



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



MEDIUM-TERM FORECAST

Q1
2009

Published by:
© Národná banka Slovenska, April 2009

Address:
Národná banka Slovenska
Imricha Karvaša 1, 813 25 Bratislava

Contact:
Monetary Policy Department
02/5787 2611
02/5787 2632
Communication Section
02/5787 2141
02/5787 2146

Fax:
02/5787 1128

<http://www.nbs.sk>

Approved by the NBS Bank Board on 7 April 2009.

All rights reserved.
Reproduction for education and non-commercial purposes is permitted provided that the source is acknowledged.



CONTENTS

SUMMARY	4
TECHNICAL ASSUMPTIONS AND THE INTERNATIONAL ENVIRONMENT	5
MEDIUM-TERM FORECAST FOR THE EURO AREA	6
MEDIUM-TERM FORECAST FOR SLOVAKIA	7
The real economy	7
Current account	7
Labour market	7
GDP	8
GDP potential and the output gap	9
HICP	10
LIST OF CHARTS	
Chart 1 GDP growth projection	9
Chart 2 Contributions to potential GDP growth and the output gap	9
Chart 3 Projected inflation	10
LIST OF TABLES	
Table 1 Technical assumptions	5
Table 2 Projections of selected euro-area indicators	6
Table 3 Comparison of HICP inflation forecasts (average for the period)	11
Table 4 Comparison of HICP inflation forecasts (end-of-year figures)	11
Table 5 Medium-term forecast (MTF-2009Q1) – main macroeconomic indicators	12



SUMMARY

In view of the deepening global economic crisis, Národná banka Slovenska (National Bank of Slovakia, NBS) expects a downturn in economic activity in 2009. The steepest GDP decline is expected in the first quarter, as a result of reduced foreign demand and the interruption of production for several days in the key Slovak industries during the gas supply crisis. The GDP decline in 2009 is likely to be accelerated by a fall in net exports in connection with the decreasing output of export-oriented enterprises. The lower production should lead to a fall in employment and slower growth in compensation per employee in comparison with the December medium-term forecast. Labour market developments are expected to cause a slowdown in the growth of disposable household incomes, which will lead to slower final consumption growth in the sector. Gross fixed capital formation is expected to be adversely affected by the profits of corporations reflecting the falling trend in global demand. However, the decline in investment should be partially offset by public investment growth in connection with the launch of PPP projects. Inflation is expected to slow to 1.7% in 2009, owing to a slower rise in energy and food prices, lower imported inflation, and lower profit margins.

Global demand is expected to recover and grow gradually over the medium-term horizon. This will also be reflected in the improving export performance of Slovakia. Thus, GDP growth is likely to be accelerated by both foreign and domestic demand. The increase in production

in the period 2010-2011 will probably lead to favourable labour market developments and growth in private consumption. The dynamics of domestic demand are likely to strengthen as a result of increased consumption and gross fixed capital formation. The gradual increase in economic activity will probably cause a moderate acceleration in the rate of consumer price increase.

Compared with the previous forecast (MTF-2008Q4), virtually all macroeconomic indicators are expected to deteriorate in 2009, owing to a further fall in global demand caused by the deepening global economic crisis. In the medium-term outlook, economic activity is expected to gradually recover as according to the previous forecast, but less dynamically and to a lower level.

The main risks to the March medium-term forecast (MTF-2009Q1) are the consequences of the January gas crisis, the impact of the global economic crisis and of the resulting reduced foreign demand on Slovakia's export performance, investment and domestic consumption, and the impact of tighter financing conditions on domestic consumption and investment. Such developments may lead to a deeper decline or limited revival in GDP, and to slower HICP growth in connection with lower import prices and lower price pressures, mainly in the services sector. An upside risk to GDP growth is the stronger-than-expected impact of PPP project implementation.



TECHNICAL ASSUMPTIONS AND THE INTERNATIONAL ENVIRONMENT

The assumptions about commodity price developments and the international economic environment for the period until 2010 have been taken from the ECB forecast (ECB staff macroeconomic projections for the euro area).^{1,2}

The tighter financing conditions are already taken into account in the present forecast. The forecast also assumes that the credit standards will gradually ease over the period under review, compared with the current state. As regards commodities, food prices are expected to fall in 2009 before rising again in 2010 in line with the Eurosystem staff macroeconomic projections from December. Oil prices are expected to reach a lower level than according to the forecast from the fourth quarter of last year. The EUR/USD cross-rate applied was 1.29 as the average rate for the last two weeks preceding the closing date, for both 2009 and 2010.

