

REPORT ON INFLATION

16 October 2018

Seasonal foods and gasoline prices keep the inflation above the target

- According to the HCSO, the Hungarian inflation was 3.6% YoY in September, up from 3.4% in the previous month. We forecasted 3.5% inflation for September, and the market consensus was the same as our expectation. So, incoming data was slightly higher than our forecast and market consensus, as well. September was the fourth consecutive months when the inflation was higher than the target.
- Underlying indicators:
 1. Filtered inflation (inflation w/o volatile items and all governmental measures) was 2.5% YoY up from 2.4% and was the same to our expectation. Its annualized 3M/3M change (rolling QoQ) was 2.7% and this was the fourth month in a row when it increased.
 2. Trend inflation (goods and marker services w/o one-offs and governmental measures) was 2.5% in September the same than in the previous month and somewhat below our forecast (2.6%). It' rolling 3M/3M growth rate (in September it is the QoQ rate for the 3rd quarter) hit 3.2% up from 2.9% in previous month and 2.7% in Q2.
- The reason for the higher-than-expected inflation was same as the previous months: potato and vegetables prices rose significantly. Taking into account the bad weather conditions during the summer, we think this price level shift may remain long-lasting, until next summer. On the other hand, the much less volatile core unprocessed and core processed foods items' inflation was in line with our expectations. This suggests that the acceleration in seasonal food inflation will not result in general food price shock.
- When we analyse the inflation trends we rather focus on the filtered inflation than the headline, because the volatile items generate high volatility around the trend, as we could have seen in the last months. The filtered inflation went up from 1% in first half of 2016 to 2.9% last third of 2017, and it has been oscillated in the 2.5-2.9% range since then. This suggests the underlying inflation processes are in line with the MNB target, but the current oil and seasonal food price shock pushed the headline above the target. Nevertheless, the evolution of the filtered inflation clearly shows that the business cycle is working and the strong domestic demand has clear effect on the inflation.
- Latter phenomenon becomes more visible if we see the trend inflation. The annualized 3M/3M changes rose from the 1.0%-1.2% range in middle of 2016 to 3.2%. The most labour cost and demand sensitive core service and core durable goods' inflation stood at 4.2% and 1.9% YoY. Latter is the highest figure since January 2010, while the core service inflation was just 2.3% YoY two years before.
- In our medium term forecast we calculated with 70\$/barrel oil prices on the forecast horizon. In this case, our medium term inflation forecast suggests 2.5% and 2.8% CPI for 2018 and 2019. If we calculate with 80\$/barrel oil price our short-term forecast shows 2.9% inflation for 2018, and the inflation may remain above 3% until May 2019 and it can reach it' peak at 3.8-3.9% in October. Nevertheless we should note, our filtered inflation forecast did not change, and the Bloomberg' market consensus suggests the oil prices may return in the 70-75\$ range. If it happens, the negative basis effect in the second half of 2019 can be much higher than our medium-term forecast suggests.
- Currently we see two risks:
 1. The currently high oil prices may have second round effect, which can easily happen in this strong demand environment.
 2. As we wrote in [earlier report](#), we expect shift in the CPI structure. We forecast the trend inflation will accelerate to 4% (currently: 2.6%, annualized QoQ rate: 3.2%) so trend inflation contribution to the total CPI will rise, while other items'

Trading Desks

Dealing code: OTPH

Live quotes at

OTP BLOOMBERG page

This report is available at BLOOMBERG:

