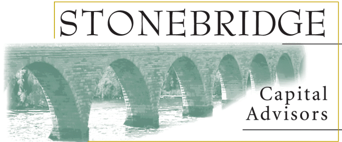


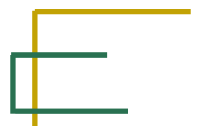
Stonebridge Economic Outlook

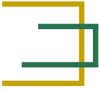
Section 1: Forecast Update
Section 2: Have Changes to the CPI Gone Too Far?

August 10th, 2018

By: Daniel E. Laufenberg, Ph.D., Economist

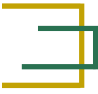
Stonebridge Capital Advisors | 651-251-1000 | info@stonebridgecap.com | stonebridgecap.com





Overview

- FORECAST UPDATE- The forecast looks for a return to slower growth in the second half of this year, with inflation only somewhat higher on average than in the first half. A relatively mild recession is still expected to start sometime next year. I suspect that although the acceleration in U.S. economic growth last quarter cannot be sustained, the pace will still be fast enough to increase the U.S. economy's vulnerability to a shock. Long-term interest rates are likely to fluctuate in a relatively narrow range over the remainder of the year; edging slightly higher over the next few months before reversing course around year-end. The Federal Reserve will continue to push short-term interest rates higher, causing the yield curve to flatten further. Although an inversion is most likely, it is not a sure thing given the potential unwinding of quantitative easing, the prospect of larger federal budget deficits and historically low interest rates (begins on page 2).
- HAVE CHANGES TO THE CPI GONE TOO FAR?- Changes in the methodology used to calculate the consumer price index (CPI) in the late 1990s removed what many economists and politicians thought was an upward bias to the index. It could be that the changes went too far and that the CPI now has a downward bias. In particular, the consumer price index for consumer goods less food and energy is no longer consistent with other measures of consumer goods prices. The implication is that maybe consumer price inflation is not as benign as suggested by the CPI. Moreover, since the CPI prices are used to calculate the personal consumption expenditures price indices, then this same downward bias is likely in the Federal Reserve's preferred PCE inflation measure as well (begins on page 8).



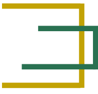
Forecast Update

Once again, the Stonebridge Capital Advisors' (SCA) economic forecast is little changed from last time. Recall that the previous forecast called for real gross domestic product (GDP) growth to accelerate somewhat in the second quarter, consumer price inflation to wane a bit, the unemployment rate to continue to drift lower, long-term Treasury yields to remain around 2.9 percent on average and the Federal Reserve to continue to raise its target for the federal funds rate. For the most part, that is exactly what happened, except that real GDP growth in the second quarter was even stronger than expected and consumer price inflation was a bit tamer than expected.

Unfortunately, the surge in second-quarter real GDP growth is unlikely to be sustained. As such, the forecast continues to look for real GDP growth to return to a slower pace in the second half of 2018. Several factors are expected to have a damping effect on output growth going forward, including new tariffs, the one-off effect of the tax cuts, and the Federal Reserve's less accommodative monetary policy. Tariffs, or any barrier to trade, essentially make doing business less efficient, which raises costs and lowers productivity. After all, if a company is buying its inputs and merchandise from foreign operations, it may be because it is the least expensive alternative (even after adjusting for quality). Tariffs obviously change the landscape in that regard. In most cases, it will mean higher prices for domestic consumers, as well as lower profits for domestic firms.

The tax cuts most likely helped boost real growth in the first half of 2018 but are unlikely to continue to do so in the second half. In particular, most economists agree that the reduction in the corporate tax rate should lead to more fixed investment. Based on the latest estimate, such investment has indeed been on the rise but it started even before the tax cuts were in place. According to the Bureau of Economic Analysis, real business fixed investment increased 7.3 percent at an annual rate in the second quarter following an upwardly revised surge of 11.5 percent in the first quarter. This compares with a gain of 6.3 percent over the four quarters of 2017. Although this uptick was anticipated in the SCA forecast ever since the tax cuts were enacted, it was always viewed as a short-lived effect. Interestingly, it looks like business fixed investment was already slowing in the second quarter and likely will continue to downshift as the year unfolds given that at least some of the boost to business fixed investment in the first half of 2018 may have borrowed from projects originally planned for later this year owing to the tentative nature of tax cuts.