The prospects for global economic development markedly deteriorated in the fourth quarter of 2008. According to the forecasts of various institutions, the world economy is experiencing its most severe downturn of many decades. Affected by the financial crisis and weak economic activity are not only the advanced economies but emerging economies as well (through a downturn in global trade). Overall, the slowdown in global GDP outside the euro area is projected to reach 0.2% in 2009 and 2.5% in 2010 (the December forecast predicted a 2.4% growth for 2009 and 5.0% for 2010).

In 2011, NBS expects a rise in commodity prices (comparable with the figure for 2010) and a continuing modest revival in the world economy.

Table 1 Technical assumptions (year-on-year changes in %, unless otherwise indicated)

	Forecast from	Forecast for the period		
		2008	2009	2010
Oil (USD/barrel)	December 2008	99.9	67.3	76.6
	March 2009	-	49.3	57.4
Food	December 2008	28.9	-9.7	4.9
	March 2009	-	-11.8	4.9
Non-energy commodities	December 2008	3.5	-22.9	5.4
	March 2009	-	-29.8	6.0

Source: ECB.

1 The technical assumptions concerning the prices of energy and non-energy commodities are based on market expectations with a closing date on 13 February 2009.

2 More detailed information about the Eurosystem staff macroeconomic projections is available at www.ecb.int.



MEDIUM-TERM FORECAST FOR THE EURO AREA

The current global economic downturn and the situation in global markets are also reflected in the prospects for the euro area. In 2009, the euro-area economy is expected to undergo a decline, followed by a very modest revival in 2010. The projected low economic activity is the result of a sharp fall in exports, combined with weak domestic demand. Investment demand will be unfavourably influenced by the low level of global activity and high degree of uncertainty. Declines will mainly be recorded in residential investments in connection with the ongoing changes in real estate prices in some of the euro-area countries. Owing to the worsening situation in the labour market, private consumption will also record a downturn. The macroeconomic stimuli applied in the euro area and in other countries should help the economy to gradually recover over the period under review, but probably no earlier than 2010. This development should be supported by exports, the gradual normalisation of financial markets, and the stabilisation of the real estate market.

In the period under review, gross domestic product is expected to reach much lower values than according to the December forecast.

The falling commodity prices and the base effect caused by price changes in the past (mainly the 2008 rise in energy prices), coupled with the worsening economic development, should lead to a fall in HICP inflation, particularly in 2009. Compensation per employee, which recorded a steep increase in 2008, is expected to slow considerably, with slower wage growth in both the private and public sectors.

Inflation is likely to slow relatively significantly compared with the previous forecast, and the band projected for the year-on-year rise in overall HICP inflation in 2009-2010 will be well below the levels predicted in December 2008. This can be expected mainly as a result of downward revisions of the estimates of energy and food prices, accompanied by less dynamic wage growth, while the low economic activity will also dampen the price pressures.

Table 2 Projections of selected euro-area indicators (average year-on-year changes in %)

	Projection from	Projection for the period		
		2008	2009	2010
HICP	December 2008	3.2 – 3.4	1.1 – 1.7	1.5 – 2.1
	March 2009	3.3	0.1 – 0.7	0.6 – 1.4
Real GDP	December 2008	0.8 – 1.2	-1.0 – 0.0	0.5 – 1.5
	March 2009	0.8	-3.2 – -2.2	-0.7 – 0.7
Private consumption	December 2008	0.1 – 0.5	-0.3 – 0.7	0.6 – 1.8
	March 2009	0.5	-1.2 – -0.2	-0.4 – 1.0
Government consumption	December 2008	1.9 – 2.3	1.3 – 1.9	1.3 – 1.9
	March 2009	2.1	1.3 – 2.1	1.1 – 1.9
Gross fixed capital formation	December 2008	0.2 – 1.2	-6.0 – -3.0	-2.4 – 1.0
	March 2009	0.3	-8.6 – -5.8	-4.3 – -0.3
Exports (goods and services)	December 2008	2.4 – 3.4	-1.4 – 1.0	2.3 – 4.9
	March 2009	1.8	-9.7 – -6.9	-0.9 – 1.9
Imports (goods and services)	December 2008	2.0 – 3.0	-1.9 – 1.1	1.4 – 5.2
	March 2009	1.8	-8.0 – -5.0	-1.6 – 2.6

Source: ECB.



