



Business Cycle Update

Will Dwindling Unemployment Finally Spark Inflation?

Some labor market slack still exists, but full employment is approaching and wage growth is likely to pick up.

Dirk Hofschire, CFA | Senior Vice President, Asset Allocation Research

Lisa Emsbo-Mattingly | Director of Asset Allocation Research

Irina Tytell, PhD | Senior Research Analyst, Asset Allocation Research

Ilan Kolet | Research Analyst, Asset Allocation Research

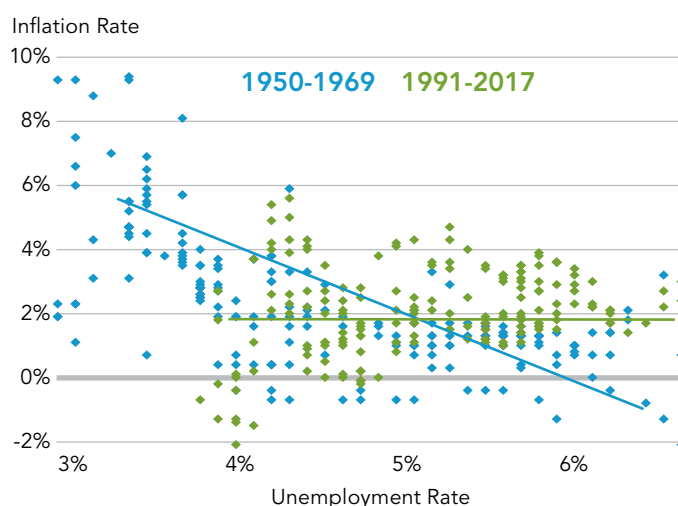
Key Takeaways

- Monetary policymakers typically raise interest rates in response to the threat that rising wages will generate broad inflationary pressures.
- Several secular factors, including globalization and automation, have generally weighed on prices and wages, particularly of manufactured goods and the wages paid to U.S. goods-producing employees.
- Other cyclical factors tied to the 2008 global financial crisis and the deep U.S. recession have depressed aggregate wage growth this cycle.
- With some slack still left in U.S. labor markets and broader inflation indicators muted, we expect the shift toward U.S. monetary policy normalization to remain gradual.
- The global business cycle is peaking and in the midst of a slow transition toward a less accommodative policy stance, so smaller cyclical tilts and thorough portfolio diversification are warranted.

Historically, wage inflation has been a key development in the context of the business cycle, as monetary policymakers typically raise interest rates in response to the threat that rising wages will generate broad inflationary pressures.

EXHIBIT 1: The relationship between inflation and unemployment has become less pronounced in recent decades.

Phillips Curve



Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments, (AART), as of Jun. 30, 2017.

During the 1960s, the Phillips Curve gained renown among economists as a visual representation of the short-term trade-off between tighter labor markets (lower unemployment) and higher inflation. However, the unemployment/inflation relationship has weakened in recent decades. In particular, the current cycle has seen unemployment drop to a relatively low 4.3% rate while inflationary pressures have remained generally muted (Exhibit 1).

Why wage inflation is still so low: secular and cyclical factors

Perhaps the biggest mystery for the current business cycle is why seemingly tighter labor markets have yet to spur a greater rise in employee wages. We posit that the causes represent a variety of factors, some of which are long-term (secular) trends, others that are more cyclical (medium-term):

Secular – disinflation in the production of goods

- During the past three decades, the combination of globalization and automation (due to technological

advances) has generally weighed on prices and wages, particularly of manufactured goods and the wages paid to U.S. goods-producing employees.

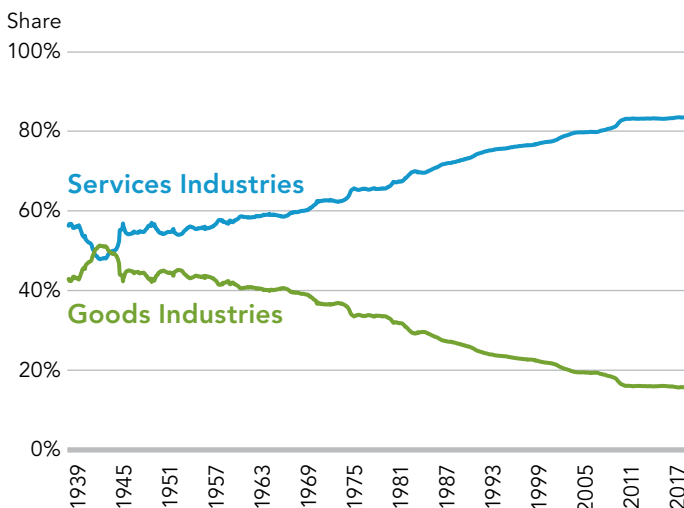
- Technological changes imply fewer workers are needed to expand the production of goods, while competition from lower-wage countries has further limited wage gains for U.S. manufacturing workers.
- Because goods-producing workers on average have a higher level of income than employees in service industries, aggregate wage growth in the U.S. has been further depressed as the share of goods producers has dwindled in the overall labor market (Exhibit 2, left).

