

Inflation's next phase

Multi-asset implications

April 2017

IN BRIEF

- The global economy is undergoing broadly synchronized reflation. The U.S. economy is currently in the lower or middle portion of the inflationary spectrum, while inflation is running well below central bank targets outside the U.S.
- How far will reflation go? What does it mean for markets? Our baseline outlook calls for a gradual rise in U.S. inflation in the coming years, influenced by the pull of labor markets and the possibility that a more cloistered U.S. trade policy will push up prices.
- We view the possibility of extreme inflation or deflation as remote and find little reason to worry that a wage-price dynamic will spiral out of control. We anticipate support for the dollar around current levels and do not expect large distortions from oil prices.
- For investors, inflation's recovery implies a supportive environment for risk assets insofar as its initial stages are positive for corporate earnings and creditworthiness. Our outlook also suggests continued upward pressure on the market pricing of inflation.

AUTHORS



Michael Hood
Global Strategist,
Multi-Asset Solutions



Benjamin Mandel
Global Strategist
Multi-Asset Solutions

FORECASTING THE PATH OF GLOBAL REFLATION¹

Around the globe, a synchronized upturn in nominal growth is underway, including an upturn in inflation. Global monetary policy is responding in kind. The Federal Reserve (Fed) is increasingly confident that inflation will hit its target rate and has begun accelerating its cautious rate-tightening cycle; the pendulum is gradually swinging toward tightening at other developed market (DM) central banks.

The investing community's perception of inflation risk has swung during the current expansion from fear of an inflationary surge after the Great Recession to fear of global deflation when oil prices collapsed and, since last year, back to a reflation theme, again accompanied by worries that some economies, particularly the U.S., could overshoot their central banks' targets. By contrast, throughout these periods, inflation itself (at least excluding volatile energy and food prices) has displayed surprising stability.

In this paper, we ask: How far will reflation go in the U.S. and other developed market economies? How can we forecast inflation? We conclude with our forecast and what it means for investors.

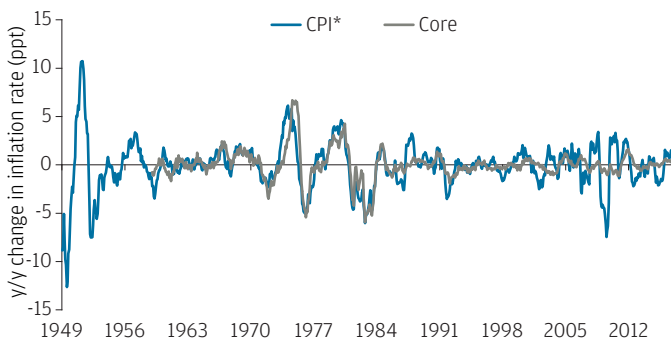
¹ This note is a distillation of the research paper "Inflation's Next Phase" by Michael Hood and Ben Mandel (2017).

WHAT DO WE KNOW ABOUT INFLATION?

- **It is fairly stable and anchored.** While the market’s pricing of inflation has swayed, core inflation itself has been rather stable (excluding energy and food). What underpins that inertia? It is the anchoring of inflation expectations intact since the Fed’s vigilant inflation fighting in the early 1980s and the resulting increase in the credibility of central banks.
- **It is slow moving, and deflation is a rare outcome.** Monetary policy discussions often focus on whether central banks have fallen “behind the curve,” suggesting runaway inflation poses a serious risk. Yet inflation moves slowly (EXHIBIT 1). Shocks one year rarely persist the next year, in either direction. And year-over-year deflation almost never occurs, across countries and history. (The U.S. has never recorded it since beginning the core inflation series in the 1950s.)
- **It is not very cyclical.** Since the 1980s, inflation in the U.S. and other developed economies has not displayed a strong connection to the business cycle and, in particular, has not consistently moved higher as expansions have progressed. Reality thus has run somewhat counter to the typical “mental model” of an overheating economy toward the end of the cycle.

Core inflation generally moves slowly

EXHIBIT 1: U.S. YEAR/YEAR INFLATION ANNUAL ACCELERATION (PPT)



Source: Haver Analytics, J.P. Morgan Asset Management Multi-Asset Solutions; data through December 2016.

