



# Long-Term Inflation Risks May Be on the Rise

Investors expect inflation to remain subdued, but peak globalization and aging demographics are risks to that outlook.

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## Key Takeaways

- U.S. inflation has slowed structurally since the early 1980s, due in part to central-bank policy measures aimed at managing long-term inflation expectations.
- Investors generally expect inflation in the U.S. to remain low, which implies that any increase in the pace of long-term inflation going forward could catch markets off guard.
- Peak globalization and aging demographics—dynamics that may not be widely recognized or understood—could contribute to ending the longstanding disinflationary trend in the U.S.

For more than 35 years, inflation in the U.S. has generally moved lower, falling from around 12% year over year in 1980 to basically zero in 2015.<sup>1</sup> Today, the conventional wisdom suggests that long-term inflation will remain subdued. Although sustained low inflation is a reasonable scenario, the ultimate impact that the shifting macroeconomic and political landscape may have on inflation remains highly uncertain. Therefore, it's important to identify and evaluate the current dynamics that could influence inflation over the long term.

This article will explore key drivers and potential risks to the long-term inflation outlook. To learn more about the asset implications and why inflation warrants prudent risk management by investors, please see the *Leadership Series* article, "Managing Inflation Risk Is Important, Even if Inflation Remains Subdued."

## Monetary policy and inflation

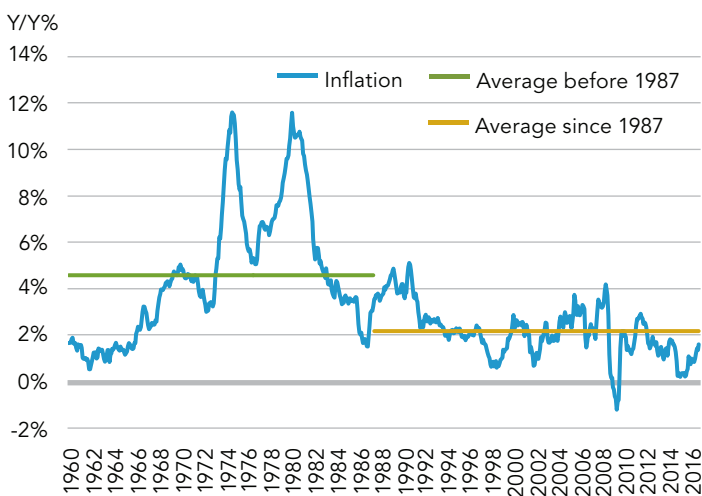
Monetary policy has historically been an essential tool for managing long-term inflation expectations. In recent decades, the credibility of central banks in achieving their

inflation-target mandates has helped long-term inflation expectations remain well-anchored. For the Federal Reserve (Fed), efforts to build this inflation credibility with the public began in earnest following the appointment of Paul Volcker as Chairman in 1979. By the time Alan Greenspan took over in August 1987, headline inflation had plunged from 11% to 3%.<sup>2</sup> Although the Fed’s implicit and explicit inflation target has varied somewhat since 1987, the general goal has been to keep inflation around 2%. Since then, U.S. inflation has averaged 2.2%, versus 4.6% for the 25 years prior to 1987 (Exhibit 1). This suggests that the Fed has been successful in achieving its long-term inflation target. The sustained improvement in the average level of inflation illustrates why monetary policy has been such an essential tool for managing long-term inflation expectations.

The Fed’s success in achieving price stability is a major contributor to investors’ expectations that inflation will

**EXHIBIT 1: On average, inflation in the U.S. has been well-anchored and reliable for almost 30 years.**

Personal consumption expenditure prices



Inflation represented by personal consumption expenditures. Source: Bureau of Economic Analysis, Haver Analytics, Fidelity Investments (AART), as of Dec. 31, 2016.

remain around 2% moving forward—in line with the Fed’s explicit target. Although there is a reasonable chance that inflation will remain low, there are many factors beyond central-bank credibility that can also influence price trends, both higher and lower. Many investors interpret recent trends as deflationary—such as slow economic growth, technological advancements, and elevated private debt levels—which have contributed to their high conviction that inflation will remain low.

**Low inflation may be priced in, but there are risks to that view**

The market’s muted inflation expectations are reflected in the implied five-year forward inflation rate of roughly 2% (what Treasury investors assume long-term inflation will be in five years).<sup>3</sup> Therefore, any shift away from the longstanding disinflationary trend in the U.S. could surprise investors. Two sources that could contribute to that shift may not be widely recognized or understood: peak globalization and aging demographics.

