

From the Editor: In this issue of showCASE, our expert in online inflation measurement discusses the recent hike in inflation levels in Poland and uses this opportunity to expound on the mechanics of CASE's automated CPI measurement tool, the Online CASE CPI.

Inflation on the Rise

By: [Adam Śmietanka](#), CASE Economist

Following an unprecedented and relatively long period of deflation that began at the end of 2014 and ended in late 2016, the Polish consumer price index (CPI) has been steadily increasing. In the years 2017-2018, the CPI remained mostly within the lower part of the National Bank of Poland's inflation target range. This has been undermining critics who warned that high social transfers introduced by the ruling fraction, Law and Justice, along with expansionary policy of the National Bank of Poland would likely pressure consumer prices considerably. Moreover, increased private consumption fuelled by the abovementioned social transfers together with uncommonly low unemployment and low interest rates would further drive the demand for consumer goods and, in turn, raise average consumer prices.

It now seems that those warnings were somewhat justified – in June 2019, the year-on-year CPI broke the barrier of 2.5%, which is the inflation target of the National Bank of Poland. This happened for the first time since 2012, almost 7 years ago. July's official read-out emerges as even more concerning – the CPI stands at 2.9%, a level which surprised market analysts who had anticipated a result similar to the previous month's. Although this is still far from the upper bound of the inflation target range, economic symptoms indicate that the pressure has not been coming from the outside (imported inflation, for example in the form of oil price increases) but is intrinsic to Polish economy. The main causes of increasing price levels might continue into the second part of the year and possibly beyond. Amid these events, the cost of electricity has emerged as an important price-pushing factor. Indeed, the prices of electric power were administratively frozen by government in the last days of 2018, most likely for [political purposes](#), ahead of the election season; still, this [decision may be reverted](#) once the elections business is done and over with. Similarly, some of the [newly proposed taxes](#) were temporarily withheld and their future remains uncertain. Of course, depending on how big of a political issue the inflation will turn out to be once a new parliament has been elected, those propositions might be brought back.

Another factor that might impact the pace of inflation is the state of the Polish labour market. The unemployment has hit its record low since 1990 – in June 2019, it stood at 5.3%, according to Statistics Poland. High demand for workers is likely to increase further due to the last year's decision of the German administration to loosen the regulations pertaining to immigrants from outside the EU. This might encourage some foreigners currently working in Poland, notably Ukrainians, to move westwards in search for better paid jobs. With the increasingly better negotiating position of employees comes higher pressure for wage raises.

Still, the high level of the CPI does not reveal the main drivers of inflation. The usual suspects are car fuels, as they are susceptible to prolonged periods of price increases. This, however, was not the case in the first half of 2019. Although average prices in the *Transport* category of the consumer basket increased since January, the change was not very substantial (according to the CASE data, they went up by about 1%). The year-on-year change appeared negligible, at 0.3% according to [official data](#). The most important contributors to the increase of consumer prices seem to be essential

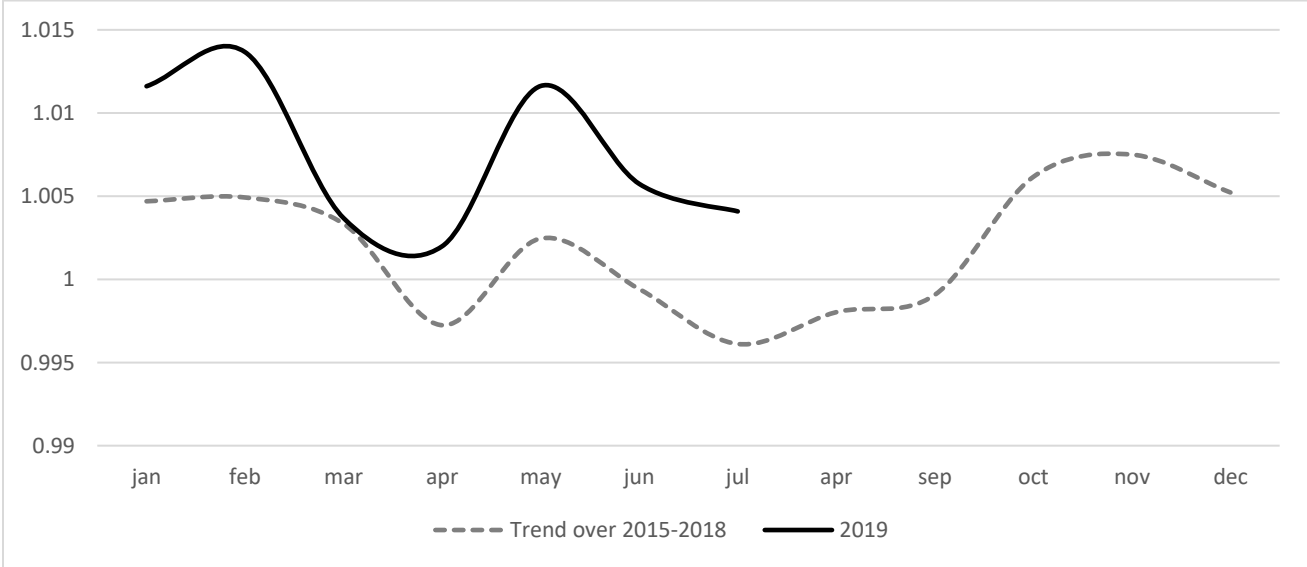
products and services. The latest official read-outs of the CPI prices in the *Food and Beverages* category went up since July of 2018 by 6.8%, followed by *Hotels and Restaurants* with a change of 4.4% and *Health* (medicines and medical services) with an increase of 3.7%. Those findings are confirmed by our own measurement of the consumer price index – Online CASE CPI.

