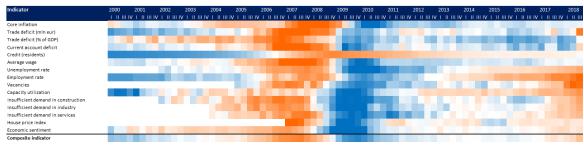
## HEATMAP AND RECOGNITION OF ECONOMIC CYCLES

As the economy has grown at faster pace than previously forecasted in both 2017 and 2018, output gap has increased advising to perform restrictive fiscal policy. To understand the development of the economic cycles that would also help to lead the endorsement procedure of the macroeconomic forecast, the Council has constructed a composite indicator of several variables describing changes in cyclical factors. It is published in the Councils homepage – <a href="http://fiscalcouncil.lv/cycle-heatmap">http://fiscalcouncil.lv/cycle-heatmap</a> and first discussed at the Councils blog – <a href="http://sekretariats.blogspot.com/2018/12/latvijas-ekonomikas-siltuma-karte.html">http://sekretariats.blogspot.com/2018/12/latvijas-ekonomikas-siltuma-karte.html</a>.

The composite indicator is calculated as the average of standardized variables. The methodology and steps of data calculation are presented at homepage, mentioned above. At the same time, this analysis is planned to be expanded further, along with other cyclical indicators, and the current choice of these variables is not necessarily the most representative of the economic cycles. We also welcome MoF to comment on variables they find important to be further included.



Annex 4 Chart 1 Economic heatmap.

From the Heatmap presented above, it is possible to observe the "heating" of the composite index since the beginning of 2017, but especially in 2018Q2 and 2018Q3. Previous signs of overheating were at the end of 2005 and early 2006, that time, as it is well known, it was a period before the global economic and financial crisis.

The heating phase of each cycle is characterized by different indicators, e.g. there was a rapidly rising inflation in 2006, which is currently not observed in Latvia. However, as in 2007, **the labour market has heated**, raising employment and activity level, but at the same time there is increasing number of job vacancies pointing to still high structural unemployment component and decreasing cyclical unemployment component. Also, **capacity utilization in manufacturing industries is historically at its highest level** and insufficient demand is no longer a constraint to business.

Even if the *U-turn* will be observed because of negative effects appearing in 2019 (as lower foreign demand, Brexit, tightening labour market, and reputation risks in banking sector), the economic growth is high leading to evidence of economic upswing. As the Fiscal Discipline Council has repeatedly stressed, in times of economic growth, the government needs to plan the fiscal balance of the budget **with a surplus**.