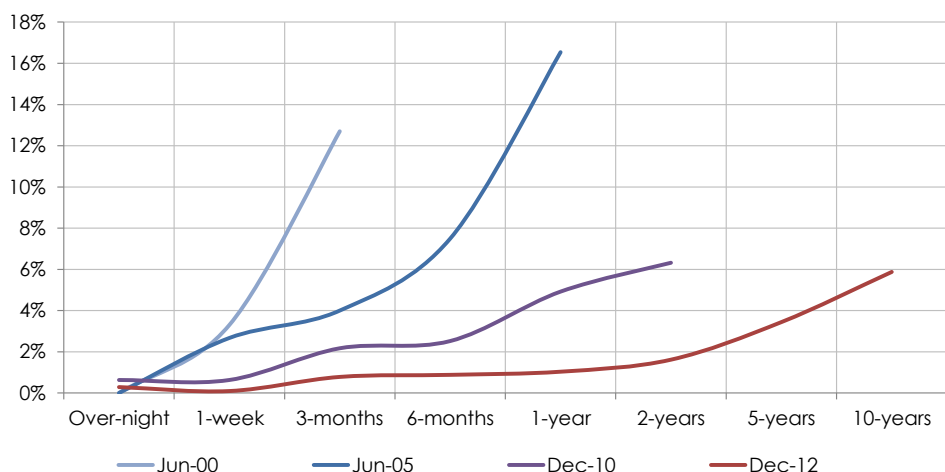
Chart 5.3 Interest Rates on Government Securities



Source: National Bank of Georgia

The slope of the yield curve has decreased over time, which implies a decline of the spread between the long-term assets and the monetary policy rate. This trend can be explained by decline of liquidity and interest rate risks, since moderate changes in the NBG refinancing rate and predictable nature of monetary policy have decreased expectations of sharp short-term interest rates changes. Development of the interbank market has also decreased liquidity risks. Since long-term interest rates are formed in line with inflation expectations, decline of spreads for long-term assets points towards stabilization of the financial sector and lowered inflation expectations. Interest rates on loans have continued to decline during the fourth quarter of 2012.

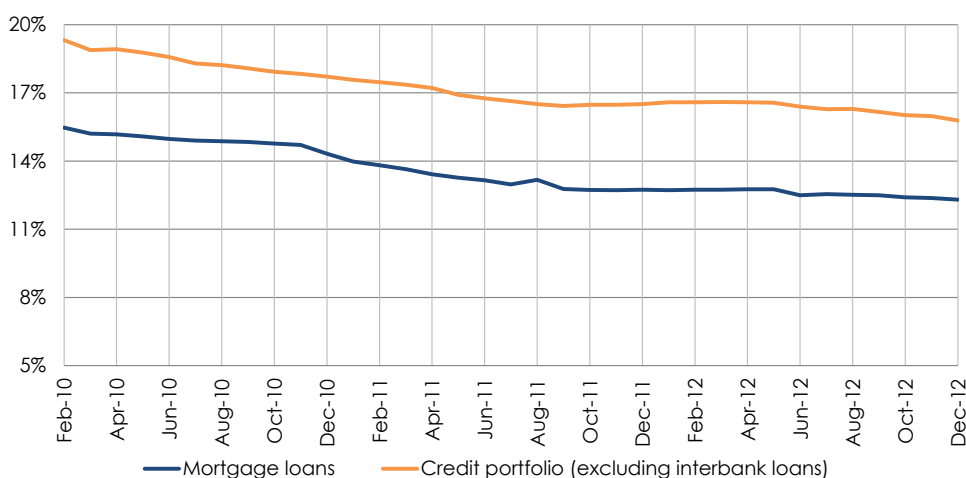
Chart 5.4 Spread between the Monetary Policy Rate and the Yield Curve



Source: National Bank of Georgia

Changes in interest rates are stem from a variety of factors, but competition and market activity are the main determinants in the short-term. Demand for loans has dropped and bank activity has slowed down due to the overall decline in economic activity by the end of the last year, but interest rates have continued to decline during that period. Average interest rate on the outstanding loan portfolio was 0.4 percentage points less in December 2012 than in September. The trend is expected to continue in the current quarter according to the commercial banks credit condition survey.

