Belarus short-term economic trends
GDP

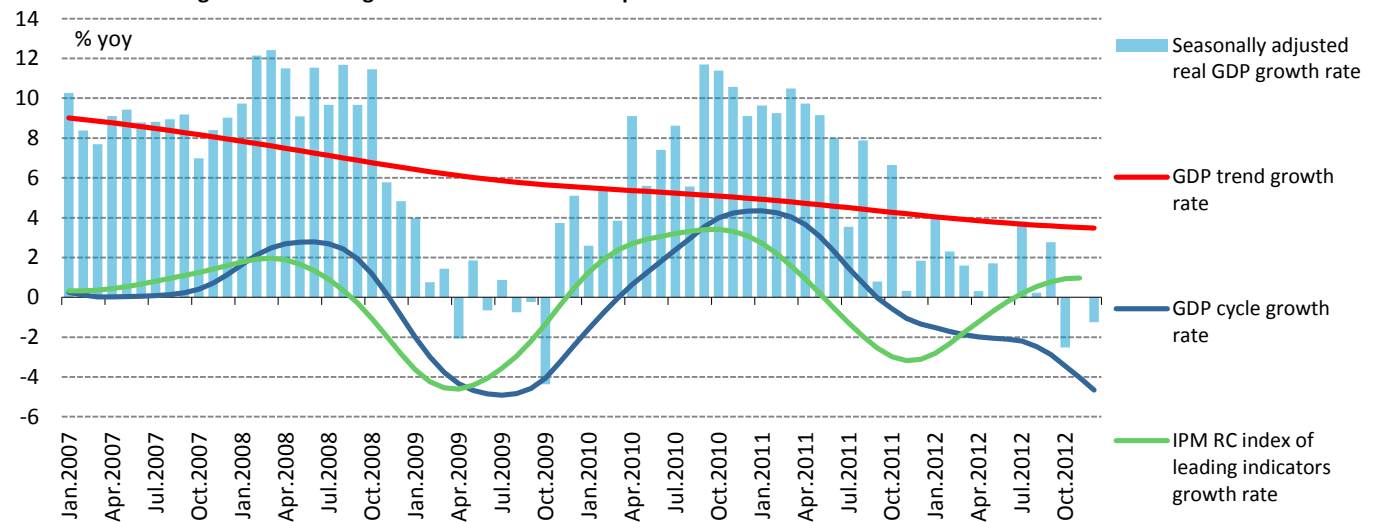01/2013

- In October-November, the ILI went almost unchanged, remaining in the recovery phase.
- In November-December, the cyclical component of the GDP remained in the slowdown phase. This situation was caused by declining exports, rising imports, and a decrease in real investment in October-November. At the same time, in December the growth rate of the long-term trend of the GDP fell down to 3.48% yoy.
- Diverging dynamics of the ILI and the GDP cycle in 2012 can be attributed to the structural break in GDP in January-July, strongly influenced by the exports of solvents, diluents, and lubricants.

The index of leading indicators and growth rates of GDP[1] components

Legend:
- Seasonally adjusted real GDP growth rate
- GDP trend growth rate
- GDP cycle growth rate
- IPM RC index of leading indicators growth rate

The IPM Research Center index of leading indicators dynamics[2] and the GDP cycle dynamics

	October 2012	November 2012	December 2012
The IPM RC index of leading indicators	99.9	99.9	--
The IPM RC index of leading indicators, business cycle phase	recovery	recovery	--
The IPM RC index of leading indicators, growth rate, % yoy	0.9	1.0	--
GDP cycle	97.4	96.7	96.1
GDP cycle, business cycle phase	slowdown	slowdown	slowdown
GDP cycle, growth rate, % yoy	-3.4	-4.0	-4.7

Source: IPM Research Center.

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[1] Here and elsewhere the term "GDP" means real GDP, unless specified.
[2] See Kruk, Zaretsky (2011) on the interpretation of the IPM Research Center index of leading indicators dynamics.