*Consumer Price Index

The common thread tying these facts together is inertia, suggesting that tomorrow’s inflation rate will likely be close to today’s—continuing as it has been, grinding gradually higher over time.

HOW CAN WE FORECAST INFLATION? THE PHILLIPS CURVE, OIL PRICES, THE DOLLAR AND TRADE POLICY

Notwithstanding the fact that inertia is a powerful influence, we can add other useful inputs to our inflation forecast to better gauge its subsequent moves—factors such as productivity growth, oil price shocks, changes in currency values and trade policy. Here we explore what these factors tell us about the direction of inflation over the next few years.

The Phillips curve

Like most central banks, the Fed projects inflation using a Phillips curve framework. The Phillips curve (named for economist A.W. Phillips) rose to prominence in the 1950s and ’60s as a description of how tightness in the labor market is transmitted to higher wages and consumer prices. A Phillips curve forecast calls for inflation to gradually grind higher over the next two years as labor market tightness continues to apply upward pressure. Services prices and wages are expected to accelerate even more rapidly, breaking out above their post-crisis ranges.

Oil prices and the dollar

It is generally difficult to say what volatility lies in wait for commodity prices, but at the moment we are not seeing the types of large distortions that would significantly skew our two-year inflation outlook. We also anticipate that the dollar will be supported near current levels by solid economic performance, rising U.S. interest rates and international spillovers from U.S. fiscal policy. We do not see the ingredients appearing for an additional surge in dollar strength, given the relative pickup in the growth of economies outside the U.S. and that foreign central banks are slowing their monetary easing programs.

International trade policy

We do, however, see scope for a potential inflationary impulse in the near to medium term if the new U.S. administration enacts a more cloistered trade stance—whether by targeting offshoring firms, implementing border taxes or not participating in new free-trade agreements. Taxes or tariffs would put upward pressure on domestic firms’ prices because less competitive pressure from imports would show up in inflation in relatively short order. Economic theory also suggests that when large economies implement tariffs, they depress prices elsewhere; in this case, tariffs would boost inflation in the U.S. relative to other economies.

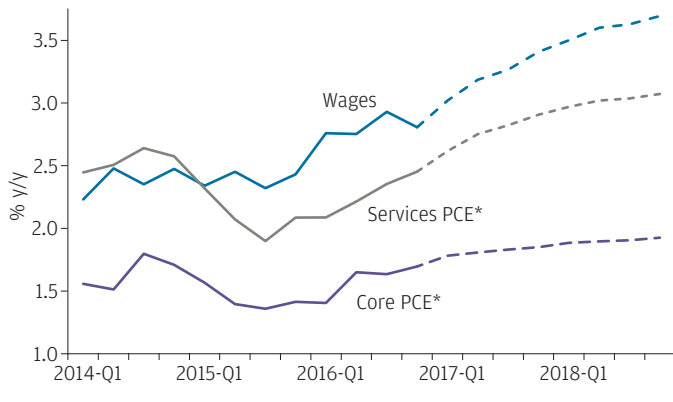
INFLATION'S NEXT PHASE: THE DM OUTLOOK

U.S. inflation forecast

The U.S. is still somewhere in the lower or middle portion of the inflationary spectrum (EXHIBIT 2). Phillips curve estimates through 2018, implied by an unemployment rate of 4.5% over the period, show core inflation ending 2018 at 2%, though it may be slowed by the inflationary inertia suppressing prices outside the U.S. Inflation is closing in on the Federal Reserve's 2% goal, thanks in large part to ongoing acceleration in services prices.

Our forecast: Inflation continues to rise, led by wages and services

EXHIBIT 2: PHILLIPS CURVE FORECASTS THROUGH 2018



Source: Bureau of Labor Statistics, Congressional Budget Office, J.P. Morgan Asset Management Multi-Asset Solutions; data through December 2016.

*Personal consumption expenditures measures changes in prices of consumer goods and services.

