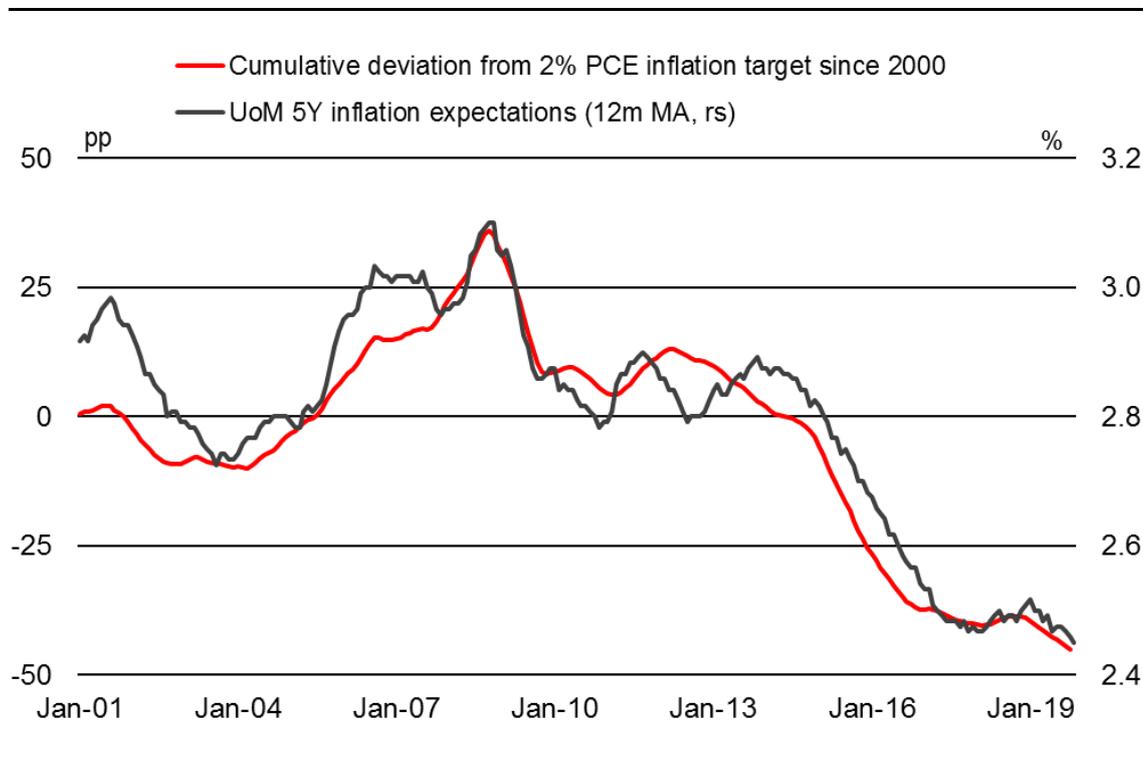


## Past inflation misses are not “bygones” to US households



Source: BEA, University of Michigan, UniCredit Research

- Our *Chart of the Week* shows that, in the US, the trend decline in household long-term inflation expectations has been closely associated with cumulative past inflation “misses” of actual PCE inflation relative to the Fed’s 2% target.<sup>1</sup> There is real concern that the current inflation-targeting regime – employed by central banks all over the world – where past inflation misses are treated as “bygones”, has led to a de-anchoring of inflation expectations at a permanently lower level. It’s important because household inflation expectations are widely seen as playing a key role in determining future actual inflation, through wage and price setting. Low expected inflation also reduces the Fed’s policy space to cut the short-term nominal interest rate sufficiently to support the economy, particularly when the equilibrium real rate (or “r-star”) is already historically low.
- The Fed is currently in the middle of a review of its monetary-policy framework and tools, known as Fed Listens, which is expected to run until the middle of next year. Many past and current FOMC participants have supported the need to achieve average inflation outcomes of two percent over time in order to re-anchor inflation expectations – so-called “make-up” strategies, to compensate for past inflation “misses”. Options include average inflation targeting (i.e. meet the inflation target over some specified period of time or over the business cycle) and price-level targeting (i.e. stabilize the price level around a constant growth path). There is – rightly – concern that a rigid “make-up” strategy would lead to time-inconsistency problems, e.g. following a prolonged period of below-target inflation, potentially caused by interest rates constrained by the lower bound, it would require the Fed to adopt accommodative policy to generate an equally prolonged period of above-target inflation, even if the economy were running “hot” and would not warrant it. Therefore, a more flexible “make-up” strategy seems likely. Fed Governor Lael Brainard suggested last week that, for example, following five years of inflation of 1.5-2%, the Fed could target inflation outcomes of, say, 2-2.5% for the subsequent five years.