Cyclical – digging out of an extreme hole

- The 2008 global financial crisis and deep U.S. recession wrought particularly extreme devastation on labor markets generally and goods-producing sectors in particular.
- The U.S. economy shed nearly nine million jobs and the unemployment rate rose to above 10%,

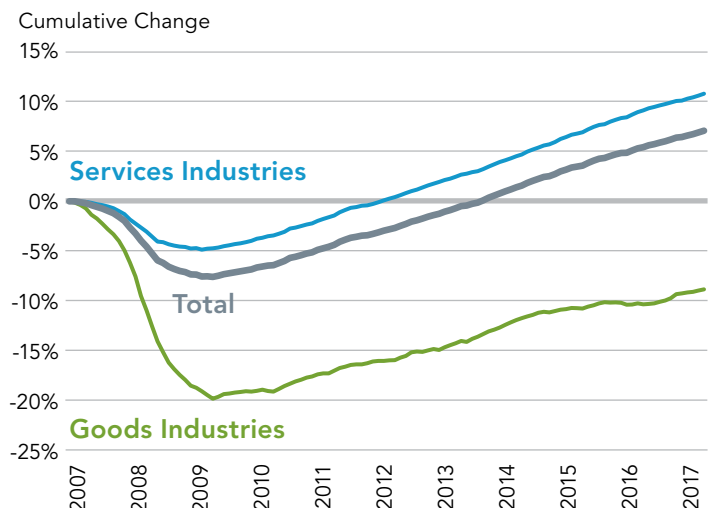
EXHIBIT 2: Employment in goods-producing sectors has lost share for decades (left)...and been particularly slow to recover during this cycle (right).

Goods and Services Share of U.S. Private Employment



Source: Bureau of Labor Statistics, Bloomberg Finance L.P., Fidelity Investments (AART), as of Jul. 31, 2017.

Change in U.S. Employment, 2007–2017



Source: Bureau of Labor Statistics, Bloomberg Finance L.P., Fidelity Investments (AART), as of Jul. 31, 2017.

with goods-producing sectors (manufacturing, construction, mining) dropping 20% of their workers.

- While service-sector employment recovered to pre-recession levels by 2012, the number of jobs in goods-producing sectors is still 10% lower than it was in December 2007. This has further accelerated the long-term mix shift of lower-paid service jobs accounting for a larger share of the overall job market, depressing aggregate wage growth (Exhibit 2, right).
- Moreover, the extreme slack in the labor markets caused by the recession has been even higher than the typical unemployment rate number would suggest. For example, falling participation rates in part represent working-age people who are under-employed or have dropped out of the labor market for other reasons.

Our view: Despite headwinds, full employment is close and wages should rise

No matter the causes of weak wage growth, the question remains whether U.S. labor markets are tightening enough that we should expect wage growth to continue to tick upward. Our view is that some labor-market slack does still exist, but we are approaching full employment levels and wages should rise.

There are different ways to estimate labor-market slack. While the 4.3% unemployment rate is lower than pre-recession levels, the employment-to-population ratio remains well below. This implies that the labor-force participation rate—how many working-age people are actively engaged in the labor force—has dropped from about 66% in 2007 to about 63% today. We estimate that the bulk of the decline in the participation rate in recent years is part of a secular trend, reflecting aging demographics. Participation rates for adults nearing and in retirement age brackets are lower than for younger

