

US Macro Update

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Fundamentals

- GDP measures sales
- Employment and investment are driven by sales
- If any agent spent less than his income, another must have spent more than his income, or the output would not have been sold
- Paradox of thrift- if there was no spending there would be no sales, output, or employment
- Unemployment is always an unspent income story

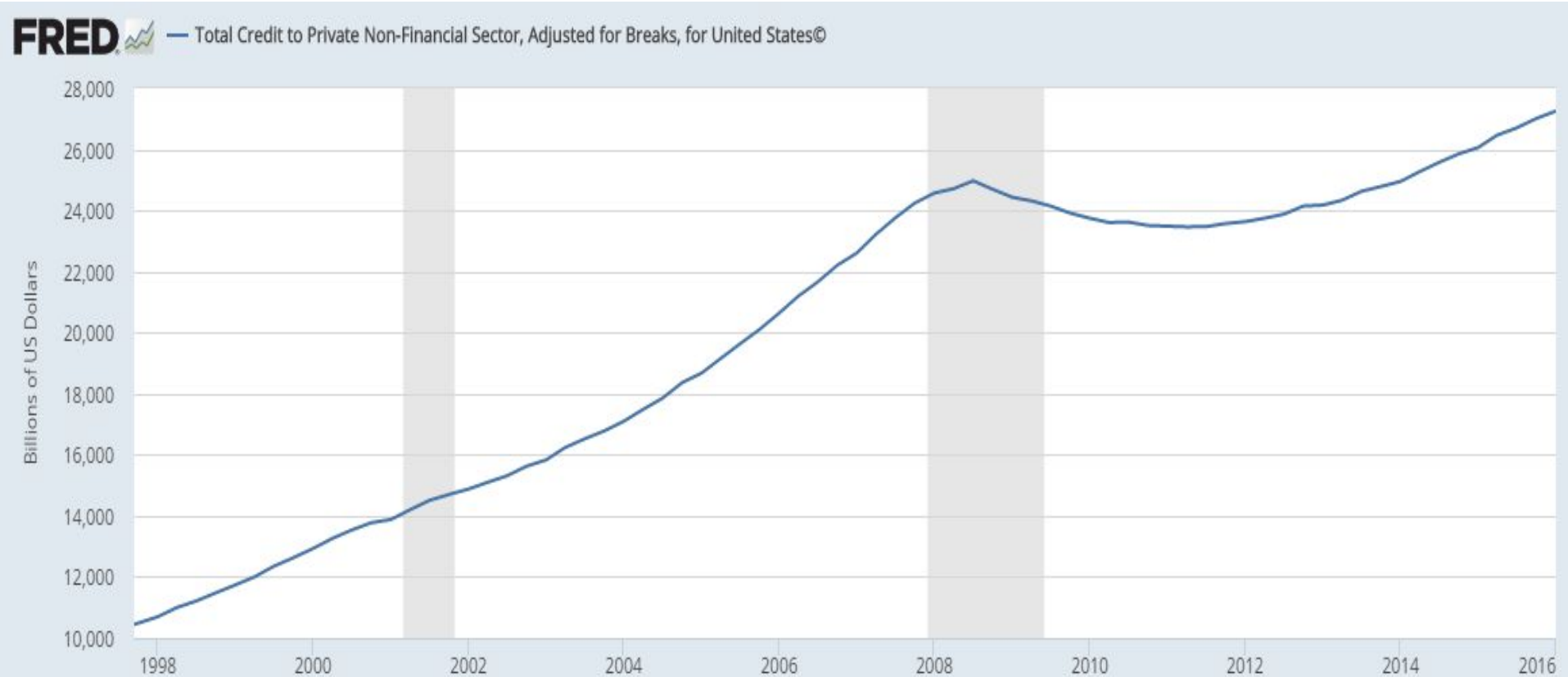
Who Spends Less than their Income?

- Individuals- pension contributions, IRA's, insurance policies
- Business accumulations of financial reserves
- State and local government reserve funds
- Central banks that accumulate foreign currency financial assets