**RISK 1: Peak globalization eliminates a disinflationary force**

The rapid increase in globalization during the past few decades put downward pressure on U.S. prices. Increased trade and commercial integration allowed multinational companies to build global supply chains and access cheaper labor around the world, slowing compensation growth for U.S. workers. The resulting disinflation showed up most demonstrably in the price of goods.

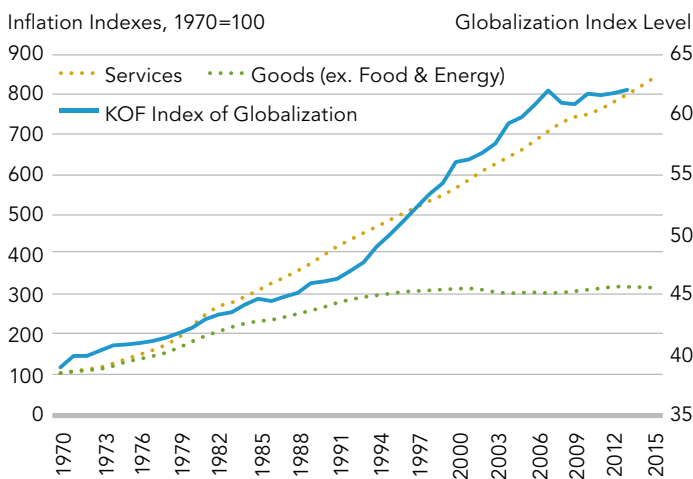
Almost all of the U.S. consumer price inflation over the past 20 years has occurred in services (Exhibit 2), which are less likely to be produced abroad. Therefore, globalization—in addition to automation and increased manufacturing productivity—has been a key driver of the disinflation in the price of goods. Categories of goods—including furniture and apparel—with significant competition from lower-wage countries, such as China, have actually experi-

enced outright price declines over the past two decades. We believe the secular (long-term) increase in globalization has hit a peak, with the Brexit referendum and Trump election as evidence that prospects for greater global integration have come under heavy political pressure. Free trade and immigration have been blamed for stagnant median wages and rising inequality in the U.S. and other advanced economies, making a continued secular increase in global integration an unlikely path forward. In fact, as seen in Exhibit 2, significant measures of economic globalization—such as the KOF Index of Globalization—have already plateaued in recent years.

As rising global integration removed barriers to trade, capital, and labor flows—and thus decreased the cost of doing business—an end to this trend will eliminate a source of disinflation. Any move toward widespread protectionism or outright trade wars would likely put upward pressure on import costs, goods prices, and compensation. Even if de-globalization does not occur, peaking glo-

**EXHIBIT 2: During the past 25 years, goods prices remained flat while globalization surged.**

U.S. consumer goods and services inflation vs. globalization



The KOF Index of Globalization quantifies the economic, social, and political dimensions of globalization. Source: Bureau of Labor Statistics, KOF Swiss Economic Institute, Haver Analytics, Fidelity Investments (AART), as of Oct. 31, 2016.

balization still removes a significant disinflationary trend.

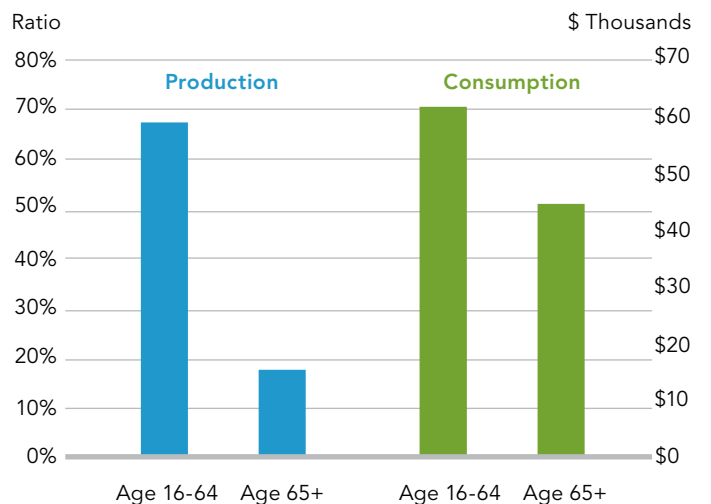
**RISK 2: Aging demographics may not be deflationary**

Japan’s deflationary environment during the past few decades has caused many to believe that aging demographics are always deflationary over the long term. However, Japan is just one example, and other factors—such as globalization—have also likely been at play. It’s difficult to untangle the role each individual factor played in Japan’s experience, and other countries face a different array of circumstances. Therefore, it’s possible that aging demographics may not be inherently deflationary.

