

Macroeconomic Forecast for Belarus: 2017–2018

No.1 (14)
July 2017

Summary

- The recovery will continue, but its pace is slow and depends on the (i) consistency of domestic macroeconomic policies, (ii) implementation of the agreements on crude oil imports from Russia, and (iii) the pace of recovery in Russia.
- We expect that the economic authorities will follow the first condition and preserve sound macroeconomic policies (and keep real exchange rate close to the equilibrium), and model the impact of (i) lower than expected supply of crude oil from Russia in 2018 and (ii) slower growth in Russia in 2018 on the key macroeconomic indicators.
- Belarus will return to growth under any scenario, mainly thanks to the recovery of exports and household consumption. Growth is especially sensitive to crude oil supply, while slower growth in Russia that undermines non-oil exports has smaller impact because of the fast adaptation of non-oil imports.
- Recovery of non-oil exports volumes and prices together with surplus in ‘oil’ trade (if happens) lead to goods and services trade surplus of about 2% of GDP, helping to reduce current account deficit even further.

Macroeconomic forecast for Belarus: The key figures

	2015	2016	2017	2018		
				Baseline	Alternative 1	Alternative 2
Real GDP growth, % yoy	-3.8	-2.6	1.4	2.0	0.3	1.5
Inflation, annual average, % yoy	13.5	11.8	7.1	6.7	6.5	6.7
Real wages growth, % yoy	-2.9	-3.9	4.0	7.8	7.2	7.6
Employment growth, % yoy	-1.2	-2.0	-1.8	-2.3	-2.4	-2.3
Wages, annual average, BYN/month	671.6	721.9	804.9	925.7	918.6	923.8
Exports of goods and services, USD bn	32.8	29.8	34.8	38.0	36.2	37.4
o.w. ‘oil’ exports	10.4	6.7	8.2	9.9	8.1	9.9
Imports of goods and services, USD bn	32.7	29.8	34.0	36.7	35.3	36.3
o.w. ‘oil’ imports	8.9	7.1	7.9	8.5	7.2	8.5
Memorandum items:						
GDP, BYN bn	89.9	94.3	107.8	122.8	120.6	122.2
GDP, USD bn	56.4	47.7	56.4	60.3	59.3	60.0

Note. For 2017, there is no difference between the scenarios. Scenarios for 2018 (comparing to baseline): ‘Alternative 1’ – lower crude oil imports; ‘Alternative 2’ – slower growth in Russia. All calculations were made based on the data available as of June 30, 2017.

Source: actual figures – Belstat, own calculations based on Belstat and NBB data; forecast – IPM Research Centre.

Abbreviations used:

Belstat	National Statistical Committee of Belarus
bn	Billions
CPI	Consumer price index
EIA	United States (US) Energy Information Administration,
STEO	Short-Term Energy Outlook
GDP	Gross domestic product
IFS	International Financial Statistics
IMF	International Monetary Fund
IPM RC	IPM Research Centre
mln	Millions
NBB	National Bank of Belarus
REER	Real effective exchange rate
Rosstat	Russian Federal State Statistical Service
yoy	year-on-year (annual growth rate)
WEO	World Economic Outlook

Standard symbols for metric units and ISO currency codes are used.

The publication is prepared under the support of the British Embassy in Minsk. The information presented in this publication is based on the statistical data available as of June 30, 2017. Neither the IPM Research Centre nor any person acting on behalf of it may be held responsible for the use that may be made of the information contained in this bulletin. The IPM Research Centre is not liable for any losses and/or damages associated with the use of the information, analysis and forecasts presented in this publication.

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Model estimates and forecasts are performed in EViews 10. Figures are plotted in EViews 10.

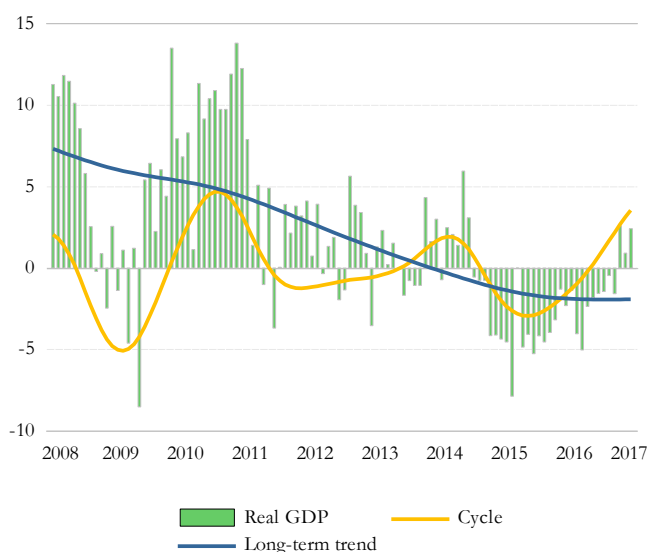
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Recent trends¹

