

- Euro area GDP +1.7% in 2016, +1.8 in Q4 y-o-y
- Russian GDP -0.2 in 2016, Polish GDP +2.8 in 2016
- 21.8% of Latvia's population at risk of poverty in 2015

1 Key economic indicators

Key Economic indicators of Latvia								
Variable / Date	2014	2015	2016	2016				2017
				Q1	Q2	Q3	Q4	Q1
Real sector								
Real GDP, yoy, %, sca	2.1	2.7	-	1.2	0.8	0.3	1.6	-
Nominal GDP per capita, EUR thou., nsa	11800	12300	-	2800	3200	3300	-	-
Industrial production index, yoy, %, ca	-0.9	3.5	4.9	3.6	4.4	1.4	9.9	-
Volume index of construction production, yoy, %, ca	7.9	-1.2	-	-19	-19	-22	-	-
Retail trade, deflated turnover, yoy, %, ca	3.6	5	1.9	2.1	2.4	1.1	2.2	-
Gross fixed capital formation, yoy, %, sca	0.1	2.8	-	-14.9	-25	-26.3	-	-
Prices								
GDP deflator, SCA	1.3	0.4	-	0.7	0.5	-0.3	-	-
HICP, eop, yoy, %	0.3	0.4	2.1	-0.6	-0.6	0.5	2.1	-
PPI, eop, yoy, %	0.3	-1.5	-1.1	-3.2	-3.5	-1.7	-1.1	-
House price index, yoy, %, eop	-4.5	6.6	-	7.1	9.5	10.8	-	-
Labour market								
Minimum wage, EUR, biannual, eop	320	360	370	370		380		380
Unemployment rate, LFS, %, sa	10.8	9.9	9.7	9.9	9.5	9.8	9.6	-
Real labour productivity per hour worked, yoy, %, nsa	2.9	3	-	2.7	0.9	2	-	-
Labour market								
Exports of goods, yoy, %, sca	3.5	-0.4	-	4.1	2.9	3.7	-	-
Imports of goods, yoy, %, sca	3.3	6.2	-	2.4	1.1	1.8	-	-
Current account balance, % of GDP, sca	1.9	-0.7	-	1.8	0.1	1.6	-	-
FDI inflow, % of GDP, nsa	0.0	2.1	-	-6.1	0.4	0.2	-	-
Economic sentiments								
Economic sentiment indicator, SA, eop	103.0	103.0	104.0	104.0	105.0	105.0	104.0	104 (Jan)
Industrial confidence indicator, SA, eop	-7.0	-6.0	-1.0	-5.0	-3.0	-3.0	-1.0	-2 (Jan)
Construction confidence indicator, SA, eop	-22.0	-32.0	-24.0	-32.0	-37.0	-30.0	-24.0	-21 (Jan)
Retail confidence indicator, SA, eop	8.0	4.0	5.0	10.0	8.0	8.0	5.0	5 (Jan)
Services Confidence Indicator, SA, eop	3.0	1.0	7.0	5.0	7.0	6.0	7.0	5 (Jan)
Consumer confidence indicator, SA, eop	-8.0	-8.0	-18.0	-10.0	-9.0	-8.0	-18.0	-17 (Jan)

[Source: Eurostat, Bank of Lithuania, author's calculations]