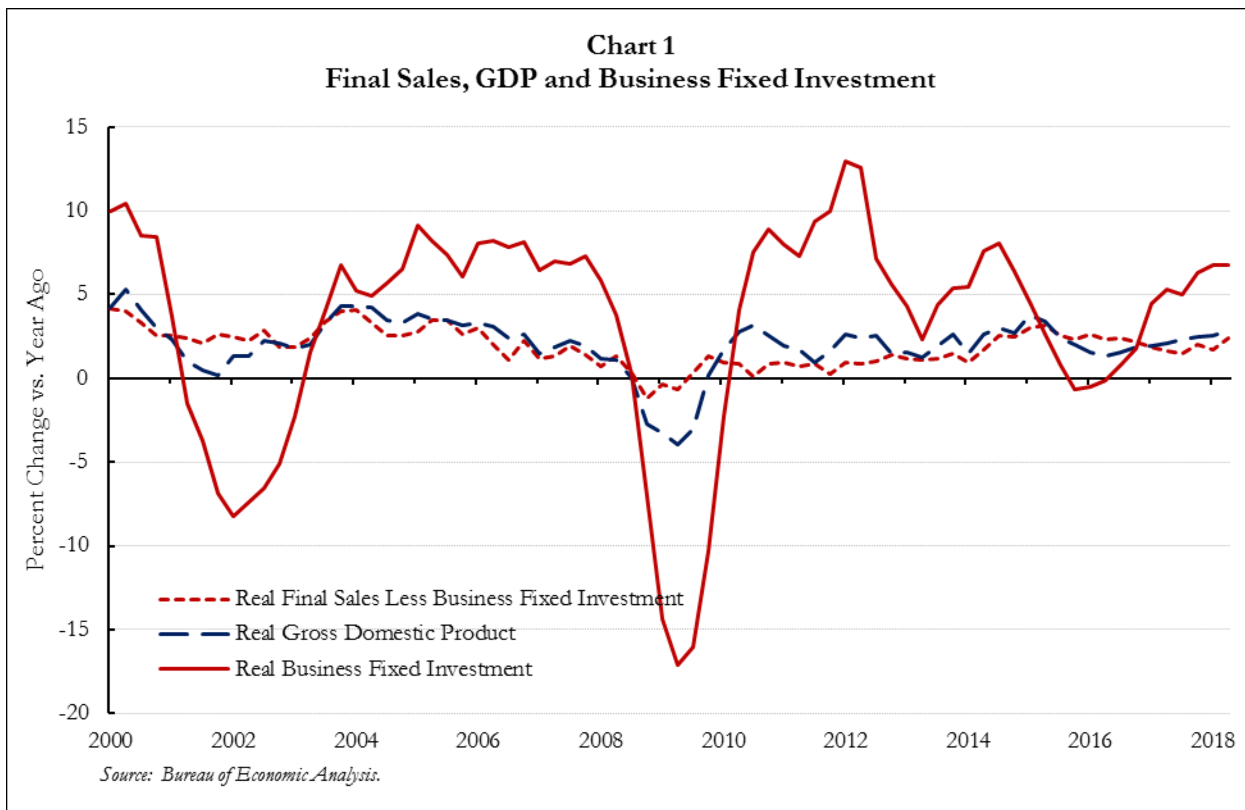
As noted in the previous forecast, the decision to invest in plant and equipment by businesses will depend primarily on whether there is sufficient demand for their product to justify making the investment regardless of the tax consequences. To demonstrate this, I have updated a chart from the previous forecast (see Chart 1); the percent change from a year ago for real fixed business investment is plotted against the percent change from a year ago for both real final sales of domestic product less real business fixed investment and real GDP. First, from the relationship between the real final sales series and real business fixed investment, it is clear that the two series tend to track directionally but that business fixed investment growth is far more volatile than final sales growth. In other words, when final sales are expanding in excess of the economy's potential, business fixed investment remains strong. However, when real final sales growth drops below potential, the bottom seems to drop out of business fixed investment. Once again, the exception to this relationship was the oil price debacle of 2015 that decimated business fixed investment in U.S. crude oil exploration and production. Also plotted in Chart 1 is real GDP growth from a year ago shown for a period that included two recessions: the very mild recession of 2001 and the very severe recession in 2008-09. Nevertheless, real business fixed investment took a substantial tumble on both occasions, suggesting that business fixed investment is very sensitive to overall output growth, regardless of how it is measured.