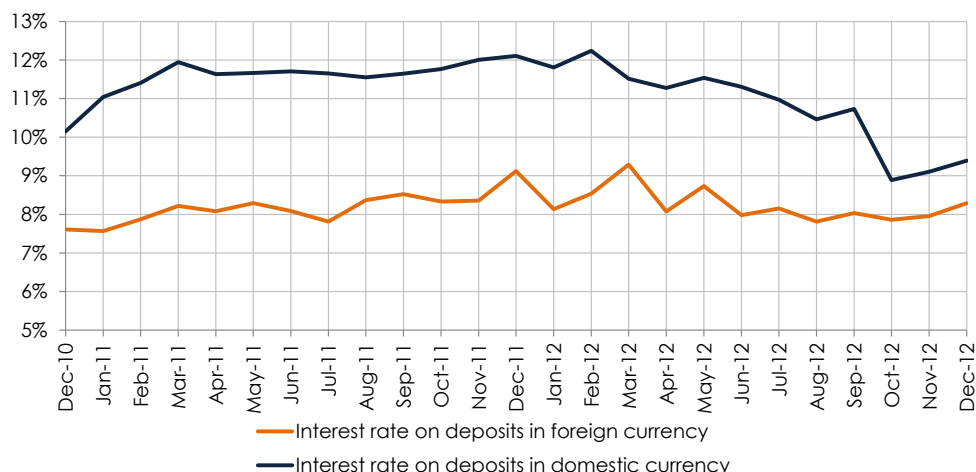
Chart 5.5 Average Interest Rates on Loan Portfolio



Source: National Bank of Georgia

Interest rates have declined significantly on national currency denominated deposits, with the average rate being 1.3 percentage points less than in September and standing at 9.4% in December, according to the NBG. This was caused by a 2.6 percentage points decline in rates on corporate deposits. Interest rates on FX denominated deposits have been largely unchanged and the average indicator stood at 8.3% in December.

Chart 5.6 Interest Rates on Deposits

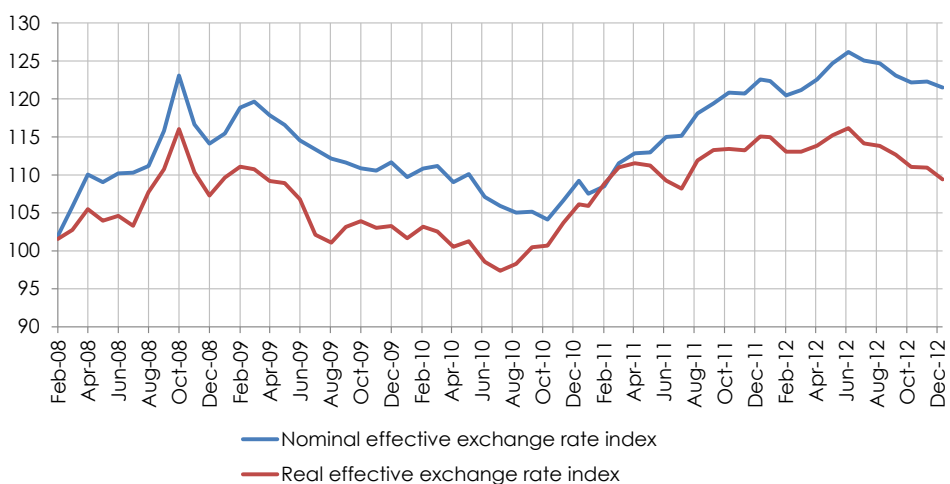


Source: National Bank of Georgia

### 5.3. EXCHANGE RATE

The GEL exchange rate with regard to the US dollar has been stable during the fourth quarter of 2012 and has depreciated by 4.2% against the Euro. The GEL exchange also depreciated by 1.1% against the Turkish Lira. As a result, the nominal effective exchange rate has slightly appreciated annually – by 0.5% and depreciated by 1.8% quarter-on-quarter during the fourth quarter of 2012.