2 Economic news of past week

Euro area GDP Q4 +0.5% Q-o-Q	Seasonally adjusted GDP rose by 0.5% in the euro area (EA19) and by 0.6% in the EU28 during the fourth quarter of 2016, compared with the previous quarter. In the third quarter of 2016, GDP had grown by 0.4% in the euro area and by 0.5% in the EU28. Compared with the same quarter of the previous year, seasonally adjusted GDP rose by 1.8% in the euro area and by 1.9% in the EU28 in the fourth quarter of 2016, after also +1.8% and +1.9% in the previous quarter. Over the whole year 2016, GDP grew by 1.7% in the euro area and by 1.9% in the EU28. (Eurostat)
2017 Jan euro area annual inflation up to 1.8%	Euro area annual inflation is expected to be 1.8% in January 2017, up from 1.1% in December 2016. Energy is expected to have the highest annual rate in January (8.1%, compared with 2.6% in December), followed by food, alcohol & tobacco (1.7%, compared with 1.2% in December), services (1.2%, compared with 1.3% in December) and non-energy industrial goods (0.5%, compared with 0.3% in December). (Eurostat)
Euro area unemployment at 9.6%	The euro area seasonally-adjusted unemployment rate was 9.6% in December 2016, down from 9.7% in November 2016 and down from 10.5% in December 2015. This is the lowest rate recorded in the euro area since May 2009. The EU28 unemployment rate was 8.2% in December 2016, stable compared to November 2016 and down from 9.0% in December 2015. This remains the lowest rate recorded in the EU28 since February 2009. (Eurostat)
Russian GDP - 0.2% in 2016	Russia's statistics service surprised economists by finding gross domestic product (GDP) contracted by only 0.2% in 2016. That implies fourth-quarter growth could have been around 1 percent year-on-year if there were no revisions to data for the previous three quarters. (Reuters.com)
Poland's GDP +2.8% in 2016	Polish GDP grew 3.9 percent in 2015. Analysts had expected a GDP growth figure of 2.7 percent for last year. Domestic demand grew 2.8 percent in real terms last year, compared to 3.4 percent in 2015, according to the Central Statistical Office. Poland's 2017 budget is based on a forecast of 3.6 percent GDP growth this year. Deputy Finance Minister Leszek Skiba said that economic growth last year was weakened by a fall in investment, but added the situation may improve in 2017. He pointed out that the reading for last year was slightly above market expectations. (thenews.pl)
21.8% of Latvia's population at risk of poverty in 2015	In 2015, as population disposable income increased, the at-risk-of-poverty threshold rose as well - to EUR 318 euros monthly (EUR 291 in 2014). Out of the total population, 21.8% of the persons with monthly equivalised disposable (net) income below EUR 318 euros were at risk of poverty in 2015. Compared to 2014, the share of persons at risk of poverty declined by 0.7 ppt in 2015. (baltic-course.com)

3 Economic insights

The Phillips curve was introduced by A. W. Phillips in 1958, which observed a negative relationship between unemployment and the rate of change in nominal wage rates. This observation suggested that there was an exploitable trade-off between inflation and employment in an economy, and that monetary policy could permanently lower unemployment at the cost of higher inflation. However, subsequent contributions pointed out that inflation expectations play an important role and that monetary policy cannot permanently affect unemployment, which instead converges in the long run to its natural level, determined by the structural features of the economy. Nevertheless, on account of rigidities in consumer prices or wages, deviations in unemployment from its natural level or, more generally, economic slack could have an impact on inflation in the short term. (ECB 2011)

Data

Annual rate of change of the overall index excluding energy, food, alcohol and tobacco is taken from the Eurostat. Gap between actual GDP and potential GDP as percentage of potential GDP is taken from AMECO database.

Table 1: Data

TIME	EA19_INFL	EA19_SL	EE_INFL	EE_SL	LV_INFL	LV_SL	LT_INFL	LT_SL
1997	1.6			-1.5	12.3	0.2	11.2	3.5
1998	1.5	0.0		-1.5	8.0	1.3	7.6	4.8
1999	1.1	0.6	5.5	-6.2	4.1	-1.1	3.8	-2.6
2000	1.0	2.1	3.7	-0.8	2.5	-1.6	0.8	-4.4
2001	1.8	2.0	4.4	0.8	1.4	-1.8	0.2	-3.8
2002	2.4	1.0	3.4	1.6	1.4	-0.9	0.5	-3.3
2003	1.8	-0.2	2.3	2.9	3.0	1.0	-0.7	0.8
2004	1.9	0.2	1.4	3.3	4.8	1.8	-0.3	1.6
2005	1.4	0.1	2.0	6.4	4.8	4.4	1.2	3.6
2006	1.4	1.5	3.6	11.0	4.2	8.6	2.3	4.9
2007	1.9	2.7	6.1	14.5	8.1	10.8	3.0	8.9
2008	1.9	1.7	6.2	5.8	9.0	2.9	6.6	6.1
2009	1.4	-3.4	0.9	-9.0	2.4	-10.9	2.8	-10.5
2010	1.0	-2.1	0.4	-6.5	-4.0	-11.9	-2.2	-9.0
2011	1.4	-1.1	2.4	-0.7	-0.2	-5.3	0.3	-4.3
2012	1.5	-2.2	2.8	1.9	0.3	-1.8	2.0	-1.9
2013	1.1	-2.9	1.9	1.4	-0.1	0.3	1.4	-0.4
2014	0.8	-2.4	1.3	2.1	1.7	1.1	0.7	1.0
2015	0.8	-1.6	1.2	1.2	1.5	1.5	1.9	0.8
2016	0.9	-1.0	1.2	-0.1	1.2	1.4	1.7	0.9