MEDIUM-TERM FORECAST FOR SLOVAKIA

THE REAL ECONOMY

CURRENT ACCOUNT

The **current account** balance is expected to mirror the negative effects of the global economic crisis, mainly the weak foreign demand, which will negatively influence Slovakia's export performance and trade balance throughout the projection horizon, compared with the December medium-term forecast. The sharpest decline in exports may be expected in 2009. The negative impact of weaker foreign demand on the **trade balance** will probably be only partially offset by the fall in oil prices and lower domestic demand. In view of the expected gradual revival in foreign demand, exports are expected to grow again in 2010 and 2011. In 2010, however, the growth in exports is likely to be substantially offset on the import side by the anticipated rise in oil prices, as well as by the implementation of PPP projects, which will cause only a modest year-on-year improvement in the trade balance. In 2011, the positive impact of growth in foreign demand is again expected to be largely offset by increased imports resulting from the growing domestic demand. Owing to the fall in foreign demand followed by a decrease in the economy's export performance, both exports and imports are expected to show negative dynamics in 2009. In the period 2010-2011, however, exports and imports are likely to achieve positive dynamics again.

The main risks to the forecast are that the economic crisis may affect Slovakia's export performance more severely than expected and that the oil price assumptions may change. The trade balance may also be negatively influenced over the projection horizon by the considered construction of new nuclear and steam power plants, which may cause a temporary deterioration in the trade balance (through increased imports).

Compared with the previous forecast, the **balance of services** is also likely to deteriorate in the period 2009-2010, as a result of the projected decline in foreign demand, which may lead to lower revenues in services. The strongest

negative impact can be expected in 2009, though the services balance will gradually improve on a year-on-year basis. The only current account item that is likely to follow a more positive trend than according to the previous forecast is the **income balance**. The expected decrease in the deficit compared with the previous forecast can be attributed to the lower profits of enterprises in 2008, and especially in 2009. This should be reflected in the payment of lower dividends to foreign investors and in the lower level of reinvested earnings. The slight deterioration in the balance of **current transfers** is the result of developments in the balance of private transfers in 2008, when the deficit increased. On the other hand, a gradual increase is expected in the amounts drawn from EU funds over the projection horizon in line with the previous forecast. This should cause a gradual improvement in the balance of current transfers.

The **current account deficit** as a share of GDP is expected to increase somewhat in 2009. The following years are, however, likely to witness a gradual year-on-year decrease in the current account deficit.

LABOUR MARKET

In 2009, **compensation per employee** is expected to grow at a slower pace than according to the previous forecast, owing to the stronger impact of the global economic crisis on the real economy of Slovakia. In an effort to reduce their costs, enterprises will probably be more reluctant to approve wage increases and will tend to restrict benefits and flexible parts of wages. Another factor in the slower growth of compensation per employee is the restriction of production and the related cuts in working hours and wage compensation payments. On the other hand, employee compensation growth will be stimulated by the payment of severance packages in connection with the mass redundancies.

Since the labour market tends to react to economic revival with a certain delay, the growth in compensation per employee is expected to



slow somewhat in 2010. Such development is likely to be accompanied by the cautious approach to collective agreements by employers and government institutions reflected in the agreed wage growth. In 2011, the growth rate of employee compensation is expected to accelerate gradually (though less dynamically than according to the December forecast), as a result of steady economic revival accompanied by labour productivity growth.

Owing to the severe downturn in economic activity and the resulting mass redundancies, **employment** is expected to fall in 2009, in contrast with the previous forecast. Therefore, the rate of unemployment will considerably increase. In the period 2010-2011, a gradual revival is expected in the labour market as a result of accelerating economic growth.

In the current forecast, the labour market indicators are worse than in the previous forecast, mainly for 2009. This is attributable to the severe downturn in the global economy and its impact on production in Slovakia, as signalled by the current monthly indicators.

The main risks to the labour market forecast for 2009-2011 are the real impact of the economic crisis, uncertainty about the effectiveness and duration of the government measures aimed at eliminating the consequences of the economic crisis, and the estimated behaviour of enterprises in the case of a loss of profit.

