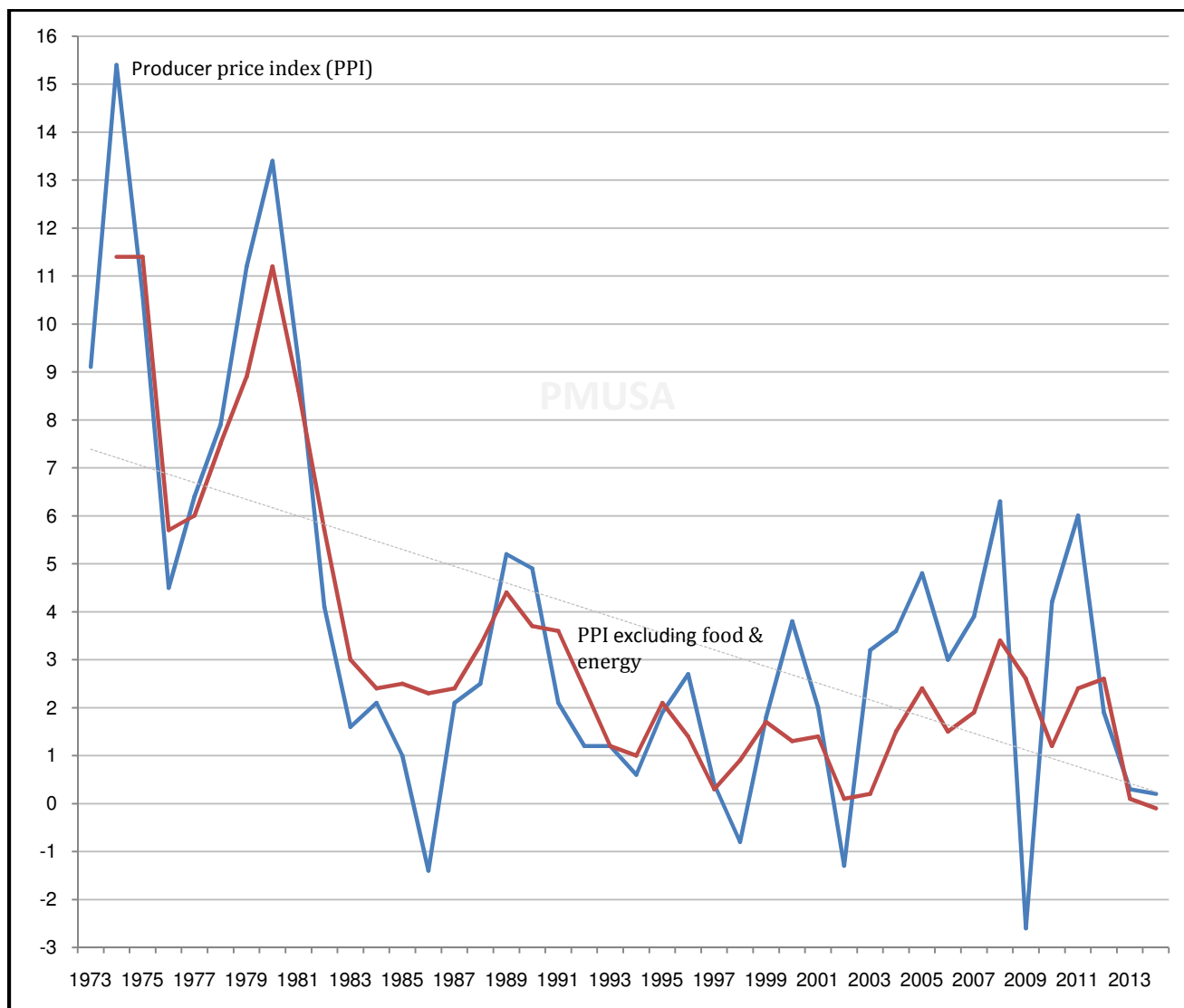


PRODUCER PRICE INDEX 1973-2015 (PERCENT CHANGE)



(Source: U.S. Bureau of Labor Statistics)

2017 (monthly % change)

Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
.6											

The Producer Price Index (PPI) is an inflation gauge that measures the average change in the selling prices received by producers. The trend in PPI over the past 41 years is clearly lower; lower rates of change in prices year-over-year. Two spikes dominate the chart, both in the 1970's. The spike from '73-'75 was the first oil price shock resulting from the 1973 Yom Kippur War. OPEC initiated an oil embargo in retaliation for the U.S. supporting and arming the Israelis. The spike from '78-'81 was the second oil price shock resulting from the 1979 Iranian Revolution and the ensuing Iran-Iraq war in 1980. Since that time, motivated by a new style of monetary policy and trade with China inflation rates have continued lower. Since future inflation expectations are typically influenced by recent experience, the trend of low and stable PPI rates should continue in 2015. However, massive central bank printing activity around the world led by the U.S. Federal Reserve since 2009 has injected significant risk for the inflation outlook. In early 2015 deflation is the buzz-word; that could turn around quickly. *PPI is released on a monthly basis and has two components. The headline PPI, and PPI excluding food & energy (2015 avg -.1%).*