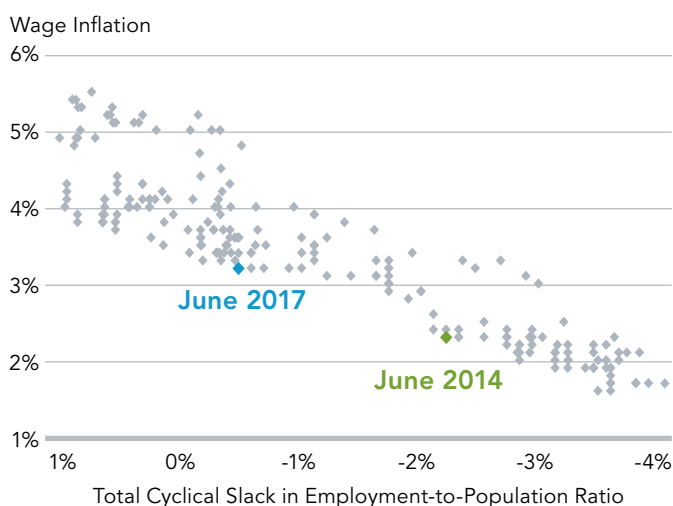
workers, so as the labor force ages, participation rates naturally decline as a result.

If we separate out the secular trend and focus only on the impact of the current cycle, the cyclical slack left in the labor market is due almost entirely to below-trend participation. However, our estimate of cyclical slack is only about one-half of one percent, implying we are nearing full employment. Moreover, if we plot the cyclical slack relative to wage growth, we can see that during the past several years the reduction in cyclical slack has resulted in higher wage growth, even if the growth rate remains subdued relative to the prior cycle (Exhibit 3).

Another way to think about extra slack in the labor markets is to use the U6 measure of unemployment that captures both discouraged workers who have dropped out of the labor force as well as part-time workers who would rather have full-time jobs. The U6 unemployment measure

EXHIBIT 3: Wage growth has risen as labor slack has declined, but less than during prior cycles.

Wage Inflation Phillips Curve (January 2000 – June 2017)



Wage inflation: Atlanta Fed wage tracker. Source: Bureau of Labor Statistics, Atlanta Fed, Haver Analytics, Fidelity Investments (AART), as of Jun. 30, 2017.

has also dropped dramatically during the past several years, and if we subtract out the explicit (U3) unemployment rate, the extra slack represented by this number is now not far above prior cycles, also implying that some slack remains but we are nearing full employment.

Outlook for wage growth:

- The secular trend of rising globalization is ebbing, but technological gains and other curbs on secular inflation are unlikely to disappear overnight, so a huge burst of wage inflation is not expected.
- However, on a cyclical basis, wages have slowly risen as slack has dissipated, and full employment is approaching.

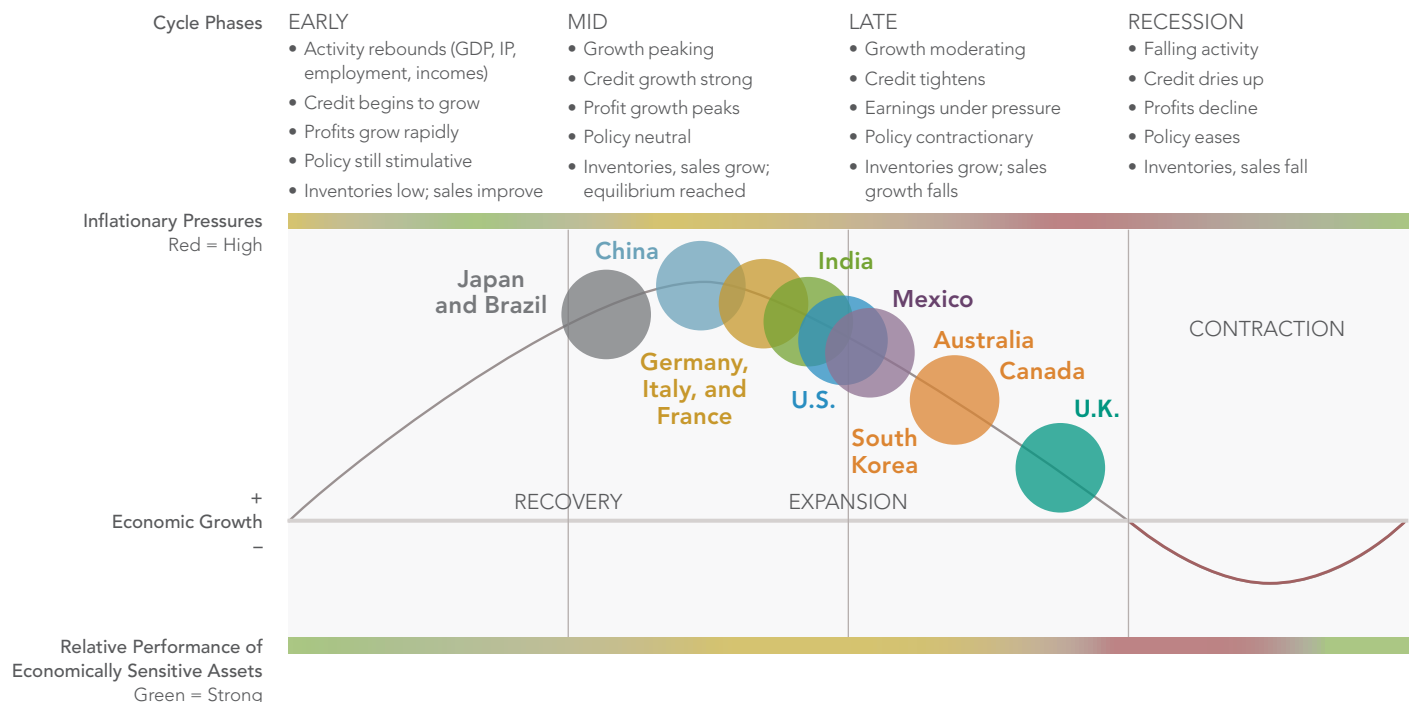
- We expect wage growth to pick up, although the peak rates for this cycle are likely to be low relative to history.