Belarusian economy is recovering since 2016Q3: in 2016Q4, seasonally adjusted real GDP increased by 0.52% to the previous quarter, in 2017Q1 – by 0.92%. The most recent decomposition of real GDP into trend and cycle (see Figure 1) shows that after a permanent decrease since the beginning of the available sample (2003), long-term trend growth rate reached its minimum in December 2016 and started to move up, but very slowly. However, it is still negative (-1.91% yoy in May, 2017), and real GDP recovery comes from the fast increase of cyclical component (+3.55% yoy in May, 2017). The pace of cyclical recovery is almost as fast as before the elections of 2010, but this time it is because of the favourable external conjuncture, not domestic demand-enhancing policies.

Figure 1. Trend and cycle in real GDP, growth rates, % yoy



Note. Hodrick-Prescott decomposition was applied. To decompose the real GDP on the trend and the cyclical component, a smoothing parameter was estimated based on a filter frequency equal to 90 months for the long-term trend, and to 24 months for the cycle (for further details see Kruk and Zaretski, 2011, pp. 8–9).

Source: own calculations based on Belstat data.

The growth is export-driven with few signs of domestic demand recovery. Household consumption recovery is supported by real wages growth and growing consumer lending. Wages increase in line with labour productivity, but employment is falling, both due to aging and lowering economic activity. Investment are still falling, but the pace is getting slower. The biggest positive contribution to investment growth still comes from the public investment (mainly construction of the nuclear power plant in *Astraviec*), but we also observe recovery of commercial crediting of investment projects in several regions of Belarus thanks to lower interest rates.

Interest rates are falling thanks to disinflation, which is the result of sound macroeconomic policies of the economic authorities. Together with appreciation of the Russian rouble, disinflation contributed to real depreciation of the Belarusian rouble: according to the NBB’s estimates, its exchange rate stays slightly below the equilibrium level for the last two years. Real depreciation supported recent “expansion” to the Russian market that drove Belarusian economic recovery (contribution of no-oil exports to real GDP growth amounted to 5.7 percentage

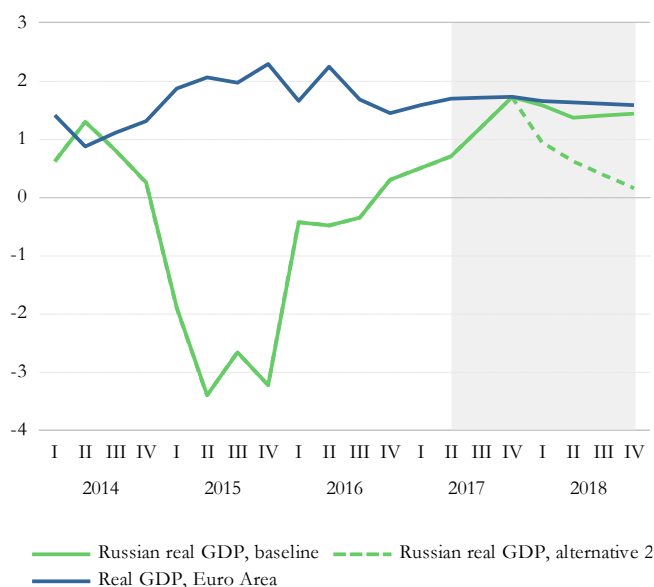
points in 2016 and to 9.8 percentage points (yoy) in the 2017Q1). However, unresolved gas conflict with Russia until recently led to historically low imports of Russian oil in the second half of 2016 and the first quarter of this year, and, hence, oil products exports also fell deep.

Assumptions

On the policies side, we assume conservative income and fiscal policies: minor fluctuations of the cyclical component of real wages and zero growth of government consumption are predicted. We also assume that the real exchange rate will be kept around its equilibrium level within the current managed float regime. Money supply (monetary base) is modelled as a function of real GDP and nominal effective exchange rate, i.e. under assumption of real exchange rate targeting it follows real GDP, which helps to keep inflation under control.