Chart 5.7 Effective Exchange Rates (Jan 2008 = 100)



Source: National Bank of Georgia

During the fourth quarter the real effective exchange rate has depreciated by an annual 3.0% and 2.7% quarter-on-quarter. The depreciation was caused by relatively low inflation of trade partner countries. The GEL has depreciated against all of the trade partners in reals terms, except for Eurozone countries (for which volume of trade is second highest after Turkey) and Armenia.

Turkey and Russia have contributed the greatest share in terms of the depreciation of the GEL real effective rate and Eurozone and Armenia have pulled the rate in the opposite direction.

Table 5.1 Annual Change of Effective Exchange Rates

	Change of Nominal Effective Exchange Rate, %	Change of Real Effective Exchange Rate, %	Share in Real Effective Exchange Rate
Effective Exchange Rate	0.5	-3.0	-3.0
Turkey	-2.2	-9.0	-2.2
Eurozone	4.0	1.2	0.2
Ukraine	0.1	-0.4	-0.1
Armenia	6.8	2.7	0.1
USA	-0.1	-2.5	-0.2
Russia	-0.5	-7.2	-0.5
Azerbaijan	-0.3	-0.7	-0.1
Others	2.6	-1.8	-0.3

Source: National Bank of Georgia

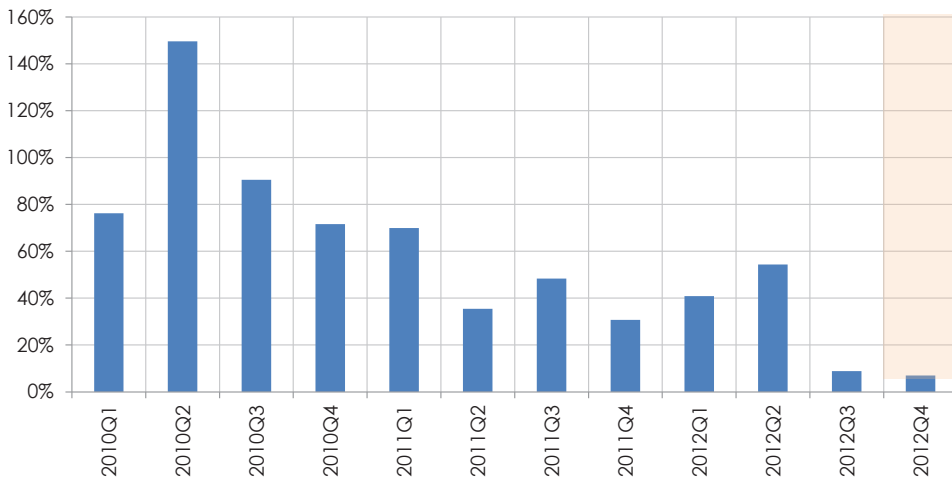
## 6. DOMESTIC DEMAND

While investments have propelled economic growth during the first half of 2012, exports (mainly increase in tourism revenues) and final consumption were main drivers of GDP growth in third quarter. Economic growth appears to be low in the fourth quarter due to decline in investments and is 2.5% according to the preliminary indicators. As a result, economic growth of 2012 is estimated at 6.1%.

« Real GDP growth of 2012 is estimated at 6.1%.

Investments have grown at a high pace since 2011 and average annual growth during the quarters has topped over 40%. The growth of investments declined significantly in the third quarter of 2012 and stood at 8.9%, which is largely due to the pre-election uncertainty. Annual growth of capital formation is expected to be 7% in the fourth quarter. However despite declining growth rate, capital formation was the main driver of economic growth in 2012.

Chart 6.1 Capital Formation Annual Growth Rate



Source: GeoStat

Export of goods and services increased by 22.8% and the imports by – 18.3% in the third quarter on annual base. It should be noted that, exports have contributed the largest share to economic growth in the third quarter. According to the preliminary information, imports have declined by an annual 1.8% in the fourth quarter and the annual growth rate of exports has dropped to 8%. As a result, net exports will have a positive contribution to GDP growth in the fourth quarter of 2012.