<sup>1</sup> The chart plots a closely-watched measure of US household long-term inflation expectations, produced by the University of Michigan, which we have smoothed using a 12-month moving average. In the three months to October 2019 it averaged 2.4% – the lowest rate recorded since the series began in 1978. To be sure, the level is not particularly informative per se – average responses for inflation perceptions tend to be somewhat higher than published inflation data – but the level relative to the long-run average is and, at 2.4%, the level is now well below the 2001-2007 average of 2.9%.

- Given that PCE inflation, currently at 1.3% yoy, has been persistently below the Fed's 2% target, if the Fed were to adopt a (flexible) average inflation-targeting regime, it would imply that rates would stay "lower for longer" than they otherwise would.
- Like the Fed (and the Bank of Canada), the ECB will likely carry out a broad review of its monetary-policy strategy. The central bank's definition of price stability (currently "below, but close to, 2%") will almost certainly be one of the main topics of discussion. With the Fed's policy review likely to strengthen its commitment to achieving 2% inflation, the ECB cannot afford to move in the opposite direction.

**Daniel Vernazza, PhD**, Chief International Economist (UniCredit Bank, London)  
+44 207 826-7805  
[daniel.vernazza@unicredit.eu](mailto:daniel.vernazza@unicredit.eu)

## Legal Notices

### Glossary

A comprehensive glossary for many of the terms used in the report is available on our website: [link](#)

### Disclaimer

Our recommendations are based on information obtained from or are based upon public information sources that we consider to be reliable, but for the completeness and accuracy of which we assume no liability. All information, estimates, opinions, projections and forecasts included in this report represent the independent judgment of the analysts as of the date of the issue unless stated otherwise. We reserve the right to modify the views expressed herein at any time without notice. Moreover, we reserve the right not to update this information or to discontinue it altogether without notice. This report may contain links to websites of third parties, the content of which is not controlled by UniCredit Bank. No liability is assumed for the content of these third-party websites.

This report is for information purposes only and (i) does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for any financial, money market or investment instrument or any security, (ii) is neither intended as such an offer for sale or subscription of or solicitation of an offer to buy or subscribe for any financial, money market or investment instrument or any security nor (iii) as marketing material within the meaning of applicable prospectus law. The investment possibilities discussed in this report may not be suitable for certain investors depending on their specific investment objectives and time horizon or in the context of their overall financial situation. The investments discussed may fluctuate in price or value. Investors may get back less than they invested. Fluctuations in exchange rates may have an adverse effect on the value of investments. Furthermore, past performance is not necessarily indicative of future results. In particular, the risks associated with an investment in the financial, money market or investment instrument or security under discussion are not explained in their entirety.

This information is given without any warranty on an "as is" basis and should not be regarded as a substitute for obtaining individual advice. Investors must make their own determination of the appropriateness of an investment in any instruments referred to herein based on the merits and risks involved, their own investment strategy and their legal, fiscal and financial position. As this document does not qualify as an investment recommendation or as a direct investment recommendation, neither this document nor any part of it shall form the basis of, or be relied on in connection with or act as an inducement to enter into, any contract or commitment whatsoever. Investors are urged to contact their bank's investment advisor for individual explanations and advice.

Neither UniCredit Bank AG, UniCredit Bank AG London Branch, UniCredit Bank AG Milan Branch, UniCredit Bank AG Vienna Branch, UniCredit Bank Austria AG, UniCredit Bulbank, Zagrebačka banka d.d., UniCredit Bank Czech Republic and Slovakia, ZAO UniCredit Bank Russia, UniCredit Bank Czech Republic and Slovakia Slovakia Branch, UniCredit Bank Romania, UniCredit Bank AG New York Branch nor any of their respective directors, officers or employees nor any other person accepts any liability whatsoever (in negligence or otherwise) for any loss howsoever arising from any use of this document or its contents or otherwise arising in connection therewith.

This report is being distributed by electronic and ordinary mail to professional investors, who are expected to make their own investment decisions without undue reliance on this publication, and may not be redistributed, reproduced or published in whole or in part for any purpose.

This report was completed and first published on 4 December 2019 at 15:25.