OTP/Macroeconomics Research page

Fixed Income Desk

András Sovány

+36 1 288 7561

SoványA@otpbank.hu

Benedek Károly Szűts

+36 1 288 7560

SzutsB@otpbank.hu

FX Desk

András Marton

+36 1 288 7523

MartonA@otpbank.hu

József Horváth

+36 1 288 7514

Horvath.Jozsef@otpbank.hu

Money Market Desk

Gábor Fazekas

+36 1 288 7536

FazekasGa@otpbank.hu

Gábor Heidrich

+36 1 288 7534

HeidrichG@otpbank.hu

Judit Szombath

+36 1 288 7533

SzombathJ@otpbank.hu

FX Option Desk

Gábor Réthy

+36 1 288 7524

RethyG@otpbank.hu

Máté Kelemen

+36 1 288 7525

KelemenMat@otpbank.hu

Analyst

Győző Eppich

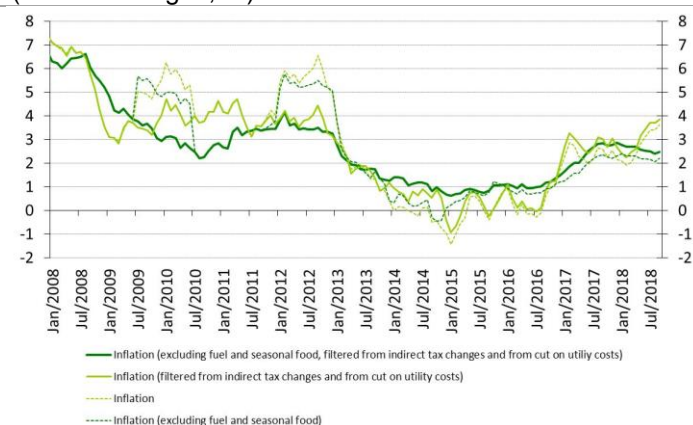
+36 1 374 7274

eppichgyo@otpbank.hu

contribution will decline. If this shift realizes, any (currently unexpected) price shock can push easily the inflation above the target.

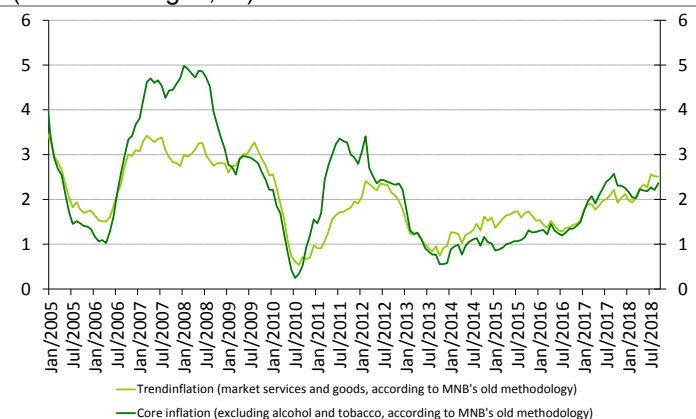
- In our view, in its latest press release the Monetary Council put also the underlying processes into the highlights. It emphasized that temporary effects (oil and seasonal foods' prices, excise duty hike on tobacco) keep the CPI above the target on short-run, but the constant tax core-inflation is remained around 2.5%. We think the incoming data will not change the general assessment of the MC on inflationary processes, so we maintain our view the normalization of the BUBOR rates will not start before second half 2019.

Chart 1: Summary chart of inflationary processes
(annual changes, %)



Sources: KSH, OTP Research

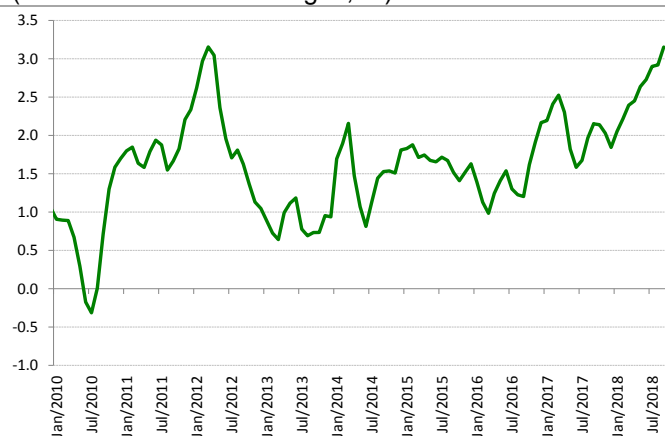
Chart 2: Core* and trend inflation**
(annual changes, %)



Sources: KSH, OTP Research

*: Filtered from indirect tax and visit fee changes, and one-off items
*: w/o second-hand car prices