GDP

At the beginning of 2009, the Slovak economy was mostly influenced by the weakening foreign demand, and by the interruption of production for several days in the key industries as a result of the gas supply crisis. Hence, a quarter-on-quarter GDP decline is expected in the first quarter of 2009, which is signalled by the monthly indicators released for January (a marked fall in industrial production, revenues, and exports). In the following period, the economy is likely to accelerate somewhat, though the recovery of production will be negatively influenced by the weaker foreign demand. The domestic part of the economy should be favourably influenced, mainly in the second half of the year, by investments in

infrastructure (PPP projects) and, to a certain extent, by government measures taken against the crisis. However, the expected marked GDP fall in the first quarter of 2009 will probably give rise to negative economic performance throughout the year, which will lead to a marked change in the estimated level of real economic activity compared with the previous forecast.

The medium-term GDP forecast for the period 2010-2011 takes into account the expected trends in the global economy. In 2010, global demand is likely to increase somewhat. This would positively influence Slovakia's export performance and would contribute to its further growth in 2011. Thus, the pace of economic growth is expected to accelerate in the medium-term outlook. Owing to the lower level of foreign demand in the medium term, GDP is expected to show weaker growth dynamics over the projection horizon than according to the previous forecast.

The government measures taken in connection with the economic crisis are different in nature and are intended for use in different areas. Some of these measures are designed to dampen the impact of the crisis on the most affected groups of the population, some are intended for the protection of existing jobs and the creation of new ones, and others are designed to stimulate the economy. Their contribution to economic revival is, however, not determining.

Domestic demand

Household final consumption is expected to slow on a year-on-year basis in 2009 as a result of slower growth in the disposable income of households, caused by a slowdown in the growth of compensation per employee and a fall in employment. Consumption growth is likely to be adversely affected by a decline in borrowing among households, due to their growing reluctance to take on debts, as well as in bank lending as a result of the gradual tightening of credit standards. In the period 2010-2011, domestic consumption is expected to recover to some extent, as a result of continuing positive growth in employment.

The forecast of **fixed investments** reflects the negative impact of weaker foreign demand,



which affects the profits of enterprises, as well as the implementation of their investment projects. This will cause an investment downturn in 2009. Investment activity will mainly be supported by investments in infrastructures (PPP projects). In the medium-term outlook, the investment activities of enterprises in machines are expected to intensify somewhat in connection with the economic revival, as well as investment in construction owing to the large number of projects under construction.

Net exports

The projections of exports and imports of goods and services are influenced by the weakening foreign demand and by the interruption of production for several days in the key export-oriented industries (machine, electrical, metallurgical, and chemical) during the gas supply crisis. Thus, net exports are expected to have a marked dampening effect on economic growth in 2009. Since foreign demand is likely to increase somewhat in 2010-2011, export performance is expected to improve and net exports to make a positive contribution to GDP growth.

Downside risks to the forecast of real economic development are the possible consequences of the January gas crisis, the duration of the

global economic crisis and its real impact on export performance, investment, and domestic consumption through reduced foreign demand, and on domestic consumption and investment through the tighter lending conditions. An upside risk to the GDP growth forecast is a possible stronger-than-expected impact of the PPP projects under implementation.

GDP POTENTIAL AND THE OUTPUT GAP

The accelerated economic growth in the past few years was mainly driven by labour productivity growth, stimulated by capital inflows in foreign direct investment. This, along with technology imports, created good conditions for a reduction in structural unemployment and for the accumulation of productive capital in the economy.

Over the projection horizon, the Slovak economy is expected to be affected by the global economic downturn, which will – mainly through total factor productivity (TFP) – cause a slowdown in the economy's potential output growth.

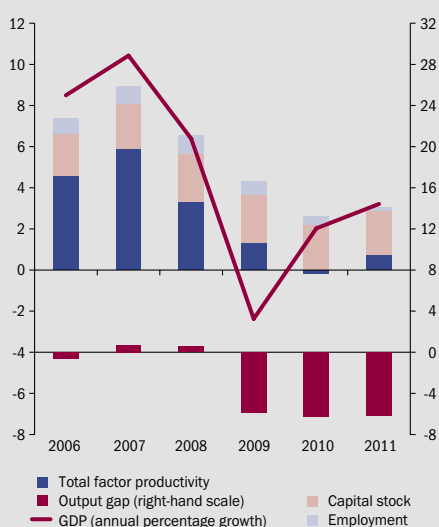
Regarding the cyclical position, the slowdown in GDP dynamics predicted for 2009 will cause the negative output gap to open up to a significant extent. In view of the sharp fall in foreign

Chart 1 GDP growth projection (annual percentage growth; constant prices)



Source: NBS.