Business cycle: U.S. cycle maturing as global expansion continues

United States: The tightening U.S. labor market and gradually rising wages are signs of U.S. business-cycle maturity. As is typical several years into an expansion, higher wages have begun to erode corporate profit margins and spur the Federal Reserve to tighten monetary policy. The trends for profits and credit have yet to show signs of significant deterioration that typically occur during the late-cycle phase, in part because wage and broader inflation pressures have

EXHIBIT 4: The world's largest economies are in expansion, though at various phases of the business cycle.

Business Cycle Framework



Note: The diagram above is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. Source: Fidelity Investments (AART), as of Aug 15, 2017.

been relatively muted thus far. The U.S. thus features a mix of mid- and late-cycle dynamics, and the solid global backdrop implies that the full transition to the late-cycle phase continues to be prolonged (Exhibit 4).

Global: The global expansion remains relatively steady and synchronized across major economies. Broadly speaking, most developed economies are in more mature (mid-to-late) phases of the business cycle. The eurozone is not as far along as the U.S. in the cycle, and it continues to benefit from improving sentiment and credit conditions. China's activity has rebounded to multiyear highs, but policy tightening and slowing momentum in industrial activity and housing suggest most of the upside has already occurred. Overall, the global expansion is on firm ground, but peak growth rates have probably already been reached.

Big question: Is excess supply generating disinflation?

Even if wages tick up, it remains uncertain to what degree it will translate into broader-based inflation. Massive global stimulus unleashed in recent years—from China's credit boom to extraordinarily easy monetary policies by developed countries—may have enabled producers to continue to produce at very low profit margins. Low rates encourage or allow misallocations of capital toward low productivity activity, and the overall effect has generated more supply than demand and resulted in excess capacity that has further truncated inflationary pressures (see 2016 *Leadership Series* article, "Potential Pitfalls of Negative Policy Rates").

Asset allocation outlook

The global financial markets have remained in a sweet spot amid steady growth, low inflation, and heavily accommodative monetary policies. The global recovery over the past 18 months has boosted trade and

multinational profits, but the absence of a significant acceleration in inflationary pressures has mitigated any impetus for monetary policymakers to shift aggressively away from their extraordinarily easy policies. The Federal Reserve—the major central bank furthest along a tightening path—is perhaps more focused on wage inflation than any other factor. With some slack still left in U.S. labor markets and broader inflation indicators muted, we expect the shift toward U.S. policy normalization will remain a gradual one.

From an asset allocation standpoint, we believe the world is in the midst of a slow transition toward a less accommodative monetary policy stance. In addition, global activity is likely peaking, the U.S. business cycle continues to mature, asset valuations are generally elevated, and geopolitical risks are rising. Smaller cyclical tilts are therefore warranted, in addition to thorough portfolio diversification that includes international equities and inflation-resistant assets.

