

- US Q4 GDP +1.9, UK Q4 GDP +0.6
- U.S. President pulls out of TPP
- Brexit needs parliament's approval

1 Key economic indicators

Key Economic indicators of Lithuania								
Variable / Date	2014	2015	2016	2016				2017
				Q1	Q2	Q3	Q4	Q1
Real sector								
Real GDP, yoy, %, sca	3.5	1.8	-	2.5	2.1	1.7	-	-
Nominal GDP per capita, EUR thou., nsa	12500	12900	-	3000	3400	3600	-	-
Industrial production index, yoy, %, ca	0.1	4.5	2.3	5.4	-0.9	2.3	2.4	-
Volume index of construction production, yoy, %, ca	16.9	-3.5	-	-17.4	-14	-11.3	-	-
Retail trade, deflated turnover, yoy, %, ca	5.5	5.5	-	6.6	6.4	6.9	7.8 (Nov)	-
Gross fixed capital formation, yoy, %, sca	3.7	4.7	-	-0.5	0.2	-3.2	-	-
Prices								
GDP deflator, SCA	1.0	0.2	-	-1	0.1	2	-	-
HICP, eop, yoy, %	-0.1	-0.2	2	0.8	0.4	0.6	2	-
PPI, eop, yoy, %	-10.5	-7.9	5.5	-9.9	-6.8	-0.6	5.5	-
House price index, yoy, %, eop	5.3	3.3	-	3.4	3.4	5.3	-	-
Labour market								
Minimum wage, EUR, biannual, eop	290	325	380	350		380		380
Unemployment rate, LFS, %, sa	10.7	9.1	8	8.5	8.2	7.6	7.9	-
Real labour productivity per hour worked, yoy, %, nsa	1.9	-0.9	-	-2.2	-0.5	-2.4	-	-
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	101	105	111	105	104	107	111	109 (Jan)
Industrial confidence indicator, SA, eop	-8	-8	1	-10	-13	-6	1	-1 (Jan)
Construction confidence indicator, SA, eop	-12	-26	-21	-26	-29	-27	-21	-25 (Jan)
Retail confidence indicator, SA, eop	2	15	8	14	7	10	8	9 (Jan)
Services Confidence Indicator, SA, eop	-4	6	15	11	10	12	15	12 (Jan)
Consumer confidence indicator, SA, eop	-14	-6	-5	-8	-8	-8	-5	-8 (Jan)

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

2 Economic news of past week

US Q4 GDP +1.9	U.S. economic growth slowed sharply in the fourth quarter as a plunge in shipments of soybeans weighed on exports, but steady consumer spending and rising business investment pointed to sustained strength in domestic demand. Gross domestic product increased at a 1.9% in Q4. While the economy grew at a 3.5% in Q3 .The economy expanded 1.6 percent for all of 2016, the worst performance since 2011, as it struggled with weak oil prices, a strong dollar and efforts by businesses to reduce a large inventory overhang. (reuters.com)
UK Q4 GDP +0.6	The British economy grew by 0.6 percent in the fourth quarter of 2016, more than economists had been expecting. The growth was driven entirely by services, with zero support from construction and production, in a continuation of the recent trend of a lopsided expansion. (bloomberg.com)
U.S. President pulls out of TPP	U.S. President Donald Trump formally withdrew the United States from the Trans-Pacific Partnership trade deal, distancing America from its Asian allies, as China's influence in the region rises. Fulfilling a campaign pledge to end American involvement in the 2015 pact, Trump signed an executive order in the Oval Office pulling the United States out of the 12-nation TPP. Trump, who wants to boost U.S. manufacturing, said he would seek one-on-one trade deals with countries that would allow the United States to quickly terminate them in 30 days "if somebody misbehaves." (reuters.com)
Brexit needs parliament's approval	A British court ruled on Thursday that the government needs parliamentary approval to start the process of leaving the European Union, potentially delaying Prime Minister Theresa May's Brexit plans. (reuters.com)
Household real income and consumption per capita up in the euro area	In the euro area, in real terms, household income per capita increased by 0.2% in the third quarter of 2016, after an increase of also 0.2% in the previous quarter. Household real consumption per capita increased by 0.3% in the third quarter of 2016, after an increase of 0.1% in the second quarter of 2016.(Eurostat)
Number of tourism nights in the EU up in 2016	In 2016, the number of nights spent in tourist accommodation establishments in the European Union (EU) is expected to have reached more than 2.8 billion, up by 2.0% compared with 2015. Since 2009, there has been a steady increase in the number of nights spent in tourist accommodation establishments in the EU, notably driven by the rise in the nights spent by non-residents of the Member State. The number of nights spent by local and foreign tourists in Lithuania in January through October 2016 rose by 7.3% yoy to 7.1 mln. The total number of tourism nights in Estonia increased by 7.7% to 6.2 mln, while Latvia recorded a 7.3% decline to 4.4 mln. (Eurostat, baltic-course.com)
Heating up housing market in Lithuania	The housing market continues to heat up, with a 12.3% increase in transactions from 2015. With low interest rates still prevailing, a large share of flats is being acquired for investment purposes, which raises property prices. The Bank of Lithuania closely monitors the situation and is ready to respond if necessary told the central banks representatives. The housing market does not seem to exhibit obvious signs of speculative activities, except for the increasing share of secondary flats, mainly those for buy-to-let, which, at the end of 2016, accounted for 12.3% of the entire stock of housing, an increase of 0.9% over 2015 and 2016. (baltic-course.com)