Other developed markets

The global economy is undergoing broadly synchronized reflation, with faster economic activity supporting a recovery in inflation rates. That being said, inflation continues to run below central bank targets outside the U.S. In the euro area and Japan, it is likely to remain well shy of the European Central Bank's and the Bank of Japan's targets. In other words, "lowflation," the term coined by market participants to describe globally depressed inflation rates in 2014-15, appears to be a genuinely persistent phenomenon in those economies, in spite of tightening labor markets.

INVESTMENT IMPLICATIONS

Our expectation of a persistent, upward inflation trajectory implies that many reflation trades will continue to work, for

instance, leaning into risk assets like equities and credit, being underweight duration and overweight TIPS (Treasury Inflation-Protected Securities) relative to nominal Treasuries. Bond investors' barometer on inflation expectations 10 years out—the 10-year breakeven rate—has staged a remarkable recovery since February 2016. Based on history, we expect some further room to run as inflation closes in on, and even exceeds, its long-run rate. Since markets price inflation aggressively, Treasury yields could be prone to overshoot as the economy reflates. This is consistent with our finding that oscillations in the market's pricing of inflation are likely to be wider than those of inflation itself.

How is inflation pricing passed through to equity and credit returns? It is a nuanced phenomenon in which it matters a lot where you are starting. For a broad swath of inflation levels, faster inflation is a positive for company earnings and creditworthiness. As inflation rises from low levels (signaling slimmer chances of a deflationary funk), credit would benefit disproportionately as downside risks to creditworthiness recede without pronounced improvements in upside risk. As inflation rises further, upside risks begin to outweigh the ebbing downside risks to profits, and equities benefit. Of course, when inflation becomes too high, asset valuations erode. Investors may recall 1973-74, when inflation shot up 10 percentage points, plunging the economy into recession, and the S&P 500 fell by almost 50%. In this regard, our analysis suggests that the slow-moving nature of inflation we have documented has its benefits.

A CAVEAT: HOW STRONGLY WILL THE FED REACT?

A strong reaction by monetary policymakers could, in principle, derail the transmission of inflation into asset prices. The main sources of uncertainty are how aggressively the Federal Reserve may tighten policy in response to rising inflation and how smoothly any changes are made.

Our read of the Fed's behavior is that its members have a strong desire to get policy normalization underway and to ward off an overheating economy, but that they seem to feel little urgency at this moment to stymie inflationary pressures. The momentum in core inflation is not dramatic by any means, and the degree of overheating in the labor market is subject to some measurement uncertainty. So while policy normalization will progress, along with reflation, policymakers are unlikely to remove the punch bowl in a hurry.

J.P. MORGAN ASSET MANAGEMENT

Important Disclaimer

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be a recommendation for any specific investment product, strategy, plan feature or other purpose. Any examples used are generic, hypothetical and for illustration purposes only. Prior to making any investment or financial decisions, an investor should seek individualized advice from a personal financial, legal, tax and other professional advisors that take into account all of the particular facts and circumstances of an investor's own situation.

Investing in foreign countries involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies in foreign countries can raise or lower returns. Also, some markets may not be as politically and economically stable. The risks associated with foreign securities may be increased in countries with less developed markets. These countries may have relatively unstable governments and less established market economies than developed countries. These countries may face greater social, economic, regulatory and political uncertainties. These risks make securities from less developed countries more volatile and less liquid than securities in more developed countries.

Equity securities are subject to "stock market risk". The price of equity securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. **Fixed Income/Bonds** are subject to interest rate risks. Bond prices generally fall when interest rates rise.

The views contained herein are not to be taken as an advice or a recommendation to buy or sell any investment in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit, and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yield may not be a reliable guide to future performance.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide. This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other EU jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JF Asset Management Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited, or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd; in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Korea by JPMorgan Asset Management (Korea) Company Limited; in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients' use only by JPMorgan Asset Management (Canada) Inc., and in the United States by JPMorgan Distribution Services Inc. and J.P. Morgan Institutional Investments, Inc., both members of FINRA/SIPC.; and J.P. Morgan Investment Management Inc. In APAC, distribution is for Hong Kong, Taiwan, Japan and Singapore. For all other countries in APAC, to intended recipients only.

Copyright 2017 JPMorgan Chase & Co. All rights reserved.

II-MAS-FA-INFLATION | 0903c02a81d806de