External demand forecast was taken from the IMF’s WEO database (April, 2017). According to this data, Russian real GDP will grow by 1.4% yoy in 2017 and by 1.44% yoy in 2018, in Euro Area – by 1.68 and 1.62% yoy, respectively. As an alternative scenario (scenario “Alternative 2”), we assume that real GDP in Russia will increase by 0.5% yoy in 2018 (see Figure 2).

Figure 2. Real GDP growth rates in Russia and Euro Area, % yoy

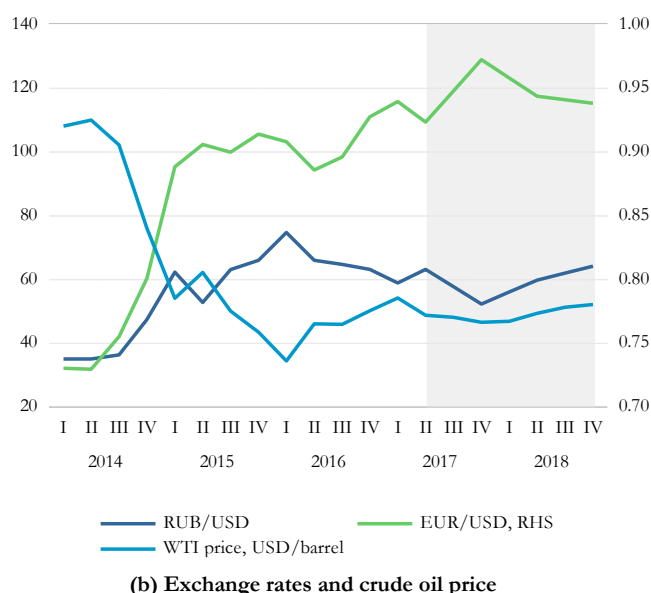
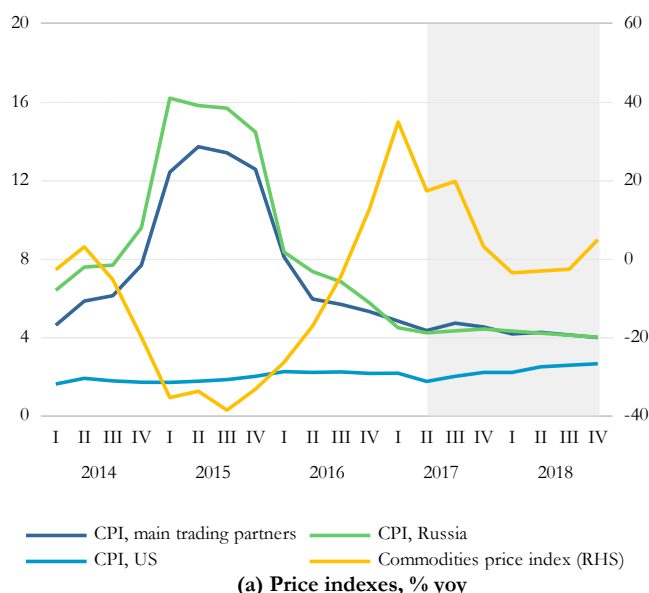


Source: actual figures – Eurostat for Euro Area (19 countries), Rosstat for Russia; forecast – own calculations based on the WEO Database, April 2017 (IMF); alternative scenario – own assumption.

Main price indexes (CPIs of the main trading partners, commodities price index), as well as main trading partners exchange rates against the US dollar were taken from the same database. Annual figures are: inflation rates in main trading partners/Russia/US are 4.61/4.46/2.65% yoy in 2017 and 4.13/4.20/2.38% yoy in 2018; commodities prices (fuel and non-fuel) will increase by 17.9% yoy in 2017 and fall by 1.2% yoy in 2018; EUR/USD and RUB/USD exchange rates are 0.941 and 58.98 in 2017 and 0.944 and 60.42 in 2018. Crude oil price for Urals is estimated based on the EIA STEO’s WTI price projections and is expected at 48.9 and 51.2 USD/barrel in 2017 and 2018, respectively (see quarterly dynamics at Figure 3). No difference between the scenarios is made.