#### Responsibility for the content of this publication lies with:

##### UniCredit Group and its subsidiaries are subject to regulation by the European Central Bank

- a) UniCredit Bank AG (UniCredit Bank, Munich or Frankfurt), Arabellastraße 12, 81925 Munich, Germany, (also responsible for the distribution pursuant to §34b WpHG). Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany.
- b) UniCredit Bank AG London Branch (UniCredit Bank, London), Moor House, 120 London Wall, London EC2Y 5ET, United Kingdom. Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany and subject to limited regulation by the Financial Conduct Authority, 12 Endeavour Square, London E20 1JN, United Kingdom and Prudential Regulation Authority 20 Moorgate, London, EC2R 6DA, United Kingdom. Further details regarding our regulatory status are available on request.
- c) UniCredit Bank AG Milan Branch (UniCredit Bank, Milan), Piazza Gae Aulenti, 4 - Torre C, 20154 Milan, Italy, duly authorized by the Bank of Italy to provide investment services. Regulatory authority: "Bank of Italy", Via Nazionale 91, 00184 Roma, Italy and Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany.
- d) UniCredit Bank AG Vienna Branch (UniCredit Bank, Vienna), Rothschildplatz 1, 1020 Vienna, Austria. Regulatory authority: Finanzmarktaufsichtsbehörde (FMA), Otto-Wagner-Platz 5, 1090 Vienna, Austria and subject to limited regulation by the "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany. Details about the extent of our regulation by the Bundesanstalt für Finanzdienstleistungsaufsicht are available from us on request.
- e) UniCredit Bank Austria AG (Bank Austria), Rothschildplatz 1, 1020 Vienna, Austria. Regulatory authority: Finanzmarktaufsichtsbehörde (FMA), Otto-Wagner-Platz 5, 1090 Vienna, Austria
- f) UniCredit Bulbank, Sveta Nedelya Sq. 7, BG-1000 Sofia, Bulgaria. Regulatory authority: Financial Supervision Commission (FSC), 16 Budapeshta str., 1000 Sofia, Bulgaria
- g) Zagrebačka banka d.d., Trg bana Josipa Jelačića 10, HR-10000 Zagreb, Croatia. Regulatory authority: Croatian Agency for Supervision of Financial Services, Franje Račkoga 6, 10000 Zagreb, Croatia
- h) UniCredit Bank Czech Republic and Slovakia, Želetavská 1525/1, 140 92 Praga 4, Czech Republic. Regulatory authority: CNB Czech National Bank, Na Příkopě 28, 115 03 Praga 1, Czech Republic
- i) ZAO UniCredit Bank Russia (UniCredit Russia), Prechistsenskaya nab. 9, RF-119034 Moscow, Russia. Regulatory authority: Federal Service on Financial Markets, 9 Leninsky prospekt, Moscow 119991, Russia
- j) UniCredit Bank Czech Republic and Slovakia, Slovakia Branch, Šancova 1/A, SK-813 33 Bratislava, Slovakia. Regulatory authority: CNB Czech National Bank, Na Příkopě 28, 115 03 Praga 1, Czech Republic and subject to limited regulation by the National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia. Regulatory authority: National Bank of Slovakia, Imricha Karvaša 1, 813 25 Bratislava, Slovakia
- k) UniCredit Bank Romania, Bucharest 1F Expozitiei Boulevard, 012101 Bucharest 1, Romania. Regulatory authority: National Bank of Romania, 25 Lipsicani Street, 030031, 3rd District, Bucharest, Romania
- l) UniCredit Bank AG New York Branch (UniCredit Bank, New York), 150 East 42nd Street, New York, NY 10017. Regulatory authority: "BaFin" – Bundesanstalt für Finanzdienstleistungsaufsicht, Marie-Curie-Str. 24-28, 60439 Frankfurt, Germany and New York State Department of Financial Services, One State Street, New York, NY 10004-1511 Further details regarding our regulatory status are available on request.

#### ANALYST DECLARATION

The analyst's remuneration has not been, and will not be, geared to the recommendations or views expressed in this report, neither directly nor indirectly. All of the views expressed accurately reflect the analyst's views, which have not been influenced by considerations of UniCredit Bank's business or client relationships.

#### POTENTIAL CONFLICTS OF INTERESTS

You will find a list of keys for company specific regulatory disclosures on our website <https://www.unicreditresearch.eu/index.php?id=disclaimer>.

#### RECOMMENDATIONS, RATINGS AND EVALUATION METHODOLOGY

You will find the history of rating regarding recommendation changes as well as an overview of the breakdown in absolute and relative terms of our investment ratings, and a note on the evaluation basis for interest-bearing securities on our website <https://www.unicreditresearch.eu/index.php?id=disclaimer> and <https://www.unicreditresearch.eu/index.php?id=legalnotices>.