Chart 2 Contributions to potential GDP growth and the output gap (%)



Source: NBS.

demand and the related slowdown in export performance, GDP is expected to grow in 2010 at a slower rate than the economy's potential output and the output gap to remain negative over the projection horizon. After a sharp decline in 2009, followed by a gradual revival in 2010, the economy is expected to grow in the next years more dynamically than its potential output, and to gradually return to the level of full capacity.

HICP

Inflation, as measured by the Harmonised Index of Consumer Prices (HICP), has followed a steadily slowing trend since September 2008. Compared with the previous forecast, the last few months have seen more favourable actual price developments, i.e. a faster-than-expected slowdown in year-on-year rate of price increase, especially in food and fuel prices. The year-on-year rate of increase also slowed more rapidly than expected in the prices of non-energy industrial goods and services.

The actual inflation forecast is based on the technical assumptions of the ECB projections³ adjusted on the basis of domestic factors⁴.

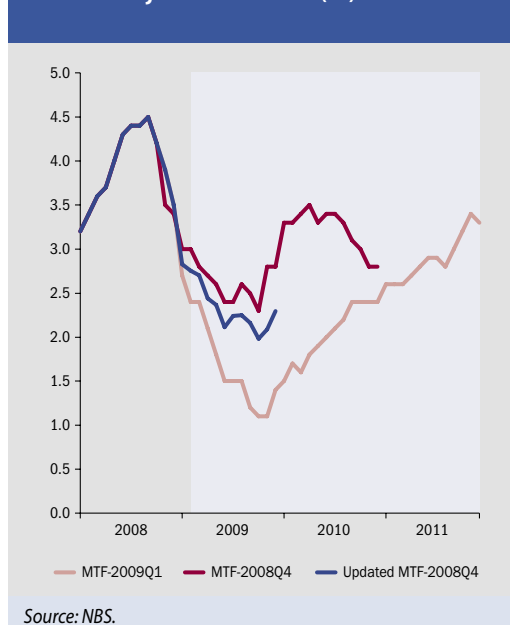
The marked slowdown in global economic activity is likely to push down the level of inflation abroad, while the currency depreciation in the neighbouring countries (major trading partners) against the euro should reduce the level of import prices for Slovakia and dampen the consumer price increase in 2009. Economic output, which is well below its potential, coupled with developments in import prices, should exert pressure on producer prices as well as on profit margins, and thus moderate the rate of price inflation. Inflation should also be reduced (compared with the December forecast) by labour market and wage developments, owing to a marked fall in labour productivity.

In the area of indirect taxes, the tax rate is expected to be raised for cigarettes in 2009, with a contribution of 0.2 of a percentage point to headline inflation during August to December 2009 (as in the previous forecast). In the following years, no further increases are planned in indirect taxes.

As a result of developments in energy-producing commodity prices, regulated energy prices are expected to stabilise. In other regulated prices (education, health care, etc.), the trends from the previous years are expected to continue (except in transport). In view of the price adjustments in transport in 2008 (mainly as a result of fuel prices), price levels are not expected to rise considerably in this segment.

In 2010, the rate of increase in consumer prices is expected to accelerate, mainly in food, non-energy industrial goods, and services prices, as a result of the projected economic revival and rise in commodity prices. In 2011, import prices are likely to increase in reaction to the growing global demand. The increase in import prices should be reflected in the strengthening dynamics of non-energy industrial goods prices. If relative prices are assumed to be stable, this will lead to accelerated price dynamics in services in 2011.

Chart 3 Projected inflation (%)



3 The fuel price forecast is based on historical Brent oil price elasticities and common assumptions about prices and on the USD/EUR exchange rate. The assumptions about oil prices were also used in electricity, gas, and heating price projections, where expert expectations based on the policy of the Regulatory Office for Network Industries were also taken into account. The assumptions about agricultural commodities were used in projections for processed and unprocessed food prices.