¹ More detailed information about the recent economic trends are available in the presentation “[Economy of Belarus: The recovery has begun. What’s then?](#)”.

Figure 3. Prices and key exchange rates



Note. Main trading partners are weighted by the REER weights. Commodities price index includes both fuel and non-fuel price indices.
 Source: actual figures – IFS database; forecast – own calculations based on the WEO Database (price indexes and exchange rates) and EIA STEO, June 2017 (WTI price).

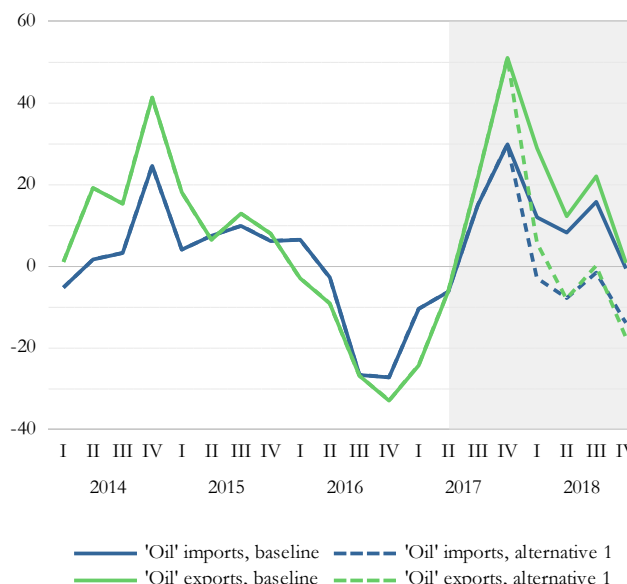
Belarusian oil export and import prices were projected based on the dynamics of WTI price (oil, oil products, petrochemicals) and commodities prices (potash fertilizers). Gas price for Belarus was set at 134 USD/1,000 m³ for 2017; for 2018 it was assumed as half of the market price (see Table 1). We expect that in 2017 Belarus will import 19.4 mln t of crude oil, and (baseline scenario) 23 mln t in 2018. It will allow to increase oil products exports to 13.5 mln t in 2017 and 16.6 mln t in 2018. As an alternative (scenario “Alternative 1”), we assume lower oil imports and, hence, lower oil products exports (18 and 12.5 mln t, respectively, see Table 1). The aggregated real growth rates of ‘oil’ imports and exports are presented at Figure 4.

Table 1. Prices and volumes of ‘oil’ trade

	Price			Volume			
	2016	2017	2018	2016	2017	2018b	2018a1
‘Oil’ imports							
Natural gas (2711)	137	139	121	18.6	18.0	18.0	18.0
Crude oil (2709)	219	245	252	18.2	19.4	<u>23.0</u>	<u>18.0</u>
Oil products (2710)	329	309	318	1.7	2.0	1.6	1.6
‘Oil’ exports							
Potash fertilizers (3104)	355	338	337	5.7	5.6	5.7	5.7
Oil products (2710)	366	398	435	13.0	13.5	<u>16.6</u>	<u>12.5</u>
Petrochemicals (2715, 3811)	329	274	279	0.6	1.2	0.9	0.9
Crude oil (2709)	292	355	375	1.6	1.6	1.6	1.6

Note. For 2018, “b” stands for the baseline, “a1” for the “alternative 1” scenarios. Gas prices are in USD per 1000 m³, USD per t for the rest. Volumes are in bn m³ for gas, mln t for the rest.
 Source: actual figures – Belstat; forecast – IPM Research Centre based on EIA STEO (June 2017) and WEO database (April 2017).

Figure 4. ‘Oil’ exports and imports, real growth rates, % yoy



Source: actual figures – own calculations based on Belstat data; forecast – IPM Research Centre (own assumptions from the Table 1).

Forecast²

The forecast was made based on the macroeconomic model built in EViews 10 based on the quarterly data from 1995Q1 (some equations – from 1998Q1 or 2000Q1) to 2017Q1. We estimated main macroeconomic indicators for three scenarios: baseline, lower than expected supply of crude oil from Russia in 2018 (alternative 1) and slower growth in Russia in 2018 (alternative 2).