« Net exports will have a positive contribution to GDP growth in the fourth quarter of 2012.

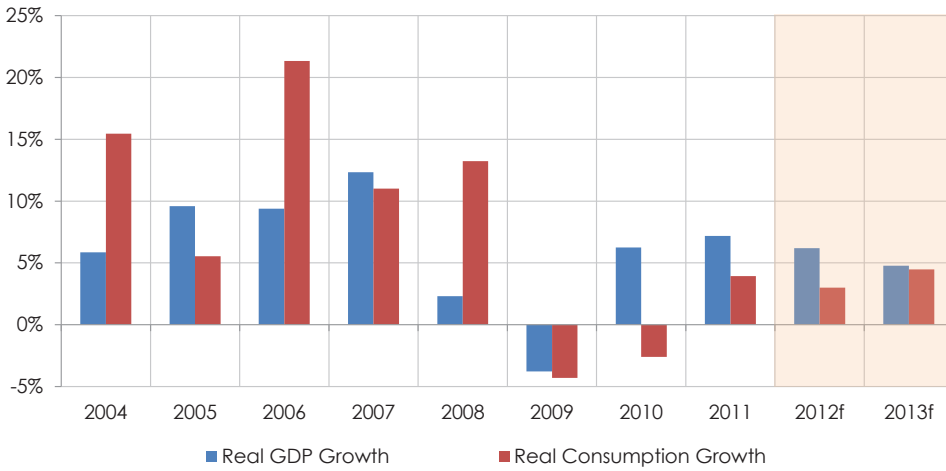
The annual real growth rate of private consumption increased in the third quarter and stood at 6.5%<sup>1</sup>. It should be noted that the growth of real consumption was less than economic growth, which points the weak inflationary pressure from the demand side. According to the preliminary information, real private consumption has grown by an annual 2.2% in the fourth quarter and the overall growth of both private and government real consumption stood at 4.5% in 2012. The real GDP is forecasted to have grown at a rate of 6.1%.

« According to the preliminary information, real private consumption has grown by an annual 2.2% in the fourth quarter.

1 Real growth of consumption is calculated by using average annual inflation.



Chart 6.2 GDP and Final Consumption Real Growth Rate

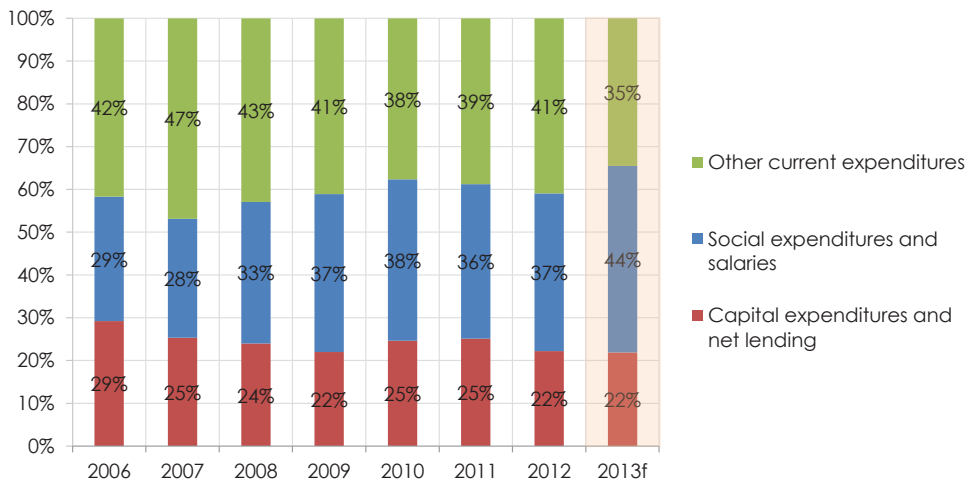


Source: GeoStat and National Bank of Georgia

The government has continued fiscal consolidation in 2012 with consolidated budget deficit standing at 2.9% of GDP in 2012, whereas the deficit was 9.2% in 2009. According to the current plans and projections the consolidated budget deficit is expected to go down to 2.8% of GDP in 2013. Social Expenditures are planned to grow approximately by 642 million GEL and capital expenditures are to be cut by 350 million GEL in 2013.