Since autumn 2015, Center for Economic and Social Research has conducted a weekly measurement of prices in the Polish economy, based on data available online. We scan webpages of online retailers and other publicly available resources for current prices of commodities and services to capture paths of prices in close to real time. The unstructured data gathered by the process called ‘web scraping’ are cleaned of anomalies and later organised in a consumer basket that mirrors the structure of Statistics Poland’s [consumer basket](#). Thus, Online CASE CPI is calculated based on weights of each category of goods.

This approach has several advantages over the traditional method of constructing a consumer prices index as used by government institutions: the process is cheap, can be repeated frequently and, as mentioned, there is very little delay between the recording of the price and the publication of the index. It is important, however, to take into account some of the limitations of using unstructured data available online. In particular, not every group of products and goods is well represented online. This is especially true for services which are rarely sold online and therefore currently not well reflected in the CASE Online CPI. Another weakness is a certain lack of control over the sample – we assign equal weights to different products within the same category without controlling for the fact that some of them might be more popular than others (for example luxury products usually represent a smaller share of the market than the bare essentials).

With such a unique dataset, we can investigate the details of price behaviour over the last 4 years and compare it to the current market situation. By way of example let us have a look at a seasonally smoothed trend in the period 2015-2018 of the prices in the *Food*, category which, for the purposes of this exercise, was collated with this year’s price evolution (Figure 1 below). Although the general seasonal trend was more or less maintained this year, there emerges a clear upward shift indicating that prices in that category have increased more than in previous years. Many analysts of the food market point to [poor weather conditions for agriculture](#) (such as last year’s drought), which resulted in a decreased supply of fresh produce and was mirrored later in the processed foodstuffs sector. Some suggest that the shift in dietary habits towards [healthier food](#) might also play a role in rising prices of fresh fruit and vegetables, although this claim is conjectural. Observation of the seasonal trend suggests that another price increase is likely to happen in the fourth quarter of 2019.

Figure 1: Food yearly seasonal trend between 2015 and 2018 compared to 2019 (January to July)



Source: CASE Online CPI

Overall, it seems that the current inflation rate in Poland is a consequence of various factors, both from the demand side (such as high consumer spending fuelled by social transfers) and the supply side (such as a decrease in agricultural production) of the economy, which overlap and will likely continue to influence consumer prices in the coming months. The government and the National Bank of Poland have gambled on a continued good economic environment, but the control over inflationary factors is limited and more effective when applied in advance – it is easier to keep inflation in check rather than fight it when it is already spiralling out of control. However, we argue that some of the important factors remain outside of the government’s control. With a couple of uncertainties on the horizon, such as the [Brexit](#), [trade wars](#) between the United States and China, and a possible crisis in the [Persian Gulf](#), the outside economic conditions that currently work in favour of government might soon join the rest of the unruly flock.

Online CASE CPI is updated weekly on the CASE website’s main page. Moreover, in every issue of showCASE, selected readouts are published on the last page.

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Trade, Innovation, Productivity

Polish economy in Q2 expanded by 4.4% y/y in real terms (4.1% seasonally adjusted), according to the flash estimate by Statistics Poland (GUS). The estimate, if confirmed in the regular release due on August 30, will mark the fourth consecutive quarter of declining growth, down from 5.3% y/y in Q2 2018. While the growth's decomposition will not be known until August 30, we expect consumption, investments and exports to be on the contributory side. Consumption, spurred on by the government's opulent and expanding social transfers, is at the same time an important factor driving the inflation to levels unseen in the past 7 years (see the article in this issue of showCASE). Although declining, Poland's growth readouts remain among the EU's highest, contrasting with the Eurozone's 1.1% and the EU28's 1.3% (seasonally adjusted). Germany's performance, continually weakened by the turbulences in global trade and yet again close to a recession, is especially troublesome for Poland, whose economy is deeply integrated with the Western neighbour's value chains.