Baseline scenario

According to our forecast, money supply (monetary base) will grow by about 12–14% a year, and the broad money supply growth will accelerate from -2.8% yoy in 2017Q1 to 8.3% yoy

² The preliminary version of this forecast was presented at the seminar “Economy of Belarus in a Low Growth Trap: Nesting or Escaping”, organized by the IPM Research Centre on June 30, 2017. It was revised after the update of the national accounts data by Belstat made in the same day.

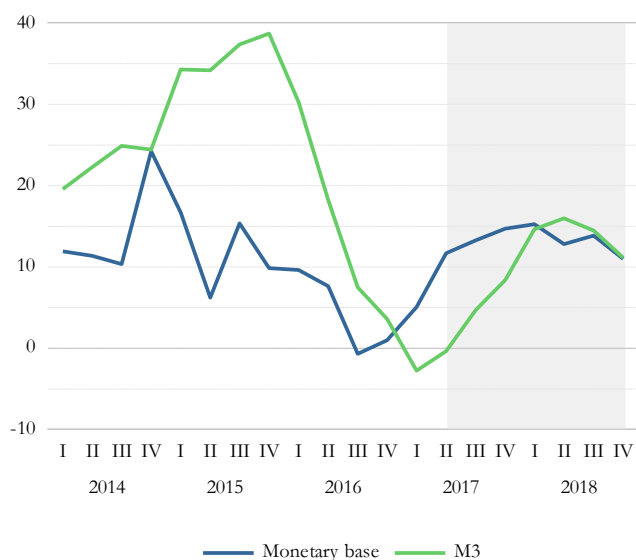
in 2017Q4 and 14.6% yoy in 2018 (Figure 5a). As a result, inflation will stay below 7% yoy in 2017 and fell to 6.3% yoy in 2018Q4 (Figure 5b). We do not expect faster disinflation due to the high inertia and consumer demand recovery, but any shifts in utility prices would influence it.

Moderate inflation will help the monetary authorities to keep the interest rate at the current level, but its further reduction will be constrained by the risk of rouble deposits outflow in case of faster than expected depreciation of Russian (and as a result Belarusian) rouble. As a result, positive impact of lower interest rates on investment will be limited, but further efforts

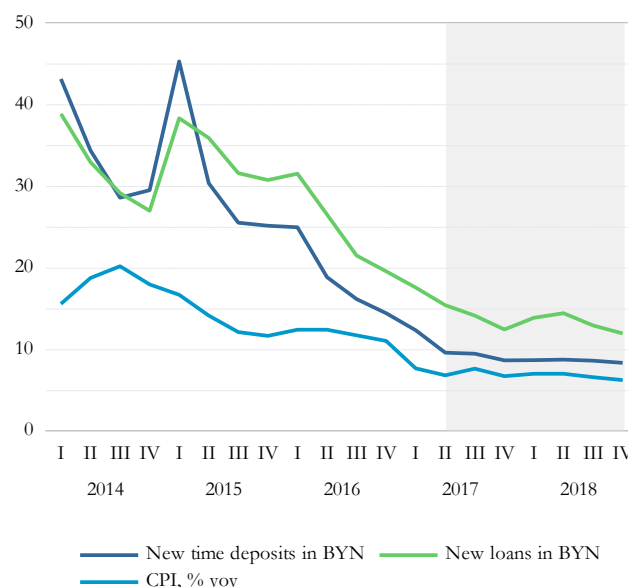
of the NBB in shifting to inflation targeting and de-dollarization may allow their further reduction and somewhat faster investment growth.

Together with real effective exchange rate targeting, moderate inflation will also allow to avoid major shifts of the nominal exchange rate of the Belarusian rouble. According to our forecast, nominal currency basket will depreciate by about 3% in 2017 and 4% in 2018 (under assumptions from the previous section). Real effective exchange rate will depreciate this year and slightly appreciate in 2018, but stay below the current level all the time (see Figure 6).