The index of leading indicators and the GDP cycle

- The GDP cycle decline continues

In October-November, the ILI went almost unchanged, being in the recovery phase. The cyclical component of the GDP remained in the slowdown phase in November-December. During two months, it was decreasing by 0.69% mom. This dynamics can be explained by worsening trade balance (caused by a decline in the volume of exports and a rise in the volume of imports) and a decrease in real investment in October-November. At the same time, the growth rate of the long-term GDP trend fell down to 3.48% yoy in December (3.54% yoy in October and 3.51% yoy in November). This diverging dynamics of the ILI and the GDP cycle during 2012 can be attributed to the structural break in the real GDP over January-July, in turn caused by the exports of solvents, diluents, and lubricants. Otherwise, the GDP cycle is likely to replicate the ILI dynamics.

The current ILI dynamics do not signal about the possible future dynamics of the GDP cycle. The five ILI components were in the downturn or slowdown phases in October-December, while the other four components – either in the recovery or expansion phases.

Early stages of production in the economy

- There are no clear signals about the future dynamics of the GDP cycle.

The index of the cyclical components of the **cargo turnover and cargo traffic** was in the slowdown phase in November-December, decreasing by 0.43% mom and 0.41% mom, respectively. Both components of the index decreased. This can be explained by decline or growth deceleration of the cargo traffic/cargo turnover by the railway and automobile transport. In contrast, the cyclical component of the **purchase of building materials** (in real terms) was in the expansion phase, having increased by 0.69% mom in November and by 0.78% mom in December.

Changes in the economic environment

- Most of the variables signal about the expected continuation of the GDP cycle slowdown.

The inverted cyclical component of the **inventories of finished goods** (as a share of average monthly industrial output) remained in the slowdown phase, having decreased by 0.41% mom in November and December. This reflects the decline in the demand for the output of the Belarusian enterprises. The cyclical component of the **number of workers employed on the**
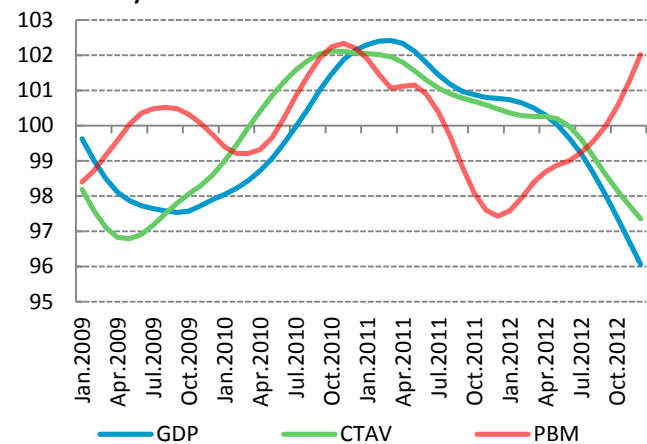
The index of leading indicators and the GDP cycle
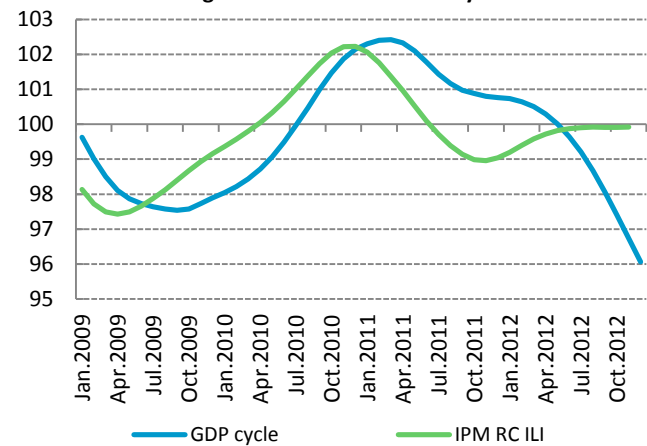
Here and elsewhere normalized dimensionless values of the corresponding variables cyclical components are presented.
Source: IPM Research Center.