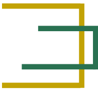


The forecast is for real business fixed investment growth to remain positive over the remainder of 2018 but at a much slower pace than registered in the first half. To the extent that the U.S. economy stumbles next year, business fixed investment will follow suit and exacerbate the anticipated economic downturn. Again, this anticipated drop in business fixed investment is unlikely to be the shock that derails the expansion but rather a consequence of the derailment.

Rather than determine whether businesses invest in plant and equipment, a lower corporate income tax rate may be more helpful in determining where it is made. In that regard, a lower corporate income tax rate may encourage some firms to shift planned investment to the U.S. but given the threat of a trade war developing around the world, that would only happen if the output would be sold in the U.S. and all the major inputs into the production process were produced domestically as well. That way, the firm would not be subject to tariffs on their final product when exported or their inputs when imported. Of course, it could work the other way as well. That is, if the product is sold overseas and many of the parts come from other countries, then production capacity may be moved closer to the final market. Harley-Davidson comes to mind. Recall that GDP includes goods and services produced within the borders of the U.S. regardless of who owns the resources used.

Finally, the Federal Reserve is in the process of removing the monetary policy accommodation that was implemented in response to the financial crisis of 2008-09 and are expected to continue to do so for the rest of this year. As such, borrowing costs are likely to continue to drift higher, making it increasingly expensive to borrow. Obviously, for financial institutions that borrow short and lend long, a flatter yield curve puts downward pressure on profit margins.





In addition, to the extent that a flatter yield curve presages a recession, investors will become increasingly concerned about bond quality. Under such circumstances, the yields on lower rated bonds most likely will increase more than yields on higher rated ones as investors start to upgrade their bond portfolios. Interestingly, credit spreads are already quite wide by historical standards (and have been for most of the current expansion), in large part because U.S. Treasury yields are still so low.

Although consumer price inflation looked troubling earlier in the year, it has faded somewhat more recently. Inflation, as measured by the consumer price index (CPI) and the price indices used to derive real consumption expenditures, are expected to edge only slightly higher on average for the remainder of this year relative to their respective averages for the first half of 2018. How will this be accomplished? For the most part, it will be due to the methodology used to calculate the consumer price indices rather than any miracle of macroeconomic policies.[1]

Table 1
Forecast Summary

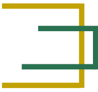
	2017	**2018**				**2018f**	**2019**
		Q1	**Q2**	**Q3f**	**Q4f**		
Real Gross Domestic Product	2.5	2.2	**4.1**	2.0	1.0	2.3	0.7
Consumer Price Index, All	2.1	3.5	1.6	2.6	3.1	2.7	2.5
Consumer Price Index, Core	1.7	3.0	1.8	2.7	3.1	2.6	2.2
GDP Chain-Type Price Index	2.0	2.0	3.0	2.5	2.8	2.6	1.5
Civilian Unemployment Rate	4.1	4.1	3.9	3.9	3.9	3.9	6.4
Price of WTI crude oil ($/bbl)	55.0	62.9	68.0	68.0	69.0	69.0	50.0
Trade-Weighted Dollar Index	88.9	86.1	88.2	87.5	85.0	85.0	79.0
S&P 500 Operating Earnings	124.5	36.5	38.0	35.6	32.0	142.1	114.0
Percent vs. Year Ago	17.2	23.5	21.3	13.6	1.1	14.1	-19.8
91-Day Treasury Bill Rate	1.3	1.4	2.0	2.2	2.4	2.4	1.0
10-Year Treasury Note Yield	2.4	2.8	2.9	2.9	2.9	2.9	2.5
30-Year Mortgage Rate	3.9	4.3	4.5	4.6	4.9	4.9	4.0
Bank Prime Rate	4.3	4.5	4.8	5.2	5.4	5.4	4.0

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Standard and Poor's, Federal Reserve Board, Department of Energy, and Federal Home Loan Mortgage Corporation.

Annual changes in real gross domestic product (GDP) and all measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. The annual estimates of the unemployment rate, the price of crude oil, the trade-weighted dollar and all interest rates are averages for the last quarter of the year indicated. S&P 500 operating earnings per share are for the period indicated.

