April 26, 2017

# *Economics Group*

## Interest Rate Weekly


**John E. Silvia, Chief Economist**
john.silvia@wellsfargo.com • (704) 410-3275
**Sarah House, Economist**
sarah.house@wellsfargo.com • (704) 410-3282
**Michael Pugliese, Economic Analyst**
michael.d.pugliese@wellsfargo.com • (704) 410-3156


# Inflation: The Price of Aging

***Persistently low inflation and its causes have been a quandary for both policymakers and financial markets in recent years. Could demographic headwinds from an aging population be the answer?***

### Is Boomer Aging to Blame for Lower Inflation?

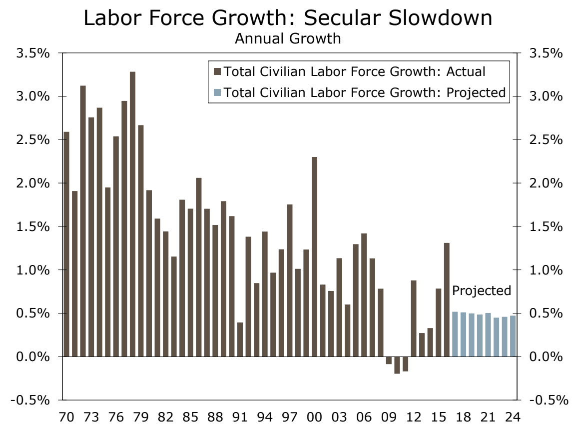
As the links between inflation, the monetary base and economic slack have come under fire in the post-Great Recession era, research has looked to new explanations for the low-inflation environment of recent years. Could demographic headwinds from an aging population be the answer?

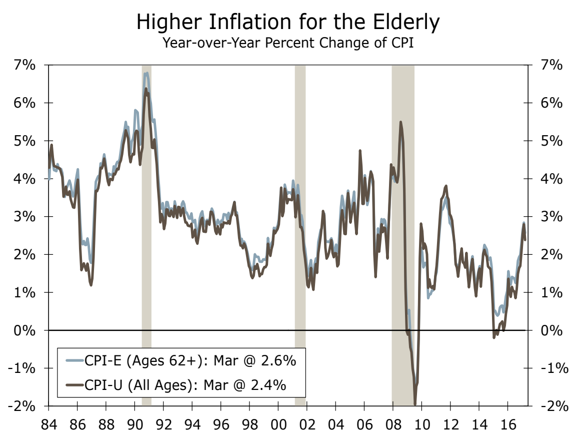
On the one hand, the aging of the population looks set to be disinflationary. To the extent that an older population portends slower growth in the labor force (top chart), and possibly lower productivity, the outlook for the economy's potential growth declines. The worsening prospects for future growth may pull down inflation expectations and curtail business investment, leading to lower realized inflation. Another channel through which the aging of the population may lead to lower inflation is more political. With a greater share of Americans living on fixed incomes, central bankers could face indirect pressure to keep inflation low. At the same time, the transmission of monetary policy and inflation may be weaker as an older population has a higher share of households that are creditors versus debtors and thus less are sensitive to interest rate changes.

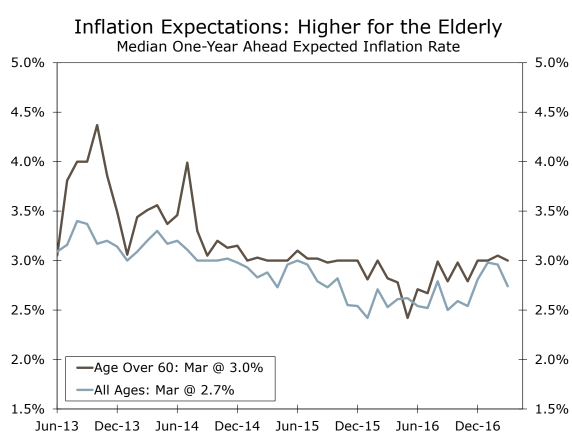
On the other hand, there is reason to believe the aging of the Boomers could lead to higher inflation. Although older households tend to spend less, the draw-down of retirees' savings remains supportive of spending. At the same time, slower growth in the working-age population could lead to tighter labor markets and greater wage pressures. Inflation in the service sector may be especially pronounced given its greater labor intensity and the consumption patterns of the elderly.

While the evidence of the aging population's effect on inflation remains mixed, historical trends suggest Boomers will face relatively higher inflation as they age. The consumer price index on inflation for Americans ages 62 and over shows that inflation for older households has tended to be a bit stronger than the general population (middle chart). The higher rates of inflation reflect more spending on services such as housing and health care, whereas younger households spend more on goods with prices that have benefited from greater technological advancements and globalization.

That said, the inflation rates faced by older households have not varied substantially from the overall population. Over the past 20 years, inflation for older households has averaged only 0.1 percentage point more per year than overall inflation. To be sure, the gap compounds over time, with older households seeing price levels increase about 4 percent more in total over the past two decades. Yet relatively higher inflation looks to be baked into older households' expectations. The New York Fed's Survey of Consumer Expectations shows households over the age of 60 have expected inflation to track about 0.3 percentage points higher than aggregate expectations over the survey's four-year history (bottom chart).