GDP and variables associated with early stages of production in the economy

CTAV – index of cargo turnover and cargo traffic cycles, PBM – purchase of building materials in real terms.
Source: IPM Research Center.

newly created jobs entered the slowdown phase in November, while early data displayed expansionary dynamics. In November, the variable decreased by 0.17% mom, in December – by 0.22% mom. The cyclical component of the **retail turnover of food products** (in real terms) was in the expansion phase, having increased by 0.33% mom in November and by 0.34% mom in December. This reflects the increase in households' real income and consumption.

Economic agents' expectations

- There are no clear signals about the future dynamics of the GDP cycle.

The cyclical component of the **business climate index of the NBB**, according to the updated data, entered the downturn phase in September and the slowdown phase in December. The variable decreased by 0.12% mom in November and by 0.15% mom in December. The cyclical component of the **RTS index**, which reflects the economic situation in Russia, was in the recovery phase, having increased by 0.14% mom in November and by 0.15% mom in December. This dynamics was accompanied by the acceleration of the Belarusian exports growth to Russia in October-November.

Economic activity fluctuations

- There are no clear signals about the future dynamics of the GDP cycle.

According to the newest dataset, the cyclical component of the **foreign currency purchase by business entities (residents)**, entered the downturn phase in August and the slowdown phase in December. The latter was driven by the nominal imports decline in September-November. The variable decreased by 0.34% mom in November and by 0.41% mom in December. The cyclical component of the flow of **long-term loans provided** by banks (in real terms) increased by 0.32% mom in October and by 0.33% mom in November, having entered the expansion phase. This is a factor to positively influence the dynamics of investment in the future.
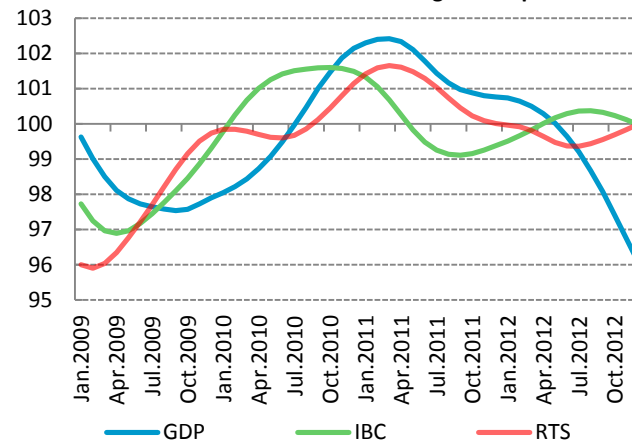
GDP and variables exhibiting a rapid response to the changing economic environment
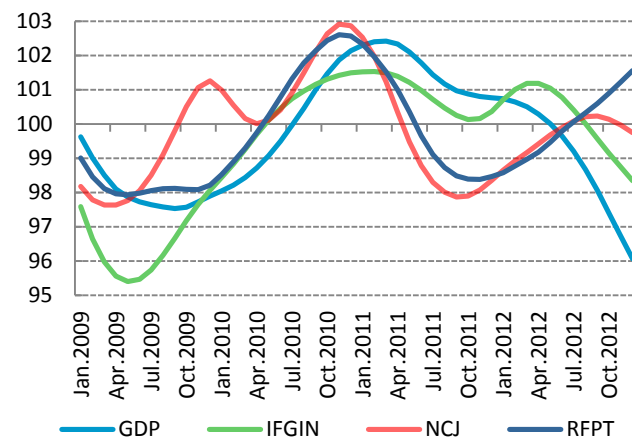
IFGIN – inventories of finished goods (inverted cycle), NCJ – number of workers employed on the newly created jobs, RFPT – retail turnover of food products in real terms.
Source: IPM Research Center.
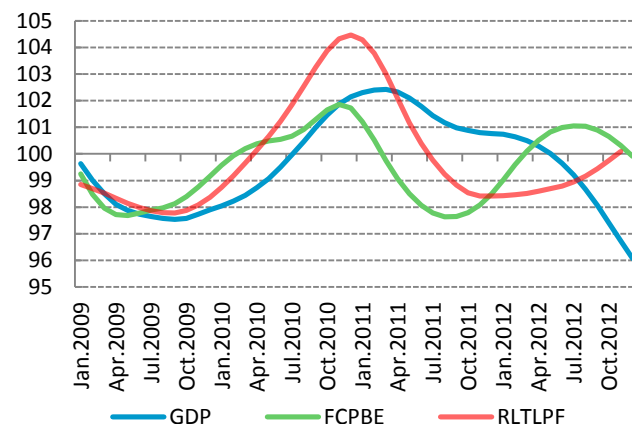
GDP and variables sensitive to economic agents' expectations