- « The consolidated budget deficit will go down to 2.8% in 2013.
- « Significant increase in social expenditures is planned in 2013.

Chart 6.3 Structure of the Consolidated Budget Expenses

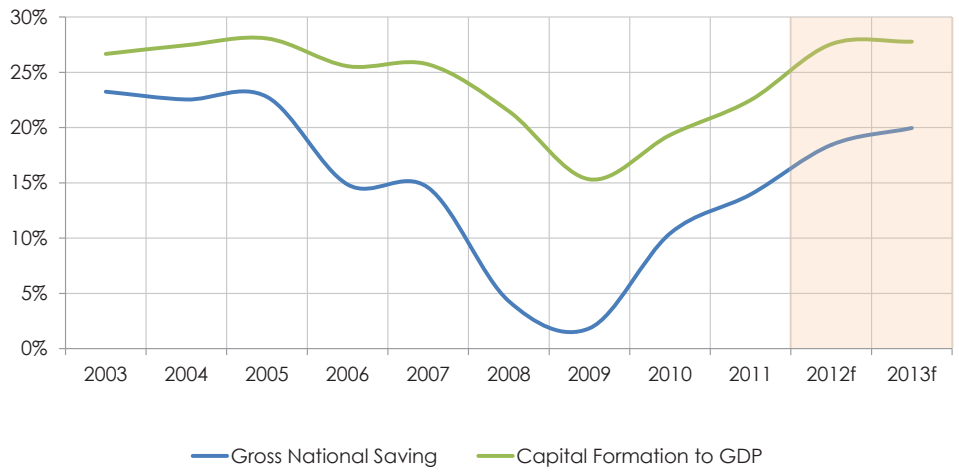


Source: Ministry of Finance of Georgia

Gross savings have shown an increasing trend after the crisis, with savings to GDP ratio increasing even further in the third quarter. According to the current estimates, the ratio of gross savings to GDP is equal to 20% in 2012. It should be noted that sustainable savings growth finances capital formation and is important for stabilizing the current account deficit.

- « Gross savings have shown a growing trend after the crisis.

Chart 6.4 Gross Savings and Capital Formation to GDP



Source: GeoStat

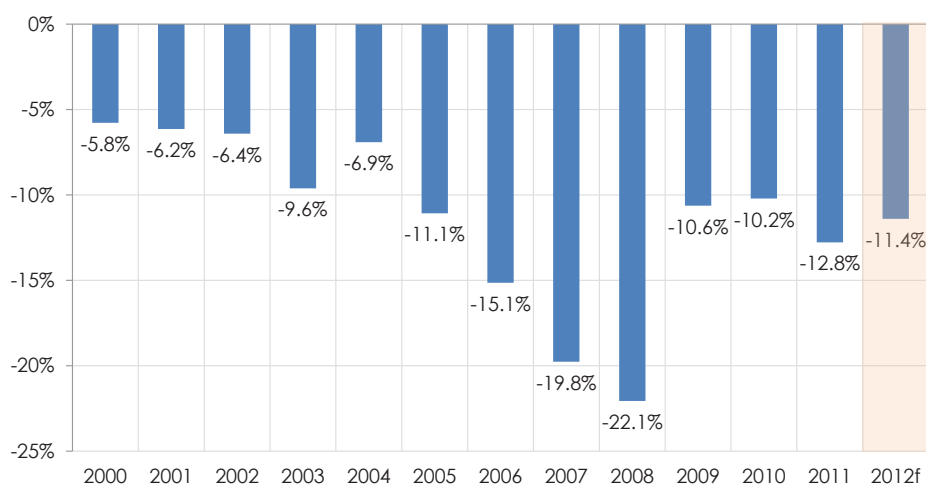
## 7. EXTERNAL DEMAND AND BALANCE OF PAYMENTS