4 The main factors taken into account are the situation in the labour market, wage developments, the output gap, producer prices, profit margins, import prices, and assumptions about regulated prices and indirect taxes. The forecast also takes into account the introduction of the euro as of 1 January 2009, the conversion rate fixation, and the estimated reflection of the Balassa-Samuelson effect in consumer prices.



**Table 3 Comparison of HICP inflation forecasts
(year-on-year changes in %; average for the period)**

	2008	2009	2010	2011
MTF-2008Q3	3.9	3.4	3.1	–
MTF-2008Q4	3.9	2.7	3.2	–
MTF-2009Q1	3.9	1.7	2.0	2.9

Source: NBS.

**Table 4 Comparison of HICP inflation forecasts
(year-on-year changes in %; end-of-year figures)**

	2008	2009	2010	2011
MTF-2008Q3	4.0	2.8	2.9	–
MTF-2008Q4	3.4	2.8	2.8	–
MTF-2009Q1	3.5	1.4	2.4	3.3

Source: NBS.

and investment activities, wage and employment growth, and the expected trend in commodity prices will cause a further rise in inflation after 2009, but to a lower level than according to the December forecast.

On the basis of these assumptions, the current NBS medium-term forecast predicts a slowdown in inflation to 1.4% in December 2009, followed by 2.4% in December 2010 and 3.3% in December 2011.

The risks to the current inflation forecast are mostly on the downside, owing to a possible

sharper-than-expected fall in foreign demand. Such development may lead to lower energy-producing and agricultural commodity prices, as well as to lower import prices. The lower foreign demand would cause lower profits in the corporate sector and pressure for slower-than-expected wage growth. The weaker wage dynamics may lead to lower domestic demand and weaker pressure on prices, mainly in the services sector. A downside risk is also represented by the currency depreciation against the euro in the neighbouring countries. The lower prices of energy-producing commodities may cause a fall in regulated energy prices even before the end of 2009.



Table 5 Medium-term forecast (MTF-2009Q1) – main macroeconomic indicators

	2008	2009	2010	2011	2009	2010	2011
	Actual	Forecast			Difference versus MTF-2008Q4		
Prices (annual percentage changes)							
HICP inflation (average)	3.9	1.7	2.0	2.9	-1.0	-1.2	-
CPI inflation (average)	4.6	2.4	2.7	3.3	-1.8	-1.1	-
ULC (compensation per employee at current prices / labour productivity ESA 95 at constant prices)	5.3	4.3	0.9	2.4	0.7	-1.2	-
Labour productivity ESA 95 (GDP at constant prices / employment ESA 95)	3.5	-1.1	1.9	3.1	-4.9	-3.2	-
Compensation per employee (current prices)	9.0	3.1	2.8	5.6	-4.4	-4.5	-
Economic activity (annual percentage change; unless otherwise indicated)							
Real GDP	6.4	-2.4	2.0	3.2	-7.1	-3.8	-
Final consumption of households	6.1	1.0	1.4	3.1	-4.7	-4.9	-
Final consumption of general government	4.3	4.4	1.9	2.3	0.3	-2.6	-
Gross fixed capital formation	6.8	-0.4	2.5	3.5	-5.6	-3.7	-
Exports of goods and services	3.2	-8.3	0.3	3.4	-12.2	-5.5	-
Imports of goods and services	3.3	-4.8	-0.1	3.3	-8.8	-5.8	-
Gross real disposable income of households	7.2	3.3	1.1	2.7	-1.5	-5.3	-
Output gap (% of the potential output)	0.5	-5.9	-6.3	-6.1	-4.8	-4.9	-
Labour market							
Employment, based on ESA 95 (annual percentage change)	2.8	-1.3	0.2	0.1	-2.2	-0.5	-
Unemployment rate, LFSS-based (%)	9.6	11.1	11.7	11.7	1.2	2.0	-
Balance of payments							
Economic openness (% of GDP)	166.8	149.5	145.6	144.3	-18.8	-22.6	-
Balance of trade (% of GDP)	-1.1	-3.2	-2.9	-2.5	-1.9	-1.9	-
Balance of services (% of GDP)	-0.7	-0.8	-0.7	-0.6	-1.3	-1.2	-
Current account (% of GDP)	-6.5	-7.3	-6.4	-5.6	-2.7	-2.9	-
Current and capital account (% of GDP)	-5.3	-5.7	-4.4	-3.6	-2.5	-2.6	-

Source: NBS.