Authors

Dirk Hofschire, CFA | Senior Vice President, Asset Allocation Research

Lisa Emsbo-Mattingly | Director of Asset Allocation Research

Irina Tytell, PhD | Senior Research Analyst, Asset Allocation Research

Ilan Kolet | Research Analyst, Asset Allocation Research

The Asset Allocation Research Team (AART) conducts economic, fundamental, and quantitative research to develop asset allocation recommendations for Fidelity's portfolio managers and investment teams. AART is responsible for analyzing and synthesizing investment perspectives across Fidelity's asset management unit to generate insights on macroeconomic and financial market trends and their implications for asset allocation.

Asset Allocation Research Team (AART) Research Analyst Josh Wilde, CFA; Research Analyst Jordan Alexiev, CFA; and Analyst Cait Dourney also contributed to this article. Fidelity Thought Leadership Vice President Kevin Lavelle provided editorial direction.



Unless otherwise disclosed to you, any investment or management recommendation in this document is not meant to be impartial investment advice or advice in a fiduciary capacity, is intended to be educational and is not tailored to the investment needs of any specific individual. Fidelity and its representatives have a financial interest in any investment alternatives or transactions described in this document. Fidelity receives compensation from Fidelity funds and products, certain third-party funds and products, and certain investment services. The compensation that is received, either directly or indirectly, by Fidelity may vary based on such funds, products, and services, which can create a conflict of interest for Fidelity and its representatives. Fiduciaries are solely responsible for exercising independent judgment in evaluating any transaction(s) and are assumed to be capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies.

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities. Views expressed are as of the date indicated, based on the information available at that time, and may change based on market or other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information.

Investment decisions should be based on an individual's own goals, time horizon, and tolerance for risk. Nothing in this content should be considered to be legal or tax advice, and you are encouraged to consult your own lawyer, accountant, or other advisor before making any financial decision.

Fixed-income securities carry inflation, credit, and default risks for both issuers and counterparties.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall, and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments. Additionally, bonds and short-term investments entail greater inflation risk—or the risk that the return of an investment will not keep up with increases in the prices of goods and services—than stocks. Increases in real interest rates can cause the price of inflation-protected debt securities to decrease.

Stock markets, especially non-U.S. markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks, all of which are magnified in emerging markets.

Investing involves risk, including risk of loss.

Past performance is no guarantee of future results.

Diversification and asset allocation do not ensure a profit or guarantee against loss.

All indices are unmanaged. You cannot invest directly in an index.

Increases in real interest rates can cause the price of inflation-protected debt securities to decrease.

The Business Cycle Framework depicts the general pattern of economic cycles throughout history, though each cycle is different; specific commentary on the current stage is provided in the main body of the text. In general, the typical business cycle demonstrates the following:

During the typical early-cycle phase, the economy bottoms out and picks up steam until it exits recession then begins the recovery as activity accelerates. Inflationary pressures are typically low, monetary policy is accommodative, and the yield curve is steep. Economically sensitive asset classes such as stocks tend to experience their best performance of the cycle. • During the typical mid-cycle phase, the economy exits recovery and enters into expansion, characterized by broader and more self-sustaining economic momentum but a more moderate pace of growth. Inflationary pressures typically begin to rise, monetary policy becomes tighter, and the yield curve experiences some flattening. Economically sensitive asset classes tend to continue benefiting from a growing economy, but their relative advantage narrows. • During the typical late-cycle phase, the economic expansion matures, inflationary pressures continue to rise, and the yield curve may eventually become flat or inverted. Eventually, the economy contracts and enters recession, with monetary policy shifting from tightening to easing. Less economically sensitive asset categories tend to hold up better, particularly right before and upon entering recession.

Third-party marks are the property of their respective owners; all other marks are the property of FMR LLC.

If receiving this piece through your relationship with Fidelity Institutional Asset Management® (FIAM), this publication may be provided by Fidelity Investments Institutional Services Company, Inc., Fidelity Institutional Asset Management Trust Company, or FIAM LLC, depending on your relationship.

If receiving this piece through your relationship with Fidelity Personal & Workplace Investing (PWI) or Fidelity Family Office Services (FFOS), this publication is provided through Fidelity Brokerage Services LLC, Member NYSE, SIPC.

If receiving this piece through your relationship with Fidelity Clearing & Custody SolutionsSM or Fidelity Capital Markets, this publication is for institutional investor or investment professional use only. Clearing, custody or other brokerage services are provided through National Financial Services LLC or Fidelity Brokerage Services LLC, Members NYSE, SIPC.

© 2017 FMR LLC. All rights reserved.

812800.1.0