Current account deficit has started to recover from the depth of 2010-2011 during the second half of 2012. Although the deepening trend of the trade balance has continued in terms of goods, improvement was evident in terms of services in the third quarter of 2012, positively impacting the overall current account despite its small scale. Factor income recorded deficits in the third quarter, whereas current transfers' balance has remained traditionally positive decreasing the current account deficit. According to the preliminary estimates, the trade deficit with goods has significantly declined in the fourth quarter of 2012 and positive balance with services has continued to improve. According to the current estimates, current account deficit has improved significantly in 2012 and has declined to 11.4% of the GDP (see chart 7.1).

« Current account deficit has improved in the second half of 2012. According to the current estimates, current account deficit has declined to 11.4% of the GDP in 2012.

« The trade deficit with goods has improved in the fourth quarter of 2012.

Chart 7.1 Current Account Deficit to GDP



Source: National Bank of Georgia

Annual growth of cars re-export has declined in the fourth quarter of 2012 and sales of important export products have also decreased. On the other hand, export of raw and processed agricultural products has increased.

Investment goods import has declined by an annual 12% in the fourth quarter of 2012 along with the expenditures on imported consumer products which have decreased by an annual 3.1%.

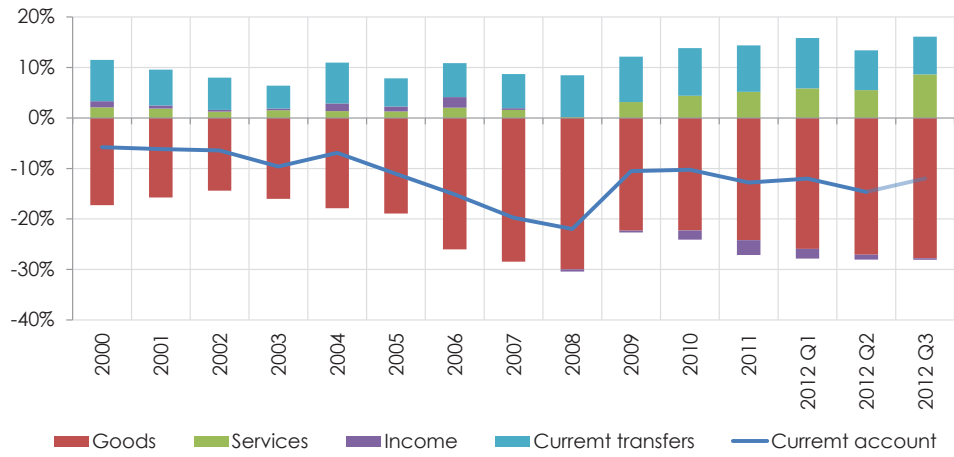
The positive trend in services trade has continued in the third quarter of 2012 (see chart 7.2) and the growth of the surplus amounted to 33.5%. Special attention should be paid to the growth of export in private and business tourism sectors. Revenues from the tourism sector have grown significantly just like during 2010-2011. According to the preliminary information, the annual growth of tourism export has been close to 50% and the total indicator stands at 1.4 billion US dollars. Impact of the transport revenue growth also has an important impact on trade balance in terms of services.

Private sector transfers have continued to grow, but at a slower pace than in the previous period and government transfers have been declining.

« Imports of both investment and consumer goods have declined in the fourth quarter of 2012, but the drop in investment goods was more pronounced.

« Revenues from the tourism sector are continuing to grow at a high pace

Chart 7.2 Current Account (as a share of GDP)



Source: National Bank of Georgia

## 8. AGGREGATE OUTPUT AND LABOUR MARKET

### 8.1 OUTPUT

Annual Real GDP growth amounted to 7.5% in the third quarter of 2012 and the GDP deflator increased by an annual 1.4% during the same period.

The services sector was the largest contributor (5 percentage points) to the real GDP growth in the third quarter with an annual 6.4% growth. The trade sector, on the other hand was the largest contributor to the services sector with an annual growth of 6.8%. The trade sector has held a leading role in fueling economic growth since the crisis, but its growth rate has slowed down compared to the previous periods.