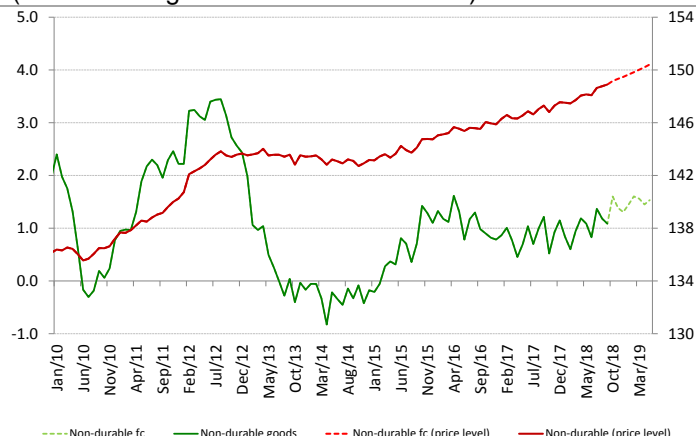
Chart 3: Trend inflation*
(annualized 3M/3M changes, %)



Sources: KSH, OTP Research

*: Filtered from indirect tax and visit fee changes, and one-off items, w/o second-hand car prices

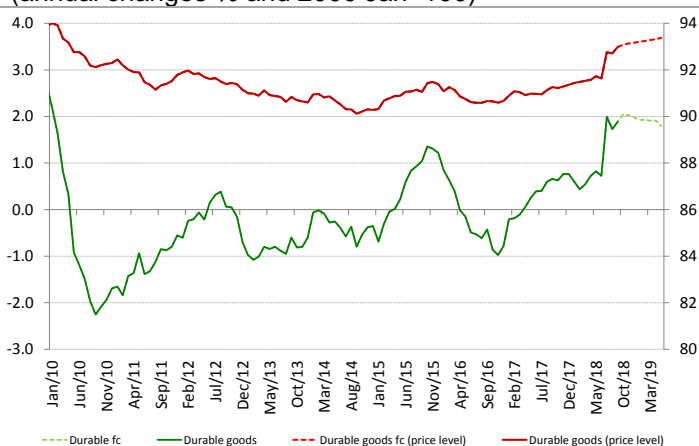
Chart 4: Non-durable goods inflation*
(annual changes % and 2000 Jan=100)



Sources: KSH, OTP Research

*: Filtered from indirect tax changes

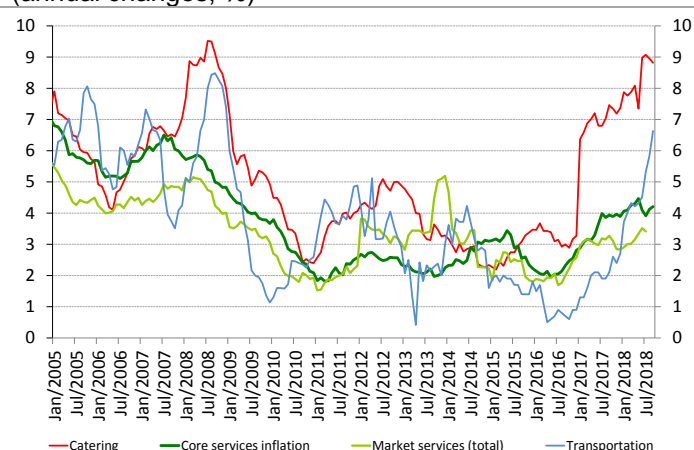
Chart 5: Core-Durable goods inflation*
(annual changes % and 2000 Jan=100)



Sources: KSH, OTP Research

*: Filtered from indirect tax changes and second hand passenger vehicle prices

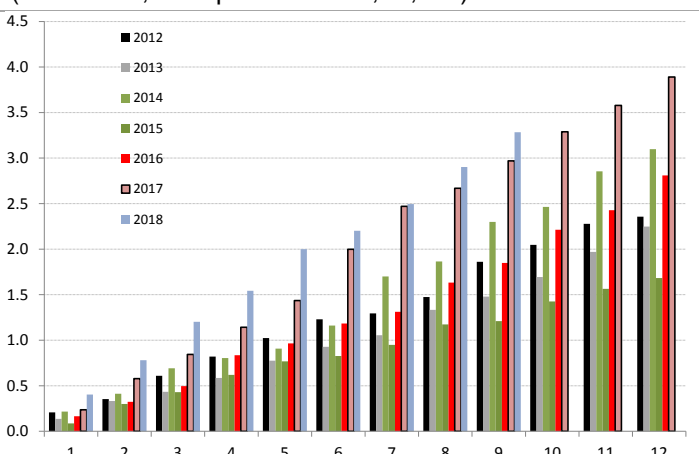
Chart 7: Services inflation*
(annual changes, %)