Labour Markets and Environment

On July 18, the network of 5 largest domestic development banks from the EU (CDC from France, CDP from Italy, Germany's KfW, BGK from Poland, and Spanish ICO) together with the European Investment Bank launched an initiative aimed at accelerating the transition to a sustainable circular economy. The Joint Initiative on Circular Economy (JICE) has been created to back the EU's push for a more circular economy before discussions of the new multiannual financial perspective are finalised. Under JICE, over the next five years (2019-2023), at least EUR 10 billion will be spent on loans and investment guarantees for projects showcasing the best practices in the promotion of circularity in industry as well as prevention and elimination of waste in general. Additionally, initiatives fostering innovation in specific sectors, such as packaging, will be supported, ultimately leading, as it is hoped, to a change in thinking and greater demand for these types of innovative products, also in countries outside the EU.

Macroeconomics and Public Finance

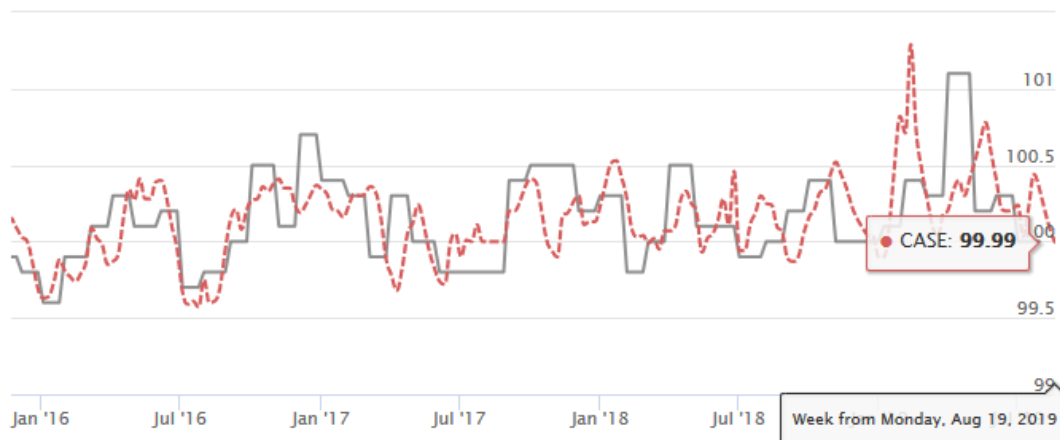
The Polish government may be considering implementation of a balanced budget for 2020, according to today's release by *Rzeczpospolita*. A number of circumstances would make such a project challenging, especially the expected slowdown of the economic growth (to 3.1%, according to CASE experts), the hefty increase in social transfers, and the reduction of the lower PIT rate from 18% to 17%. On the other hand, the government is counting on accelerating inflation and one-time revenues, such as from the transfer fees related to the planned restructuring of the pension system. A deficit-less budget has never been implemented in modern Poland; in 2018, the deficit amounted to PLN 10.4 billion (EUR 2.4), and for 2019, it has been planned at PLN 28.5 billion (EUR 6.6 billion).

The Weekly Online CASE CPI

The online CASE CPI is an innovative measurement of price dynamics in the Polish economy, which is entirely based on online data. The index is constructed by averaging prices of commodities from the last four weeks and comparing them to average prices of the same commodities from four weeks prior. The index is updated weekly. For more information on our weekly online CASE CPI, please visit: <http://case-research.eu/en/online-case-cpi>.

The Online CASE CPI readout based on data collected on August 19 shows that average prices of goods and services in the inflation basket dropped slightly. This is the first result below the level of 100 since January, ending the period of 31 weeks with prices increases in a row. The category that fell the most was *Food and Non-Alcoholic Beverages*, with a 0.5% decrease in average prices. This is consistent with trends observed in the previous years – prices of food tend to drop the most during summer months. This is noticeable especially in the case of fresh produce: fruit prices fell by 2.3%, and vegetables were cheaper by 1%, compared to the previous month.

Our Weekly Online CASE CPI



Online CASE CPI (- - - -) vs GUS CPI (—)

Monthly CASE Forecasts for the Polish Economy

Every month, CASE experts estimate a range of variables for the Polish economy, including future growth, private consumption, investments, industrial production, growth of nominal wages, and the CPI.

CASE economic forecasts for the Polish economy
(average % change on previous calendar year, unless otherwise indicated)

	GDP	Private consumption	Gross fixed investment	Industrial production	Consumer prices	Nominal monthly wages
2019	4.3	4.4	7.2	4.9	2.5	7.5
2020	3.1	3.3	2.5	2.5	3.0	4.0

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