Figure 5. Selected monetary policy indicators, baseline scenario



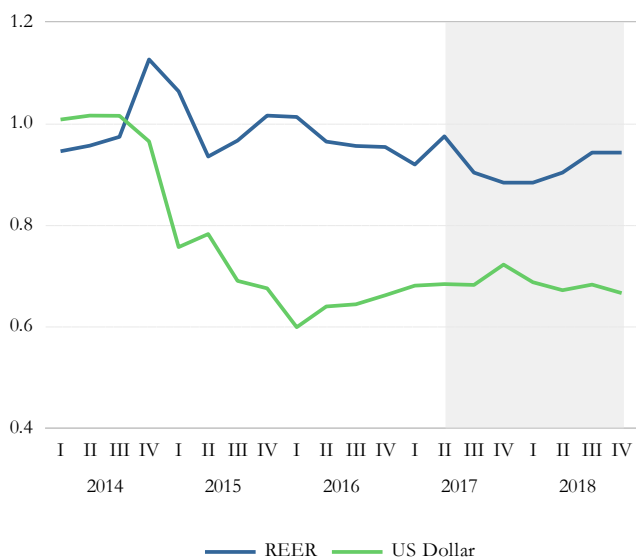
(a) Money supply, growth rates, % yoy



(b) Interest rates (% per annum) and inflation

Source: actual figures – NBB; forecast – IPM Research Centre.

Figure 6. Real exchange rates (effective and against the US Dollar), baseline scenario, indexes, 2014 = 1



Source: IPM Research Centre.

Non-oil exports growth will push GDP up: its contribution to real GDP growth will stay high in 2017 (6 percentage points) and remain positive (2 percentage points) in 2018, see Table 2. Wages will follow productivity growth; moreover, labour productivity will grow faster than real GDP because we do not expect any major recovery of employment. It will decline faster

than the working-age population because of the lower economic activity: SOEs that preserved excessive employment during 2015 and 2016 re-start its gradual releases.

In spite of the visible recovery of real wages (we expect wages growth of 4 and 7.8% yoy in 2017 and 2018, respectively), household consumption recovery will be slower right because of employment reduction. Investment recovery will start in the second half of 2017, but we expect only modest investment growth of 2.6% yoy in 2018. In general, we expect small positive contribution of domestic demand to real GDP growth already in 2017 and its further increase to 3.1 percentage point in 2018 (see Table 2).

Net export's contribution will be positive in 2017, but negative in 2018, despite the expected growth of net 'oil' exports. This is because of the recovery of non-oil imports that will bring -4.5 percentage points to real GDP growth in 2018 according to our forecast (see Table 2) due to the recovery of domestic demand and some real appreciation of Belarusian rouble.

Further depreciation of the Belarusian rouble that could contribute to export growth or further lowering of the interest rates would harm the macroeconomic stability and undermine even this fragile recovery, that is why we expect conservative macroeconomic policies and gradual economic recovery. The economy is too small to rely on domestic demand and too integrated with the Russian economy to expect faster export growth.

Table 2. Real GDP and aggregate demand forecast

	2012	2013	2014	2015	2016	2017	2018		
							baseline	alternative 1	alternative 2
Growth rates, % yoy									
Real GDP	1.6	1.0	1.7	-3.8	-2.6	1.4	2.0	0.3	1.5
<i>Domestic Demand</i>	2.0	8.0	-0.2	-7.6	-6.1	0.2	3.1	2.8	2.9
Household consumption	10.9	10.8	4.3	-2.4	-3.9	2.8	4.0	3.7	3.9
Gross fixed capital formation	-11.5	9.0	-5.8	-15.5	-16.7	-1.5	2.6	1.6	2.4
Other domestic demand components	11.1	-1.5	-1.6	-8.2	6.7	-5.1	0.4	2.0	0.4
Exports of goods and services ('non-oil')	7.8	-3.0	-0.5	-7.0	16.4	14.4	4.2	4.2	1.9
Imports of goods and services ('non-oil')	9.6	13.5	0.1	-12.7	2.0	12.8	10.1	9.6	8.5
Exports of goods ('oil')	15.2	-33.4	17.6	11.1	-17.5	5.2	14.9	-5.8	14.9
Imports of goods ('oil')	16.3	-35.1	5.5	6.7	-13.1	5.1	8.2	-7.1	8.2
Contribution to real GDP growth, percentage points									
<i>Domestic Demand</i>	2.0	7.7	-0.2	-7.7	-5.9	0.2	2.8	2.6	2.6
Household consumption	4.6	5.0	2.2	-1.2	-2.1	1.4	2.1	1.9	2.1
Gross fixed capital formation	-4.4	3.0	-2.1	-5.1	-4.9	-0.4	0.6	0.4	0.6
Other domestic demand components	1.7	-0.3	-0.3	-1.3	1.0	-0.8	0.1	0.3	0.1
<i>Net exports of goods and services + statistical discrepancy</i>	-0.3	-6.8	1.8	3.8	3.3	1.2	-0.9	-2.3	-2.3
Exports of goods and services ('non-oil')	2.8	-1.2	-0.2	-2.5	5.7	6.0	2.0	2.0	0.9
Imports of goods and services ('non-oil')	-3.3	-5.1	0.0	5.3	-0.7	-5.0	-4.5	-4.2	-3.7
Exports of goods ('oil')	3.3	-8.1	2.8	2.1	-3.8	0.9	2.8	-1.1	2.8
Imports of goods ('oil')	-3.1	7.6	-0.8	-1.0	2.1	-0.7	-1.2	1.0	-1.2