Sources: KSH, OTP Research

*: Filtered from indirect tax (including the financial transaction tax) and visit fee changes

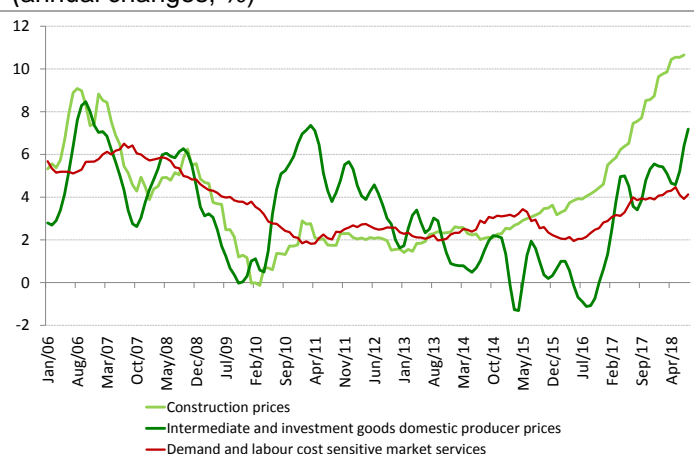
Chart 7: Intra-year price setting in core services*
(cumulated, over previous Dec, %, SA)



Sources: KSH, OTP Research

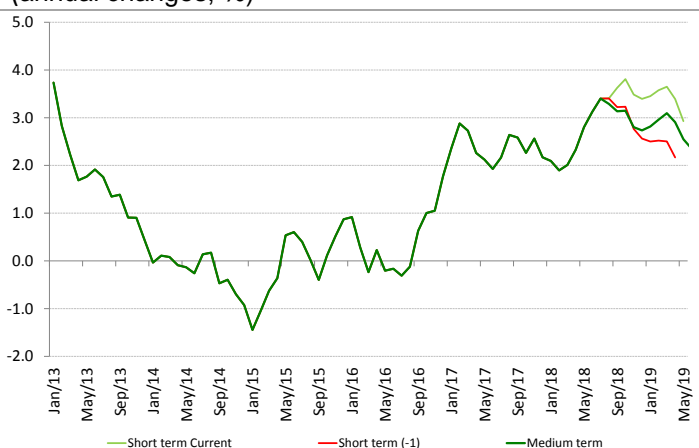
*: Aggregation of the most demand-sensitive and labour-intensive services, filtered from indirect tax and visit fee changes

Chart 8: Price evolution in some non-CPI items
(annual changes, %)



Sources: KSH, OTP Research

Chart 11: Incoming data effect on our CPI forecast
(annual changes, %)



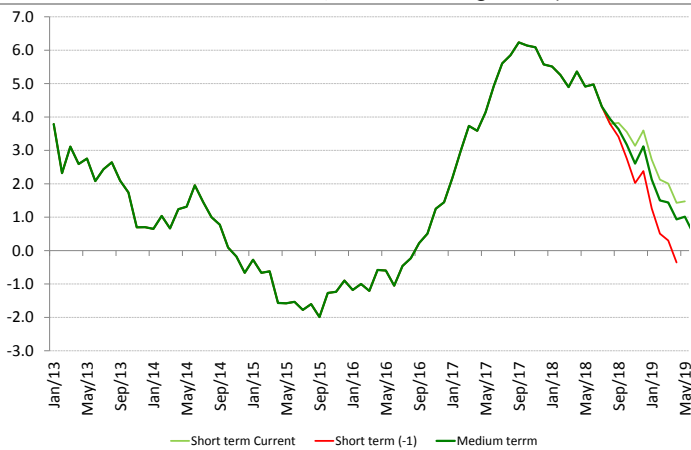
Sources: KSH, OTP Research

Chart 12: Incoming data effect on core unprocessed foods' inflation forecast
(annual changes, %)