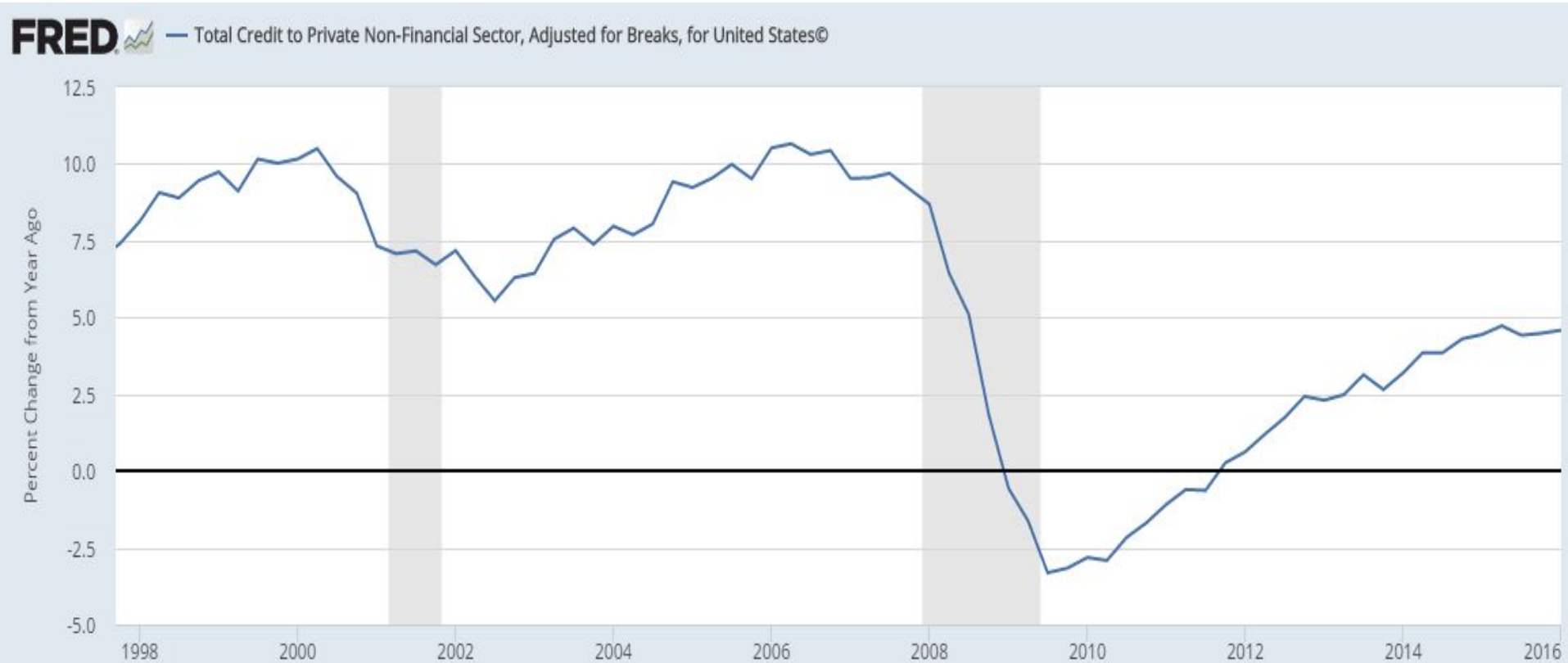
Who Spends More than his Income?

- Individuals who borrow to buy houses, cars, and an education
- Businesses that invest
- State and local governments
- Federal Government