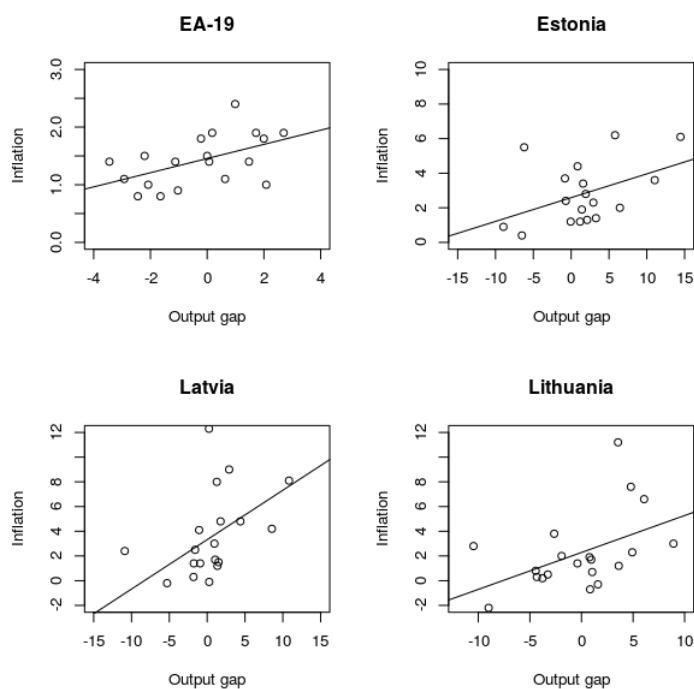
Estimation results

Table 2: Estimation results of simple linear fit model

Euro area									
	β	Std. Error	t	Sig.	F-statistic	df	Sig.	adj. R^2	N
Intercept	1.45517	0.09120	15.956	<0.001	6.009	17	0.02535	0.2177	19
Slack	0.12296	0.05016	2.451	<0.05					
Estonia									
	β	Std. Error	t	Sig.	F-statistic	df	Sig.	adj. R^2	N
Intercept	2.58961	0.40884	6.3334	<0.001	3.782	16	0.0696	0.1406	18
Slack	0.13743	0.07067	1.945	<0.1					
Latvia									
	β	Std. Error	t	Sig.	F-statistic	df	Sig.	adj. R^2	N
Intercept	3.3231	0.7170	4.635	<0.001	8.225	18	0.01023	0.2755	20
Slack	0.3999	0.1395	2.868	<0.05					
Lithuania									
	β	Std. Error	t	Sig.	F-statistic	df	Sig.	adj. R^2	N
Intercept	2.2876	0.6301	3.630	<0.01	5.172	18	0.03543	0.18	20
Slack	0.2989	0.1314	2.274	<0.05					

Scatterplot

Figure 1: HICP inflation excluding energy and food for the period 1997-2016 against the output gap



Negative gaps are associated with a high degree of unutilised capacity or economic slack. The coefficients of a linear fit and the associated R^2 measure of the closeness of this fit are also displayed in table 2. The coefficients associated with the gaps, or the “slopes” of the Phillips curve, are significant

and their signs are as expected - wider negative gaps are typically accompanied by lower inflation rates. According to the R^2 coefficient, the output and unemployment gap can explain around 18-20% variation in inflation in this simple framework. The intercepts depict the expected average core inflation rate given a 0-gap from potential GDP. In this scenario, annual core inflation rate in Estonia is estimated at 2.6%, in Latvia 3.3% and in Lithuania 2.3%