Source: actual figures – Belstat/own calculations based on Belstat data; forecast – IPM Research Centre.

Alternative scenarios

Alternative scenarios show that the recovery expected under the baseline scenario is not sustainable: it strongly depends on external factors, especially on agreements concerning energy issues between Russia and Belarus. The uncertainty about volumes of crude oil supply is high even if both parties report about the achieved agreements; the same is true about the Russian natural gas price for Belarus. According to our estimates, lower crude oil supply (“alternative 1”) would cost Belarus 1.7 percentage points of real GDP growth, while slower growth in Russia (“alternative 2”) – “just” 0.5 percentage points.

Monetary parameters are similar for all scenarios, as well as real wages and domestic demand growth rates. This is because the NBB reacts to the slower GDP growth with smaller money supply increase in order to keep inflation under control, and drivers of domestic demand suffer less than foreign trade indicators that are affected directly. In case of slower growth in Russia, its negative impact on non-oil exports is rather high (its contribution to real GDP growth is 1.1 percentage points lower than the baseline), but slower non-oil exports growth causes slower non-oil imports increase – the long-term elasticity of the imports on the exports is 0.88, and short term 0.55. Of course, potential impact of larger negative movements in Russian GDP on Belarusian economy is more severe, but in the past the respective model equations captured them as short-term shifts in non-oil exports growth rate.

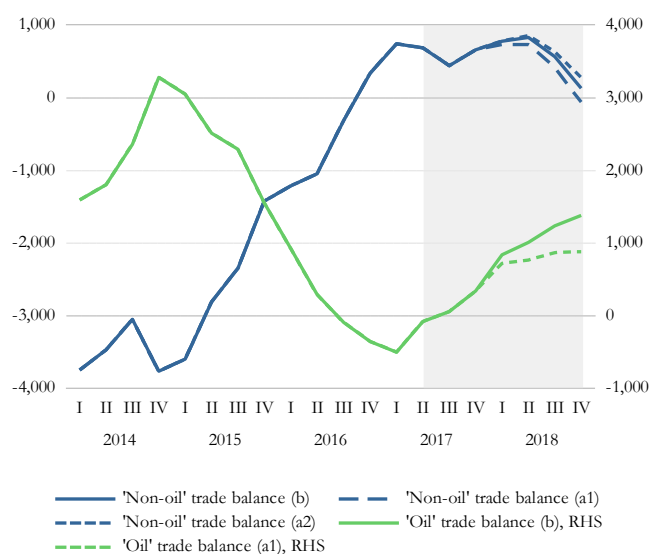
Impact on foreign trade

Although the model does not include balance of payments indicators, it allows calculation of balance of trade in goods and services. Under any scenario, Belarus will have surplus in ‘oil’ trade (in our definition from the Table 1) and a surplus (or at least balance) in ‘non-oil’ trade, see Figure 7.

One reason of the surplus in non-oil trade is improvement in terms of trade: according to our estimates, average dollar prices of non-oil exports will grow faster than those of non-oil imports between 2017Q4 and 2018Q3; on average, in 2017 both non-oil exports and imports prices will increase by 2.2% yoy,

while in 2018 – by 4.3 and 0.7% yoy, respectively. Another reason is that in 2017 volumes of exports will grow faster than import volumes, but in 2018 imports will grow faster under any scenario (see Table 2), pushing non-oil trade from the surplus to a balance. Anyway, surplus of trade in goods and services would contribute to further reduction of the current account deficit and easing the external debt burden.

Figure 7. Trade balance, goods and services, 4-quarter moving sum, USD mln



Source: actual figures – Belstat/own calculations based on Belstat data; forecast – IPM Research Centre.