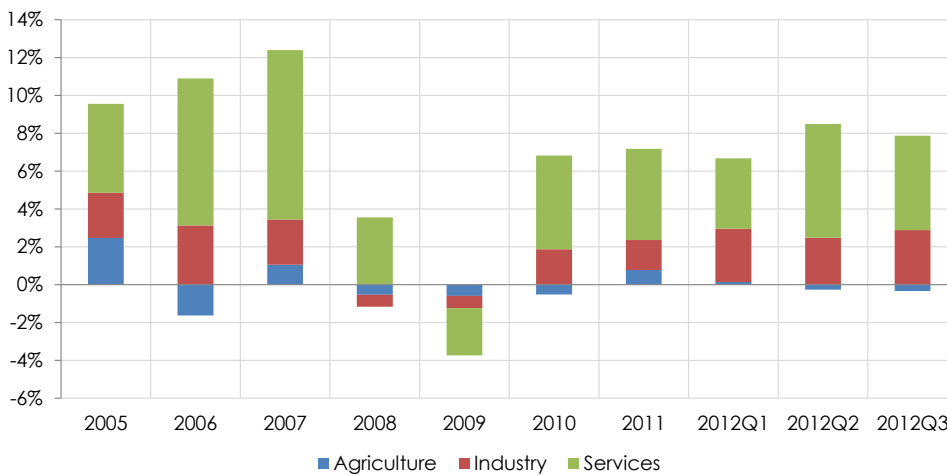
The real growth of industrial sector has amounted to 12.5%, but despite such significant growth the contribution towards real GDP growth of this sector was relatively modest compared to the services sector (2.9%). On the other hand, the share of the industrial sector's contribution to growth has increased compared to the previous periods, while the opposite is true for the services sector. High growth rates of such industrial sectors as manufacturing and construction (19.7% and 19.4% correspondingly) are noteworthy.

Real value added of the agricultural sector which represents approximately 8% of GDP, has decreased by an annual 2.4% with the trend reversing after 8% growth recorded in 2011.

« Services sector was the main determinant of the economic growth in the third quarter of 2012.

« Tourism sector among services and manufacturing among industry have recorded stable growth rates.

Chart 8.1 Shares of the Main Sectors of the Economy in Real GDP Growth Rate, 2005-2012



Source: GeoStat and National Bank of Georgia

Real value added has increased in all of the major sectors of the economy except for agriculture. Trade and tourism<sup>2</sup> services together with manufacturing and construction industries have played the most important role in long-term economic growth, exhibiting strong growth rates since the beginning of 2010 and the trend continuing into 2012.

« In the post-crisis period the biggest contributions to economic growth were made by trade, tourism, manufacturing and construction sectors.

2 Tourism sector is not considered separately in the System of National Accounts, so the sum of the value added in sectors closely related to tourism ("Hotels and Camping", "Restaurants, bars, diners and fast food", rail and air transport, etc.) is used to approximate the value added in the tourism sector.

Chart 8.2 Real Growth Rates of the Largest Sectors of the Economy, 2007-2012



Source: GeoStat and National Bank of Georgia

### 8.2 LABOR MARKET

The growth of the labour productivity has slowed down during 2012. According to GeoStat the real value added per employee has increased by 4.5% quarter-on-quarter during the third quarter, which is 1.0 percentage point less than in the previous quarter. The growth of productivity can be largely attributed to the industrial sectors. The growth rate of productivity in the service sector has declined again after increasing in the previous quarter. Productivity has not grown in agriculture for the last several years and actually started to decline in 2012. Labour productivity of the agricultural sector has decreased the most, by 9.1%, during the third quarter.