Source: U.S. Department of Labor, Federal Reserve Bank of New York and Wells Fargo Securities

## Wells Fargo U.S. Interest Rate Forecast

| | Actual | | | | Forecast | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2016 | | | | 2017 | | | | 2018 | | | |
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Quarter End Interest Rates | | | | | | | | | | | | |
| Federal Funds Target Rate | 0.50 | 0.50 | 0.50 | 0.75 | 1.00 | 1.25 | 1.50 | 1.50 | 1.50 | 1.75 | 2.00 | 2.25 |
| 3 Month LIBOR | 0.63 | 0.65 | 0.85 | 1.00 | 1.15 | 1.50 | 1.75 | 1.75 | 1.75 | 2.00 | 2.25 | 2.50 |
| Prime Rate | 3.50 | 3.50 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.50 | 4.50 | 4.75 | 5.00 | 5.25 |
| Conventional Mortgage Rate | 3.69 | 3.57 | 3.46 | 4.20 | 4.20 | 4.29 | 4.45 | 4.46 | 4.47 | 4.48 | 4.55 | 4.62 |
| 3 Month Bill | 0.21 | 0.26 | 0.29 | 0.51 | 0.76 | 1.02 | 1.30 | 1.40 | 1.45 | 1.50 | 1.75 | 2.02 |
| 6 Month Bill | 0.39 | 0.36 | 0.45 | 0.62 | 0.91 | 1.19 | 1.45 | 1.56 | 1.60 | 1.66 | 1.92 | 2.18 |
| 1 Year Bill | 0.59 | 0.45 | 0.59 | 0.85 | 1.03 | 1.35 | 1.65 | 1.80 | 1.85 | 1.90 | 2.10 | 2.31 |
| 2 Year Note | 0.73 | 0.58 | 0.77 | 1.20 | 1.27 | 1.75 | 2.05 | 2.15 | 2.20 | 2.26 | 2.41 | 2.56 |
| 5 Year Note | 1.21 | 1.01 | 1.14 | 1.93 | 1.93 | 2.10 | 2.40 | 2.46 | 2.49 | 2.52 | 2.66 | 2.80 |
| 10 Year Note | 1.78 | 1.49 | 1.60 | 2.45 | 2.40 | 2.55 | 2.72 | 2.75 | 2.76 | 2.78 | 2.86 | 2.94 |
| 30 Year Bond | 2.61 | 2.30 | 2.32 | 3.06 | 3.02 | 3.18 | 3.44 | 3.54 | 3.56 | 3.58 | 3.67 | 3.76 |

Forecast as of: April 12, 2017

## Wells Fargo U.S. Economic Forecast and FOMC Central Tendency Projections

| | 2017 | 2018 |
|---|---|---|
| **Change in Real Gross Domestic Product** | | |
| Wells Fargo | 2.1 | 2.6 |
| FOMC | 2.0 to 2.2 | 1.8 to 2.3 |
| **Unemployment Rate** | | |
| Wells Fargo | 4.5 | 4.5 |
| FOMC | 4.5 to 4.6 | 4.3 to 4.6 |
| **PCE Inflation** | | |
| Wells Fargo | 2.0 | 2.4 |
| FOMC | 1.8 to 2.0 | 1.9 to 2.0 |
| **"Core" PCE Deflator** | | |
| Wells Fargo | 1.9 | 2.2 |
| FOMC | 1.8 to 1.9 | 1.9 to 2.0 |

Forecast as of: April 12, 2017

NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation is the percentage rate of change in the price index for personal consumption expenditures (PCE). Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated.

Fed Data as of: March 15, 2017

Source: IHS Global Insight, Bloomberg LP, Federal Reserve Board and Wells Fargo Securities

## Wells Fargo Securities Economics Group


| | | | |
|---|---|---|---|
| Diane Schumaker-Krieg | Global Head of Research, Economics & Strategy | (704) 410-1801<br>(212) 214-5070 | diane.schumaker@wellsfargo.com |
| John E. Silvia, Ph.D. | Chief Economist | (704) 410-3275 | john.silvia@wellsfargo.com |
| Mark Vitner | Senior Economist | (704) 410-3277 | mark.vitner@wellsfargo.com |
| Jay H. Bryson, Ph.D. | Global Economist | (704) 410-3274 | jay.bryson@wellsfargo.com |
| Sam Bullard | Senior Economist | (704) 410-3280 | sam.bullard@wellsfargo.com |
| Nick Bennenbroek | Currency Strategist | (212) 214-5636 | nicholas.bennenbroek@wellsfargo.com |
| Anika R. Khan | Senior Economist | (212) 214-8543 | anika.khan@wellsfargo.com |
| Eugenio J. Alemán, Ph.D. | Senior Economist | (704) 410-3273 | eugenio.j.aleman@wellsfargo.com |
| Azhar Iqbal | Econometrician | (704) 410-3270 | azhar.iqbal@wellsfargo.com |
| Tim Quinlan | Senior Economist | (704) 410-3283 | tim.quinlan@wellsfargo.com |
| Eric Viloria, CFA | Currency Strategist | (212) 214-5637 | eric.viloria@wellsfargo.com |
| Sarah House | Economist | (704) 410-3282 | sarah.house@wellsfargo.com |
| Michael A. Brown | Economist | (704) 410-3278 | michael.a.brown@wellsfargo.com |
| Jamie Feik | Economist | (704) 410-3291 | jamie.feik@wellsfargo.com |
| Erik Nelson | Currency Strategist | (212) 214-5652 | erik.f.nelson@wellsfargo.com |
| Misa Batcheller | Economic Analyst | (704) 410-3060 | misa.n.batcheller@wellsfargo.com |
| Michael Pugliese | Economic Analyst | (704) 410-3156 | michael.d.pugliese@wellsfargo.com |
| Julianne Causey | Economic Analyst | (704) 410-3281 | julianne.causey@wellsfargo.com |
| E. Harry Pershing | Economic Analyst | (704) 410-3034 | harry.pershing@wellsfargo.com |
| Donna LaFleur | Executive Assistant | (704) 410-3279 | donna.lafleur@wellsfargo.com |
| Dawne Howes | Administrative Assistant | (704) 410-3272 | dawne.howes@wellsfargo.com |




WELLS FARGO SECURITIES