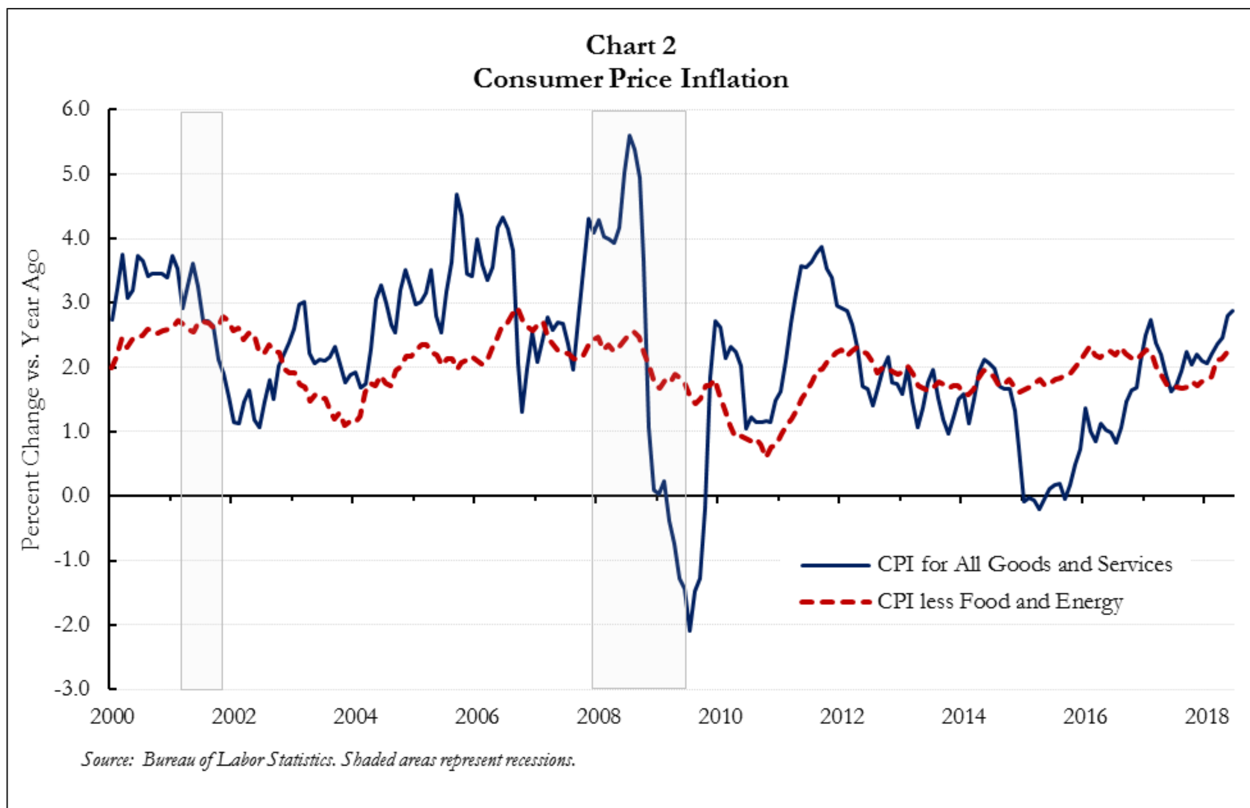
Quarterly changes in real GDP and all measures of inflation are percent changes from the previous quarter at annual rates. For the unemployment rate, the price of crude oil, the trade-weighted dollar and all interest rates, quarterly estimates are averages for the quarter indicated. S&P earnings are per share for the period indicated.

f-forecast; bold type reflects a major change from the previous forecast



Since inflation expectations are a key determinant of long-term interest rates, it seems unlikely that inflation concerns will pressure long-term interest rates substantially higher anytime soon. In fact, it is expected that the 10-year Treasury yield will be little changed on average over the remainder of this year, moving a bit higher in the near-term before fading again later. On the other hand, the Federal Reserve will continue to move short-term interest rates higher. According to the latest from the Fed, they plan to increase the federal funds rate target at least two more times this year, most likely 25 basis points each. If this is the case, then the yield curve (the yield on the 10-year Treasury note minus the yield on the one-year Treasury bill) will remain positive for most of this year. However, if the Fed decides to be a bit more aggressive about raising short-term rates over the next five months, then the 10-year yield actually may drop a bit and causing the yield curve to invert. This potentially could be troubling because every recession since 1955 was preceded by an inverted yield curve.

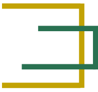
Personal consumption expenditures will be the key to the expansion's survival in 2019. After all, if consumers are shocked into retrenchment, the overall economy will falter as well. One candidate that could cause consumers to pull back on spending is a surprisingly sustained decline in consumer purchasing power, which is triggered by prices rising faster than wages. Indeed, as shown in Chart 2, an uptrend in consumer inflation may be underway.