« Labour productivity has grown by 4.5% in the third quarter of 2012

Table 8.1 Index of Real Value Added per Employee in 2012 Q3 compared to the previous year corresponding period

	Real value added per employee (growth index)
Agriculture and processing of agricultural products by households	90.9
Industrial sectors	117.2
Service sectors	105.0
Overall in the economy	104.5

Source: National Bank of Georgia

Labour productivity has resumed increasing at a fast pace after declining in the previous quarter in manufacturing and construction sectors. It is noteworthy that the productivity growth has slowed down significantly in the financial intermediation sector.

The growth rate of the employee salaries has exhibited a declining trend since the beginning of 2012, but the trend reversed in the third quarter and the growth rate of an average salary amounted to 9.6%. According to the latest data from GeoStat, an average monthly nominal salary of employees is equal to 753 GEL in Georgia.

« The growth rate of an average salary amounted to 9.6% in the third quarter of 2012.

According to the sector analysis annual growth of salaries has been evident in construction, real estate, healthcare, transport and communication and manufacturing sectors. Salaries have declined on an annual basis in the hotels and restaurant sectors, trade and financial activities in the third quarter of 2012.

Table 8.2 Index of Average Nominal Monthly Salary in 2012 Q3 compared to the previous year corresponding period

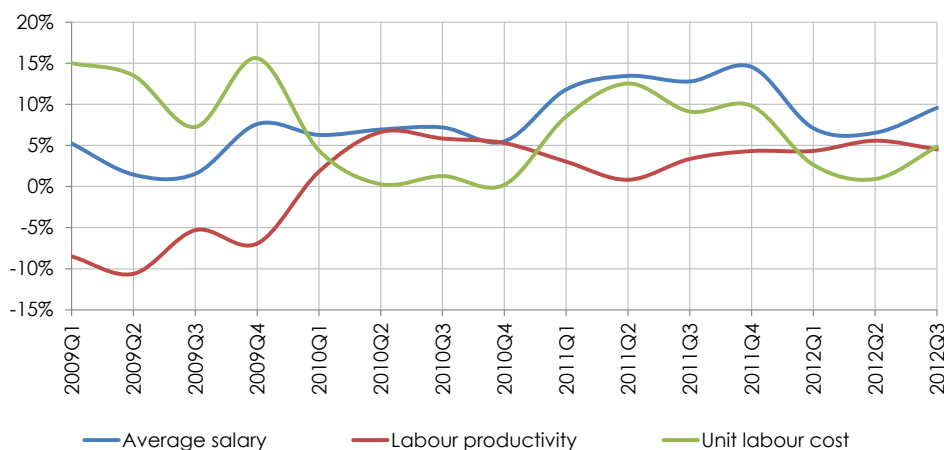
	Average nominal wage (growth index)
Agriculture, hunting and forestry	140.5
Fishing	78.3
Quarrying	99.1
Manufacturing	110.1
Electricity, gas and water supply and distribution	106.4
Construction	124.0
Trade; Repair of cars, personal and household goods	95.9
Hotels and Restaurants	94.1
Transport and Communication	114.4
Financial Intermediation	98.1
Real estate operations, rent and service	119.4
Public administration	98.1
Education	119.4
Healthcare and social services	117.2
Community, social and personal service	111.6
Overall in the economy	109.6

Source: GeoStat

Overall, average employee salary annual growth rate has continued to increase in the third quarter of 2012, while the labour productivity growth rate has declined. As a result, annual growth rate of unit labour cost (personnel expense per production unit)<sup>3</sup> has increased and stands at 4.8% in the third quarter of 2012.

« Unit labour cost annual growth rate amounted to 4.8%, which does not create inflationary pressure.

Chart 8.3 Labour Productivity, Average Monthly Salary and Unit Labour Cost, 2009-2012 (annual percentage change)



Source: GeoStat and National Bank of Georgia

Unit labour cost has declined at an average rate of 3% in manufacturing and trade sectors, while increasing by more than 20% in transport and communication and healthcare sectors.

Overall, due to a higher growth of salaries compared to labour productivity, unit labour cost has increased in the third quarter of 2012, but the increase is not large and there is no evident inflationary pressure stemming from the developments in labour market.

<sup>3</sup> Same as salary expenditures as a share of aggregate real value added (GDP).

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