#### ADDITIONAL REQUIRED DISCLOSURES UNDER THE LAWS AND REGULATIONS OF JURISDICTIONS INDICATED

You will find a list of further additional required disclosures under the laws and regulations of the jurisdictions indicated on our website <https://www.unicreditresearch.eu/index.php?id=disclaimer>.

E 19/3

UniCredit Research\*

Macro Research



**Erik F. Nielsen**  
Group Chief Economist  
Global Head of CIB Research  
+44 207 826-1765  
erik.nielsen@unicredit.eu



**Dr. Ingo Heimig**  
Head of Research Operations  
& Regulatory Controls  
+49 89 378-13952  
ingo.heimig@unicredit.de

Head of Macro Research



**Marco Valli**  
Head of Macro Research  
Chief European Economist  
+39 02 8862-0537  
marco.valli@unicredit.eu

European Economics Research



**Dr. Andreas Rees**  
Chief German Economist  
+49 69 2717-2074  
andreas.rees@unicredit.de



**Dr. Loredana Federico**  
Chief Italian Economist  
+39 02 8862-0534  
loredanamaria.federico@unicredit.eu



**Stefan Bruckbauer**  
Chief Austrian Economist  
+43 50505-41951  
stefan.bruckbauer@unicreditgroup.at



**Daniel Vernazza, Ph.D.**  
Chief International Economist  
+44 207 826-7805  
daniel.vernazza@unicredit.eu



**Tullia Bucco**  
Economist  
+39 02 8862-0532  
tullia.bucco@unicredit.eu



**Edoardo Campanella**  
Economist  
+39 02 8862-0522  
edoardo.campanella@unicredit.eu



**Walter Pudschedl**  
Economist  
+43 50505-41957  
walter.pudschedl@unicreditgroup.at



**Chiara Silvestre**  
Economist  
chiara.silvestre@unicredit.eu



**Dr. Thomas Strobel**  
Economist  
+49 89 378-13013  
thomas.strobel@unicredit.de

EEMEA Economics Research



**Dan Bucsa**  
Chief CEE Economist  
+44 207 826-7954  
dan.bucsa@unicredit.eu



**Gökçe Çelik**  
Senior CEE Economist  
+44 207 826-6077  
gokce.celik@unicredit.eu



**Mauro Giorgio Marrano**  
Senior CEE Economist  
+43 50505-82712  
mauro.giorgiomarrano@unicredit.de



**Florin Andrei, Ph.D.**  
Senior Economist, Romania  
+40 21 200-1377  
florin.andrei@unicredit.ro



**Artem Arkhipov**  
Head, Macroeconomic Analysis  
and Research, Russia  
+7 495 258-7258  
artem.arkhipov@unicredit.ru



**Hrvoje Dolenc**  
Chief Economist, Croatia  
+385 1 6006-678  
hrvoje.dolenc@unicreditgroup.zaba.hr



**Dr. Ágnes Halász**  
Chief Economist, Head of Economics and  
Strategic Analysis, Hungary  
+36 1 301-1907  
agnes.halasz@unicreditgroup.hu



**Ľubomír Koršňák**  
Chief Economist, Slovakia  
+421 2 4950 2427  
lubomir.korsnak@unicreditgroup.sk



**Kristofor Pavlov**  
Chief Economist, Bulgaria  
+359 2 923-2192  
kristofor.pavlov@unicreditgroup.bg



**Pavel Sobišek**  
Chief Economist, Czech Republic  
+420 955 960-716  
pavel.sobisek@unicreditgroup.cz

UniCredit Research, Corporate & Investment Banking, UniCredit Bank AG, Am Eibach 4, D-80538 Munich, globalresearch@unicredit.de  
Bloomberg: UCCR, Internet: www.unicreditresearch.eu

MR 19/3

\*UniCredit Research is the joint research department of UniCredit Bank AG (UniCredit Bank, Munich or Frankfurt), UniCredit Bank AG London Branch (UniCredit Bank, London), UniCredit Bank AG Milan Branch (UniCredit Bank, Milan), UniCredit Bank AG Vienna Branch (UniCredit Bank, Vienna), UniCredit Bank Austria AG (Bank Austria), UniCredit Bulbank, Zagrebačka banka d.d., UniCredit Bank Czech Republic and Slovakia, ZAO UniCredit Bank Russia (UniCredit Russia), UniCredit Bank Romania.