IBC – business climate index of the NBB, RTS – RTS index.
Source: IPM Research Center.

GDP and variables causing economic activity fluctuations

FCPBE – foreign currency purchase by business entities (residents), RLTLPF – flow of long-term loans provided by banks (in real terms).
Source: IPM Research Center.

Statistical appendix

- Turning points of the Belarusian business cycle: June 2003 – trough, August 2004 – peak, May 2005 – trough, November 2006 – peak, April 2007 – trough, June 2008 – peak, September 2009 – trough, March 2011 – peak.

Leading indicators	2011	2012											
	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Index of leading indicators	99.0	99.2	99.4	99.6	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	--
Index of leading indicators, % yoy	-3.1	-2.8	-2.3	-1.8	-1.2	-0.7	-0.2	0.2	0.5	0.8	0.9	1.0	--
ILI components:													
Index of cargo turnover and cargo traffic cycles	100.5	100.4	100.3	100.3	100.3	100.2	100.0	99.6	99.1	98.6	98.2	97.8	97.4
Index of cargo turnover and cargo traffic cycles, % yoy	-1.6	-1.6	-1.7	-1.7	-1.5	-1.3	-1.3	-1.4	-1.7	-2.1	-2.5	-2.8	-3.1
Foreign currency purchase by business entities (residents)	98.5	99.0	99.6	100.1	100.5	100.8	101.0	101.1	101.0	100.9	100.7	100.3	99.9
Foreign currency purchase by business entities (residents), % yoy	-3.2	-2.2	-0.9	0.4	1.5	2.4	3.0	3.4	3.5	3.3	2.9	2.3	1.4
Business climate index of the NBB	99.4	99.5	99.7	99.8	100.0	100.2	100.3	100.4	100.4	100.3	100.2	100.1	100.0
Business climate index of the NBB, % yoy	-2.1	-1.8	-1.4	-0.8	-0.2	0.3	0.8	1.1	1.2	1.2	1.1	0.9	0.6
Inventories of finished goods (inverted cycle)	100.4	100.7	101.0	101.2	101.2	101.0	100.8	100.4	100.0	99.6	99.2	98.7	98.3
Inventories of finished goods (inverted cycle), % yoy	-1.1	-0.8	-0.5	-0.3	-0.2	-0.2	-0.2	-0.3	-0.5	-0.7	-1.0	-1.4	-2.0
Number of workers employed on the newly created jobs	98.4	98.7	98.9	99.2	99.4	99.7	99.9	100.1	100.2	100.2	100.1	100.0	99.8
Number of workers employed on the newly created jobs, % yoy	-4.4	-3.8	-3.0	-2.0	-0.9	0.2	1.1	1.8	2.2	2.4	2.3	1.9	1.4
Purchase of building materials in real terms	97.4	97.6	98.0	98.4	98.7	98.9	99.0	99.2	99.5	100.0	100.5	101.2	102.0
Purchase of building materials in real terms, %yoy	-4.7	-4.2	-3.4	-2.6	-2.4	-2.3	-1.9	-1.1	-0.1	1.1	2.5	3.7	4.7
Retail turnover of food products in real terms	98.5	98.6	98.8	99.0	99.2	99.5	99.8	100.1	100.3	100.6	100.9	101.2	101.6
Retail turnover of food products in real terms, % yoy	-4.0	-3.7	-3.1	-2.5	-1.8	-0.9	0.1	1.0	1.6	2.1	2.5	2.9	3.1
Flow of long-term loans provided in real terms	98.4	98.4	98.5	98.5	98.6	98.7	98.8	98.9	99.2	99.4	99.8	100.1	--
Flow of long-term loans provided in real terms, % yoy	-5.8	-5.6	-5.1	-4.4	-3.4	-2.4	-1.6	-0.8	-0.1	0.6	1.2	1.7	--
RTS index	100.0	100.0	99.9	99.8	99.6	99.5	99.4	99.4	99.4	99.6	99.7	99.8	100.0
RTS index, % yoy	-1.1	-1.4	-1.7	-1.8	-1.9	-2.0	-1.9	-1.7	-1.3	-0.9	-0.5	-0.3	0.0