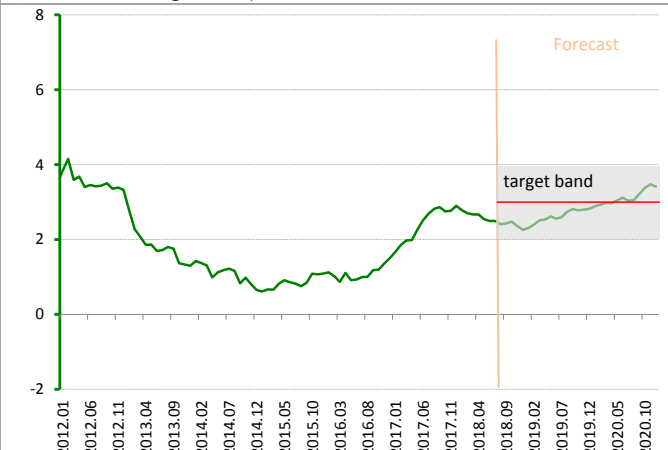
Sources: KSH, OTP Research

Chart 13: Incoming data effect on core processed foods' inflation forecast (annual changes, %)



Sources: KSH, OTP Research

Chart 12: Our medium-term forecast for filtered CPI (annual changes, %)



Sources: KSH, OTP Research

Disclaimer

1. **The statements in this document shall not be considered as an objective or independent explanation of the matters. Please note that this document (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research, and (b) is not subject to any prohibition on dealing ahead of the dissemination or publication of investment research.**
2. This communication does not contain a comprehensive analysis of the described issues. No part, chapter, or the entirety of this information shall be considered as investment recommendation, an offer or solicitation for the purchase or sale of any financial instrument, inducement to invest, financial or investment analysis, investment research or marketing communication, not even if any part of this document contains a description of a certain financial instrument in terms of its possible price or yield development, and the related investment options; the data herein are for informational purposes only. This document shall not be considered as investment recommendation falling under Directive 596/2014/EU of the European Parliament and of the Council. This document does not take into account investors' individual interests, circumstances, or objectives; therefore, in the absence of personal recommendation, it shall not be considered as investment advice. OTP Bank intends to make this document available to its clients or to the public, or to make it accessible to other persons in such a way that allows this document to be disseminated to the public.
3. Information herein reflects the market situation at the time of writing. However, it provides only momentary information and may change as market conditions and circumstances develop. You may request more information from OTP Bank. Although the information in this document has been prepared in good faith from sources that OTP Bank believes to be reliable, we do not represent or warrant its accuracy or completeness. This document was prepared using data, facts and information from the following essential sources: Bloomberg, Reuters, KSH (Hungarian Central Statistical Office), Eurostat, Magyar Nemzeti Bank (Hungary's central bank) ÁKK (Hungary's Government Debt Management Agency), and European Central Bank (ECB). The opinions and estimates in this document are based on the opinion of OTP Research's analyst(s) at the time when the document was prepared, and they may be subject to change at any time in the future without further notice. You may receive different recommendation from the staff of OTP Bank, in particular if you are provided investment advice based on an investment advice agreement.
4. This publication contains generic presentation of information and knowledge, thus it does not take into account the individual clients' unique and special interests, financial condition, or their ability and willingness to take risks. Therefore please contact our staff or contact your banking consultant for advice before you make an investment decision. The assessment and the consideration of the individual circumstances is provided by the suitability and appropriateness tests that assess clients' financial knowledge, experience, risk-taking abilities, as well as the examination of the target market.
5. Before making an informed decision to invest and to use the services, please carefully read through all documents, including the documentation, prospectus, regulations, terms and conditions, announcements and key information documents for that product/service, and carefully consider the subject, the risk, the fees and costs of your investment, the possibility of any loss, and seek information about the tax regulations regarding the product and the investment. The prices of financial instruments and securities are changing, outright sales are realized at then current market prices, which may involve losses. The information and opinions in this document do not substitute or take the place of the issuance documentation for the given financial assets (e.g. prospectus, fund management rules), or their brochures or announcements.
6. You assume total responsibility and risk for any specific decision or investment; OTP Bank shall not be held responsible for the effectiveness of investment decisions or for reaching your purpose, nor for the individual investment decision made based on this document or any part thereof, or for their consequences.
Investments in financial instruments carry a certain degree of risk, which may affect the effectiveness of the investment decision, and investors may not receive the whole amount they expected the investment to yield in their investment targets; they may not preserve even the invested amount, therefore the invested capital might even decrease, be wholly lost, or even lead to additional payment obligation.