Source: Bureau of Labor Statistics. Shaded areas represent recessions.

---

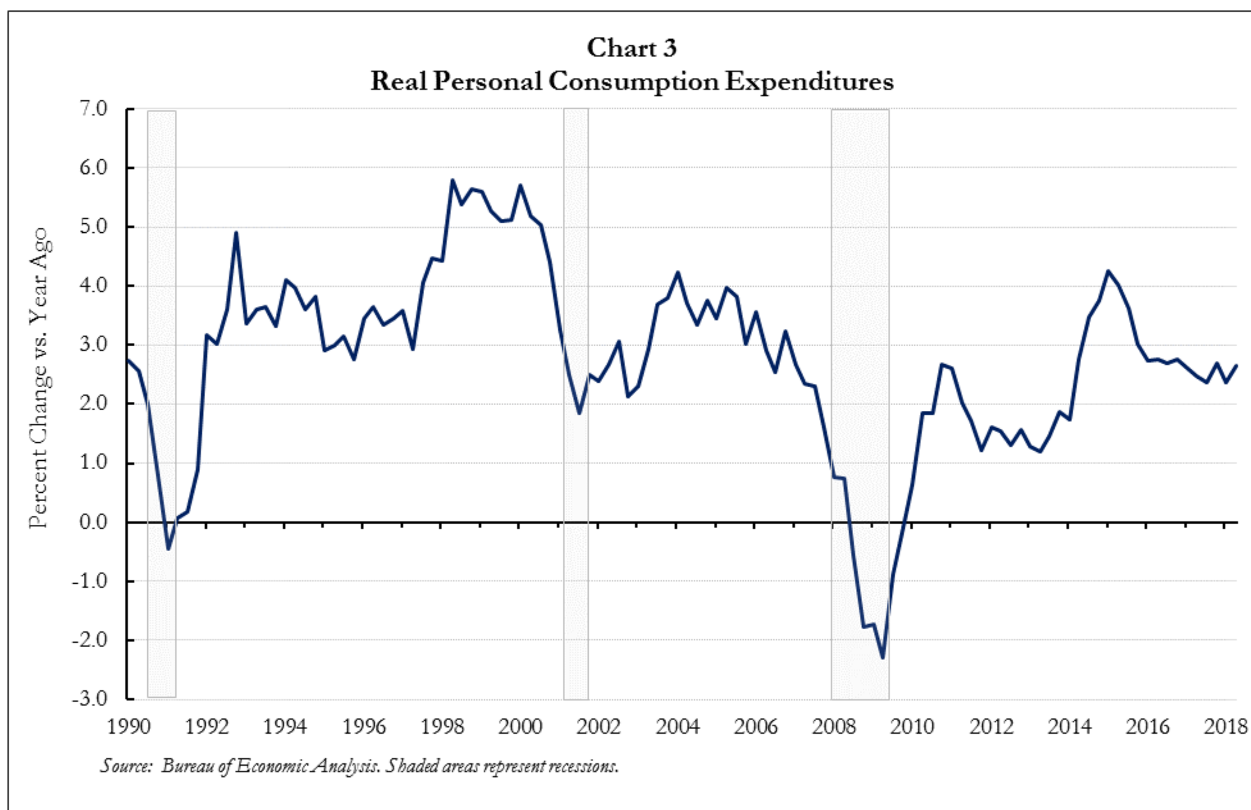
[1]For a more detailed discussion of why inflation may be understated, please see "Have the changes to the CPI gone too far?" in this edition of the *Economic Forecast*.



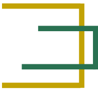
A continuation of this uptrend over the remainder of this year could be problematic for consumers, which is exactly what the SCA forecast anticipates. That said, inflation does not need to move dramatically higher to be a problem given the low inflation environment of the last nine years. As a result, a recession, albeit mild by historical standards, is expected to begin in the first half of 2019.

Clearly, consumer spending was not a problem in the second quarter of this year, given that the Bureau of Economic Analysis estimated that real personal consumption expenditures (PCE) jumped at a 4.0 annual rate and were up 2.7 percent from the same period a year earlier (see Chart 3).