Normalized dimensionless values of the corresponding variables cyclical components and their annual growth rates are presented.
Source: IPM Research Center.

Methodological comments

The major goal of constructing the composite indices of leading indicators within the growth cycle concept is to detect, as early as possible, the forthcoming turning points of a business cycle and changes in a business cycle phase. A change of the ILI growth phase and its movement to/from a turning point indicates that a reference series (real GDP) will have the similar path in the several periods (typically, 3–4 months).

The dynamics of an ILI and a GDP cycle are the straightforward way to present the results. This representation illustrates both the current growth cycle phase and a future direction of change in the growth cycle phase. Growth cycle phases are identified by referring to the level and dynamics of the corresponding indicator: increase at the level higher than 100 – expansion, decrease at the level higher than 100 – downturn, decrease at the level lower than 100 – slowdown, increase at the level lower than 100 – recovery.

Furthermore, such representation of the results provides clues about the expected direction of GDP growth rate changes (acceleration/deceleration). Nevertheless, the ILI cannot be used to make judgments about future values, such as growth rate or growth acceleration/deceleration. Thus, the ILI is a useful tool to infer about cycle phase changes and/or about a direction of growth rate changes. First, ILI amplitude might not be corresponding to future GDP cycle amplitude. Second, GDP growth rate changes could be determined by long-term trend changes, as well as by short-term cyclical dynamics from which all the variables, included in the ILI, are cleared at a stage of calculating cyclical components.

There is another way to interpret this representation of the results: the concept of output gap. This concept is inextricably associated with the growth cycle concept. A GDP cycle at the level higher than 100 can be interpreted as a positive output gap, whereas a cycle at the level lower than 100 – a negative output gap. Since the amplitudes of ILI and GDP cycle can differ, an index falling into a positive gap range does not imply that a GDP cycle reaches the same range. Still, we can expect that a GDP cycle moves in the same direction as ILI.

It is also possible to present results as a set consisting of real GDP growth rate, growth rates of the trend and cycle of GDP, and the ILI growth rate. This way of representation provides an insight into real GDP changes, which are caused by changes in the long-term equilibrium level and the cyclical component. In addition, it allows to make judgments about a future dynamics direction of the cyclical component.

Abbreviations used:

GDP	Gross domestic product
ILI	Index of leading indicators
IPM RC	IPM Research Center
NBB	National bank of Belarus
RTS	Russian Trading System Stock Exchange
yoy	year-on-year (annual growth rate)
mom	month-on-month (monthly growth rate)

Data sources/references:

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3. Belstat, the statistical data book "National accounts of the Republic of Belarus" (different issues).
4. Belstat, the statistical bulletin "Social and economic situation in the Republic of Belarus" (different issues).
5. Belstat, the statistical bulletin "The number of workers and wages in the Republic of Belarus" (different issues).
6. Joint Economic and Social Data Archive, website, http://sophist.hse.ru/exes/tables/FINMAR_M.htm.
7. Kruk D., Zaretsky A. (2011). "Methodology of the composite index of leading indicators construction for Belarus", *working paper* WP/11/01, IPM Research Center (in Russian).
8. NBB, "Bulletin of banking statistics" (different issues).
9. NBB, "Monitoring of the real economy enterprises of the Republic of Belarus" (different issues).

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