7. Trading with leveraged products (such as foreign exchange contracts) or with shares and indices that have underlying products carries a considerable amount of risk, and these products are not suitable for all investors. Trading with leveraged products carries the risk of losing all capital, and it may incur losses that exceed the amount invested.
8. **The figures and information described herein refer to yields or changes in the past. Past performance is not a reliable indicator of future yields, changes, or performance.** The changes on money and capital markets, the fluctuation of prices, the development of investments and their yields are influenced by the combined effect of multiple factors; one important factor of them is the change in investors' expectations. **The development of prices, the future yield of financial assets, indices or indicators, the examination of their changes, trends, and future performance is based on estimations and forecasts, which forecasts do not allow reliable conclusions to be drawn about the future moves of prices, real future yields, changes, or performance.** For each product and service, please assess their tax accounting implications, and other tax consequences, taking into account that they cannot be precisely assessed without knowing the effective tax regulations or the client's individual circumstances; and these legislative provisions as well as the circumstances may change over time.
9. This document shall not be a basis for any further analysis in relation to the financial instruments contained therein. Any reference in this document to the future distribution of a financial instrument shall be construed as indicative, preliminary and informative, and any analysis of such financial instrument is exclusively based on publicly available information listed in the respective prospectus or announcement. The content of this document shall not imply that OTP Bank acts as an agent, a fiduciary, or an advisor to, or on behalf of, any prospective purchaser of the financial instruments discussed herein.
10. For certain persons, access to the products and/or services discussed in this document may not be granted, or it may be limited. The act of preparing this document by OTP Bank, its uploading to the website, its publication may under no circumstances be considered as OTP Bank's intention to make available the product and/or service information in the prospectus to persons whom any country or state prohibits from having or obtaining the given product and/or service, including the promotion and the advertisement thereof.
11. OTP Bank maintains a conflict of interest policy and it keeps such records, and it also has requirements that regulate the transmission of bank secrets and securities secrets, which requirements shall be considered as the effective internal organizational and management solutions as well as information barriers to prevent or manage conflicts of interest.
OTP Bank has developed appropriate internal procedures for (i) the personal transactions and trading of financial analysts and other relevant persons, (ii) the physical separation of the financial analysts involved in the production of investment research and other relevant persons; moreover, information barriers have been implemented, (iii) for accepting and managing incentives and remuneration.
Please be informed that OTP Bank is entitled to deal or trade as market maker, acting in good faith and in accordance with the usual way of market-making, with the financial instruments distributed by the issuer(s) specified in this document, as well as to provide other investment activities or ancillary (investment) services, and/or other financial or ancillary financial services to the issuer and other persons.
12. Previous documents on investing in this asset or product are available on the website of OTP Research: www.otpresearch.com
13. OTP Bank (company registration number: 01-10-041-585; registered seat: Nádor utca 16., Budapest H-1051, Hungary. Supervisory authority: Magyar Nemzeti Bank (National Bank of Hungary – H-1054 Budapest, Szabadság tér 9); financial customer services: H-1013 Budapest, Krisztina krt. 39. PSZÁF licence numbers: III/41.003-22/2002 and E-III/456/2008; further information: <https://www.otpbank.hu/portal/hu/Megtakaritas/Ertekpapir/MIFID>).
All rights reserved. This document is solely owned by OTP Bank. No part of this material can be reproduced, re-used, disseminated, made available, re-published, referenced to, or inserted in other websites or services without the prior written consent of OTP Bank.
14. If you received this document from OTP Bank Plc, then it was sent to you with your previous consent. You may withdraw this permission by sending an e-mail to research@otpbank.hu or by writing a letter to 'Research Center', Hungary H-1051, Budapest, Nádor utca 21. Please refer to your name and e-mail address in both cases.
Data management registration number: NAIH-89457/2015
15. The personal data in this investment research are processed by OTP Bank. The legal basis for processing the data is the legitimate interest of OTP Bank. The detailed information about the processing of personal data and the related rights of data subjects is available [here](#).

This document was prepared on 16 October 2018.