Real PCE growth is expected to slow down on a quarter-to-quarter basis over the remainder of this year before decelerating even more dramatically early next year. Whether the slowdown will be enough to cause the National Bureau of Economic Research (NBER) to declare it a recession is unclear. One thing for sure, if it is a recession, it will be 2020 before the NBER recognizes it as such. I suspect that the decline in real PCE in the next recession will look more like what happened in 1990-91 than either the mild 2001 recession or the severe 2008-09 recession. That is, on a percent change from a year ago basis, real PCE will barely slip into negative territory. That said, it will still be painful in terms of employment, riskier asset prices and corporate profits.



Source: Bureau of Economic Analysis. Shaded areas represent recessions.



Because the forecast is essentially the same as last time, the investment implications are the same as last time as well. Equities and high-yield bonds still look to be in favor (the LQ Indicator suggests that the current bull market for equities is still intact and will be for at least through the end of this year). However, given the forecast that the U.S. economy will be shocked into a mild recession sometime next year, equities and high-yield bonds are expected to falter markedly at roughly the same time. The bottom line is for investors to stay the course if they can because timing such an inflection point is always difficult.

Have Changes to the CPI Gone Too Far?

Over the years, the methodology used to construct the consumer price index (CPI) has gone through several major changes in the hope of providing a better measure of consumer prices. For the most part, those changes have succeeded to do just that. However, the last round of major changes to the CPI in the late 1990s may have gone too far.

The Boskin Commission, formally called the "Advisory Commission to Study the Consumer Price Index", was established by the U.S. Senate in 1995 to study possible upward bias in the computation of the CPI by the Bureau of Labor Statistics (the CPI is used to measure inflation in the United States). At the time, there was considerable discussion about cutting the annual cost-of-living increases, which are set by the percent change in the CPI from the prior year, to Social Security recipients as part of a federal budget deficit reduction plan. The political issue was how to accomplish it. Cleary, it was far better for the careers of politicians if the cuts in benefits were the result of removing the perceived upward bias in the CPI rather than Congress reducing the cost-of-living increases through legislation.

The Boskin Commission delivered. According to the findings of the Commission, the CPI at the time was estimated to have an upward bias of 1.1 percentage points a year. According to the Commission's report, the bulk of this bias came from failing to account properly for quality improvements in products, as well as being too ridged about product substitution.

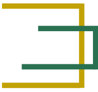
In its response to the Boskin Commission's findings, the Bureau of Labor Statistics had a somewhat different interpretation of the Commission's message. In particular, they focused on the recommendation from the Commission "that the BLS should establish the economic concept of a cost-of-living index (COLI) as the measurement objective for the CPI. Viewed from the context of statistical agencies around the world, this recommendation was relatively controversial."[2] It was noted that "the COLI is rejected as a measurement objective in many countries, including the United Kingdom and Australia. The recommendation was accepted rather readily by the BLS, however."[3] Although the BLS argued in the past that the CPI could not be considered a COLI, cost-of-living theory was still used as a guide in the construction of the index. As such, formal acceptance of the Commission's recommendation to accept the CPI as a COLI did not represent a major shift in concept or practice by the BLS but it did make it easier for the BLS subsequently to take steps to make the CPI a closer approximation to a COLI.

In this article, I do not focus on the theoretical aspects of the CPI as a COLI. Instead, my focus will be on the empirical difference between the prices of consumer goods less food and energy in the CPI and the prices of consumer goods less food and energy in the producer price index (PPI). For the most part, I seem to generate more questions than answers.