Aging populations ultimately have an impact on both an economy’s production (supply) and consumption (demand), and the net effect on inflation depends on which is influenced more. As populations age, consumption is reduced because older people have historically spent less (Exhibit 3). If an economy’s production doesn’t change, reduced demand for goods is generally deflationary.

**EXHIBIT 3: U.S. households age 65 and older work quite a bit less and spend less than younger households.**

U.S. employment-to-population ratio (production) and average household spending (consumption) in 2015



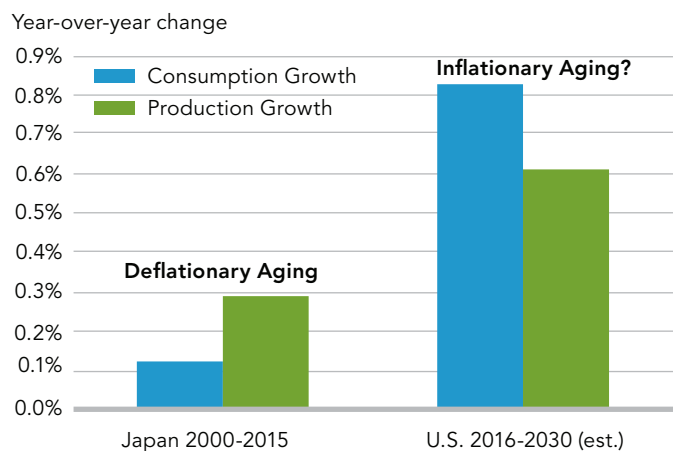
Source: U.S. Census Bureau, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of Dec. 31, 2015.

On the supply side, older workers tend to be slightly less productive and work quite a bit less than younger workers (Exhibit 3). And while the decline in domestic production has historically been partially offset by increasing imports, peaking globalization may limit a country's ability to increase imports moving forward. If consumption does not change, fewer and less-productive workers producing fewer goods would be inflationary. Because aging demographics tend to slow both consumption growth and production growth, whether the net impact is inflationary or disinflationary depends on the relative magnitude of the supply-and-demand effects.

In the case of Japan, its population has aged rapidly during the past 15 years and has declined outright since 2010. During this period, both consumption and production growth have slowed from prior periods, but consumption has been hit harder. Therefore, as production growth outpaced consumption growth, the net impact of aging demographics has been deflationary (Exhibit 4).

**EXHIBIT 4: Although aging demographics have been deflationary in Japan, they may not be in the U.S.**

Growth in consumption and production: Japan vs. U.S.



Source: U.S. Census Bureau, Federal Reserve, Bureau of Labor Statistics, Bureau of Economic Analysis, World Bank, International Monetary Fund, Haver Analytics, Fidelity Investments (AART), as of Dec. 31, 2015.

For the U.S. moving forward, population aging is expected to continue to accelerate, so both consumption growth and production growth are likely to slow. However, in contrast to Japan's experience, we expect U.S. production to be much more sensitive to aging than consumption. This is because, based on history, the participation of workers of retirement age has been lower in the U.S. than in Japan. In addition, Japanese workers of retirement age have tended to slow their consumption by a greater amount than their counterparts in the U.S. Finally, the U.S. may not be able to offset slowing domestic production by increasing imports to the same extent Japan did. Given these dynamics, an aging U.S. population could mean that spending growth will outpace production growth, which would be inflationary. However, if U.S. workers begin to postpone their retirement relative to prior generations (because they haven't saved enough, for example), these inflationary pressures could be offset.

**Conclusion**

It's possible that inflation will remain subdued over the long term, and this outlook appears largely priced into asset markets. However, there are dynamics at play that could contribute to ending the longstanding disinflationary trend in the U.S. To learn more about the impact inflation can have on asset markets and why inflation risk warrants prudent risk management, see our *Leadership Series* article, "Managing Inflation Risk Is Important, Even if Inflation Remains Subdued."

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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.

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## Endnotes

<sup>1</sup> Inflation cited throughout this article is year over year. Source: Bureau of Economic Analysis, Haver Analytics, Fidelity Investments (AART), as of Oct. 31, 2016.

<sup>2</sup> Source: Goodfriend, Marvin (2004). Inflation Targeting in the United States? National Bureau of Economic Research Book Series Studies in Business Cycles: The Inflation-Targeting Debate, 311–352.

<sup>3</sup> Source: Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of Jan. 31, 2017.

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