3 Economic insights

Transparency International released its yearly Corruption Perceptions Index, which is based on expert opinion and measures the perceived levels of public sector corruption worldwide. It scores countries on the scale from 0 (highly corrupt) to 100 (very clean). The whole report can be downloaded [here](#)

Estonia scored highest with CPI of 70 and ranked 22nd, Lithuania scored 59 points and ranked 38th, while Latvia achieved only 57 points and ranked 44th. Poland reached 62 points and ranked 29th (see table 1)

Table 1: Corruption Perceptions Index 2016

Country	CPI2016	Rank in world (out of 176)	Rank in region (EU-28)
Denmark	90	1	1
Finland	89	3	2
Sweden	88	4	3
Netherlands	83	8	4
Germany	81	10	5
Luxembourg	81	10	6
United Kingdom	81	10	7
Belgium	77	15	8
Austria	75	17	9
Ireland	73	19	10
Estonia	70	22	11
France	69	23	12
Poland	62	29	13
Portugal	62	29	14
Slovenia	61	31	15
Lithuania	59	38	16
Spain	58	41	17
Latvia	57	44	18
Cyprus	55	47	19
Czech Republic	55	47	20
Malta	55	47	21
Slovakia	51	54	22
Croatia	49	55	23
Hungary	48	57	24
Romania	48	57	25
Italy	47	60	26
Greece	44	69	27
Bulgaria	41	75	28

How does corruption influence economic development?

When looking at the data, it appears, that the more developed a country is, the higher it scores in the CPI. To test this hypothesis a simple linear regression model will be estimated.

Data

Gross domestic product based on purchasing-power-parity (PPP) per capita in the year 2016 is taken from the [IMF World Economic Outlook \(WEO\) database](#). The GDP values are the IMF's estimates for 2016. The logged values of GDP per capita are used for the estimation. CPI data is taken from [Transparency International webpage](#). Both datasets are merged, yielding 144 complete elements.

The Model

A simple linear regression model that describes the relationship between the logged GDP per capita in PPP and the CPI scores is estimated.

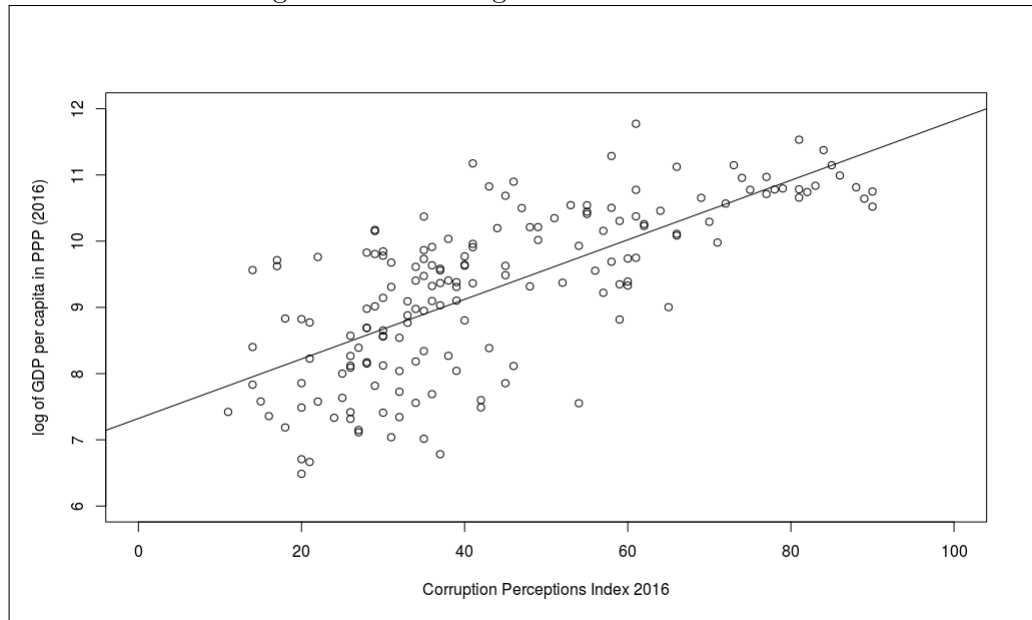
$$\log(GDP) = \beta_0 + \beta_1 CPI + \varepsilon \quad (1)$$

Estimation results are presented in the table 2. Coefficient estimates are all statistically significant at 0.001 level, the adjusted R^2 is 0.50. The variation is somewhat high and the model should be further adjusted in the future evaluations.

Table 2: Estimation results

	β	Std. Error	t	Sig.	F-statistic	df	Sig.	adj. R^2	N
Intercept	7.322537	0.163799	44.70	<0.001	170.8	166	<0.001	0.5042	161
CPI	0.044971	0.003441	13.07	<0.001					

Figure 1: Plot of log GDP in PPP over CPI



The estimated model (see table 2) suggests, that on average an increase of CPI by 1 point, results in GDP per capita in PPP increase of 4.6%. ¹ For example, if Lithuania increased its score to 70, as in Estonia, Lithuanian GDP per capita in PPP would increase by around 64%.

$$\left(\frac{\exp(7.322537+0.044971 \times 70)}{\exp(7.322537+0.044971 \times 59)} - 1 \right) \times 100 = 63.99\% \quad (2)$$

¹ $(\exp^{(0.044971)} - 1) \times 100 = (1.046 - 1) \times 100 = 4.6\%$