---

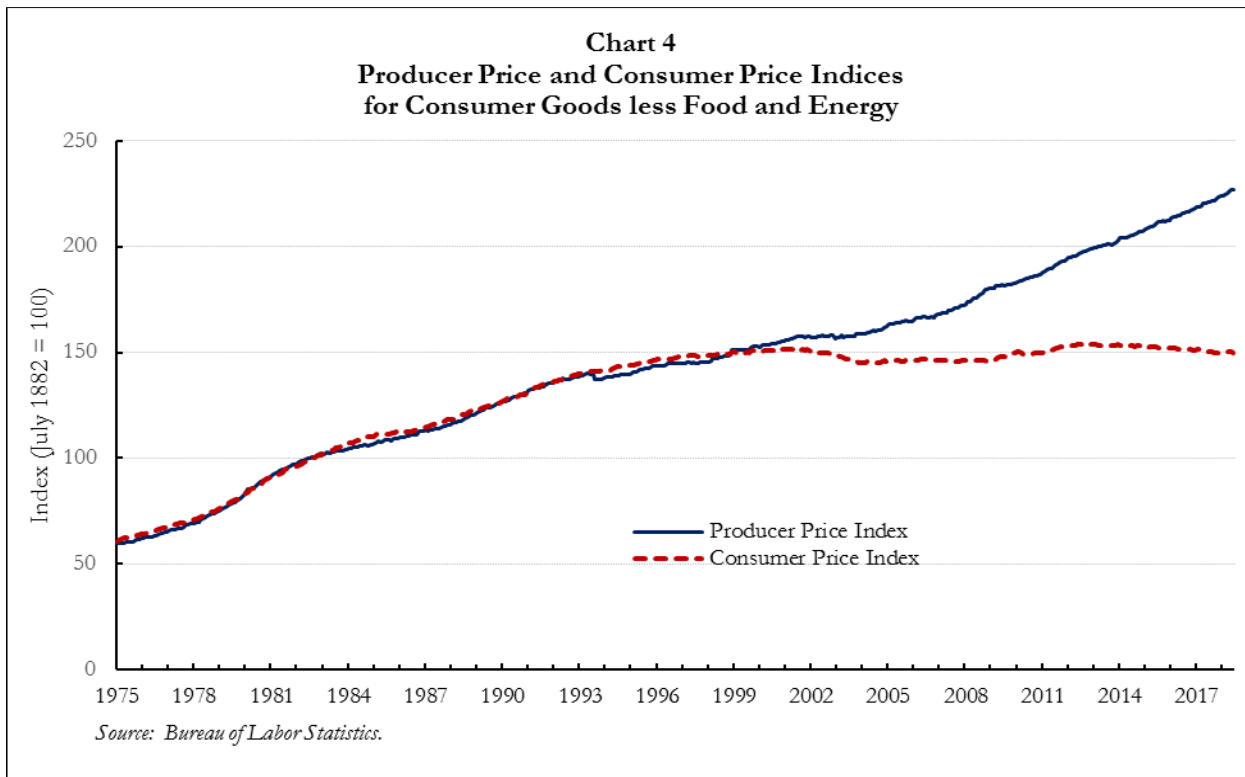
[2] John S. Greenlees, "The BLS Response to the Boskin Commission Report," International Productivity Monitor, no. 12 (Spring 2006): 23-41.

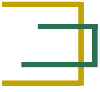
[3] Ibid.



That said, the two price indices are not designed to measure exactly the same thing; the primary difference is that the CPI measures prices from the perspective of consumers, while the PPI measures prices from the perspective of the sellers. At first blush, one would think that even though they might differ in the short run, the average percent changes in the two price series would be similar over time. As shown in Chart 4, this was true until the late 1990s but not since. In particular, from 1975 to 2000, the CPI index increased at an average annual rate of 3.4 percent and the PPI index increased at an average annual rate of 3.8 percent—not that different. Since then, the PPI index has advanced 2.2 percent on average, while the CPI index has registered no gain. Clearly, the methodology used to compute the CPI index has changed more so than the methodology used to compute the PPI but that does not necessarily make the CPI a better measure of price inflation. Recall that the CPI is now more of a cost-of-living index than a measure of inflation. It may be that the PPI subset may be more suited as a measure of inflation.

In this regard, consumer goods less food and energy represented 19.7 percent of the overall CPI index in June 2018. If the CPI index is replaced by the PPI index for this subset of consumer products, the overall CPI would have been up 3.4 percent from a year earlier in June rather than the reported increase of 2.9 percent. This one adjustment may provide investors, as well as consumers and policymakers, with a somewhat different perspective of inflation and inflation expectations. Another way to think of this is that while consumer prices are adjusted for quality and substitution biases, wages are not. In other words, if the price of a new car increases 5 percent from a year ago but most of the higher price is estimated to be due to higher quality, then the adjusted price as reported in the CPI is unchanged. However, when the consumer goes to the dealer to buy the car, the sticker price is still 5 percent higher. Unfortunately for consumers, wages and salaries are not indexed to keep pace with price increases due to quality improvements.





The views expressed here reflect those of Daniel E. Laufenberg as of the date noted and not necessarily those of Stonebridge Capital Advisors. They may change as economic fundamentals and market conditions change. This commentary is provided as a general source of information only and is not intended to provide investment advice for individual investor circumstances. Past performance does not guarantee future results.