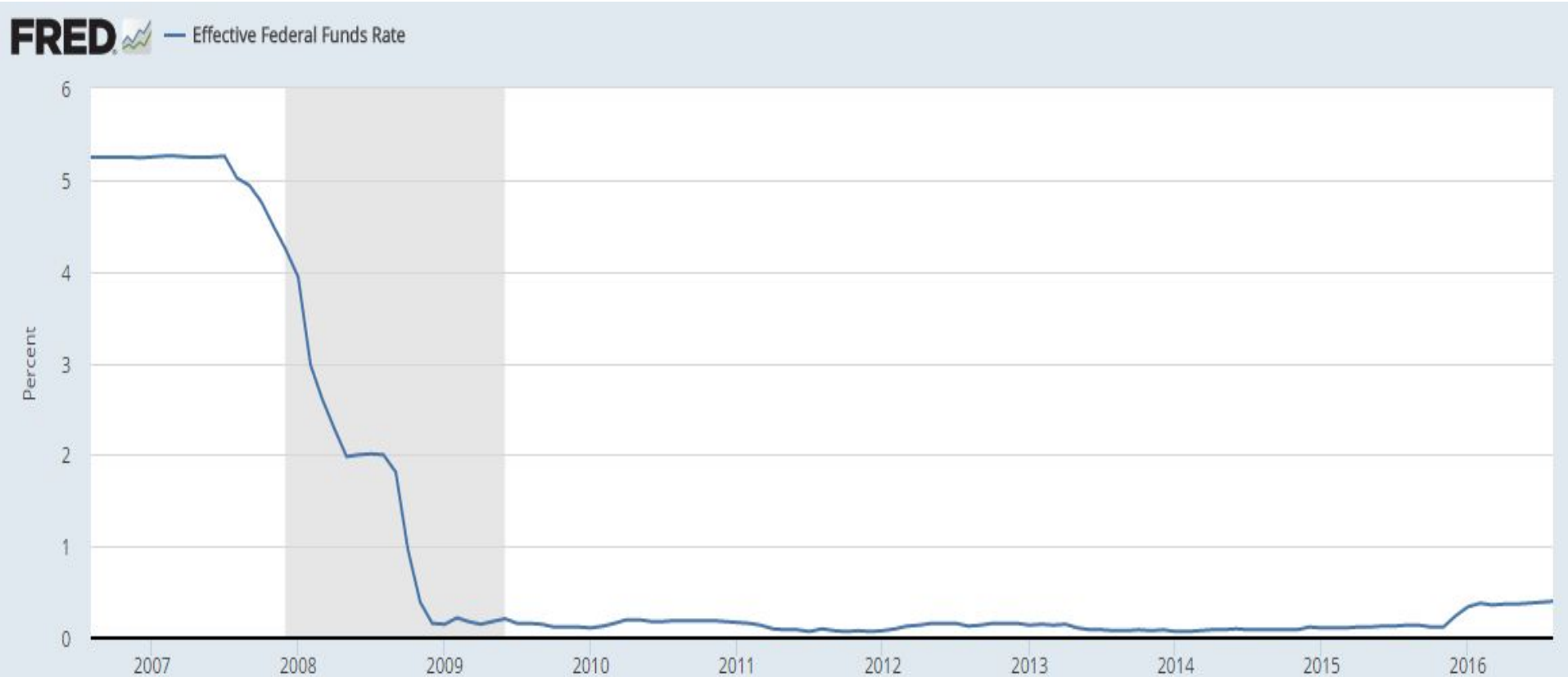
Private Sector Deficit Spending



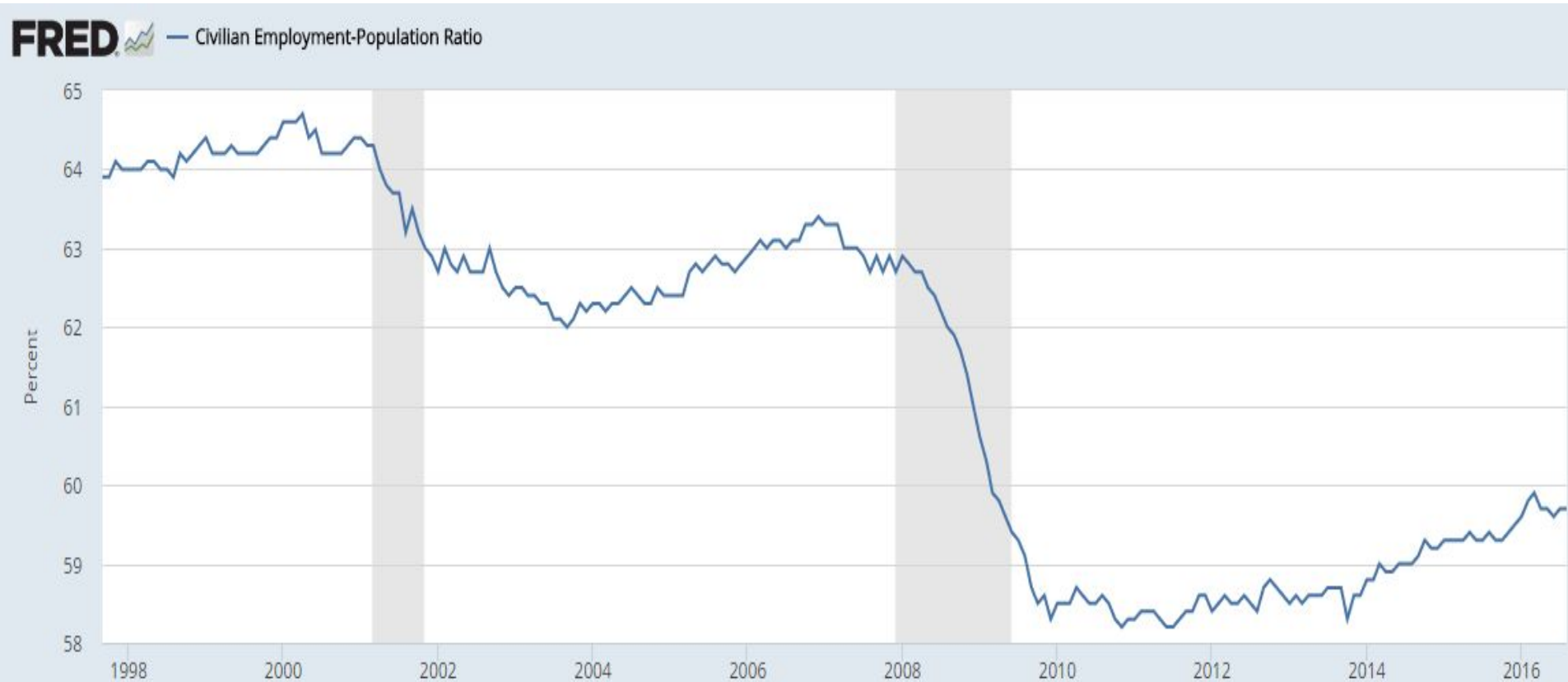
Private Sector Deficit Spending Year Over Year



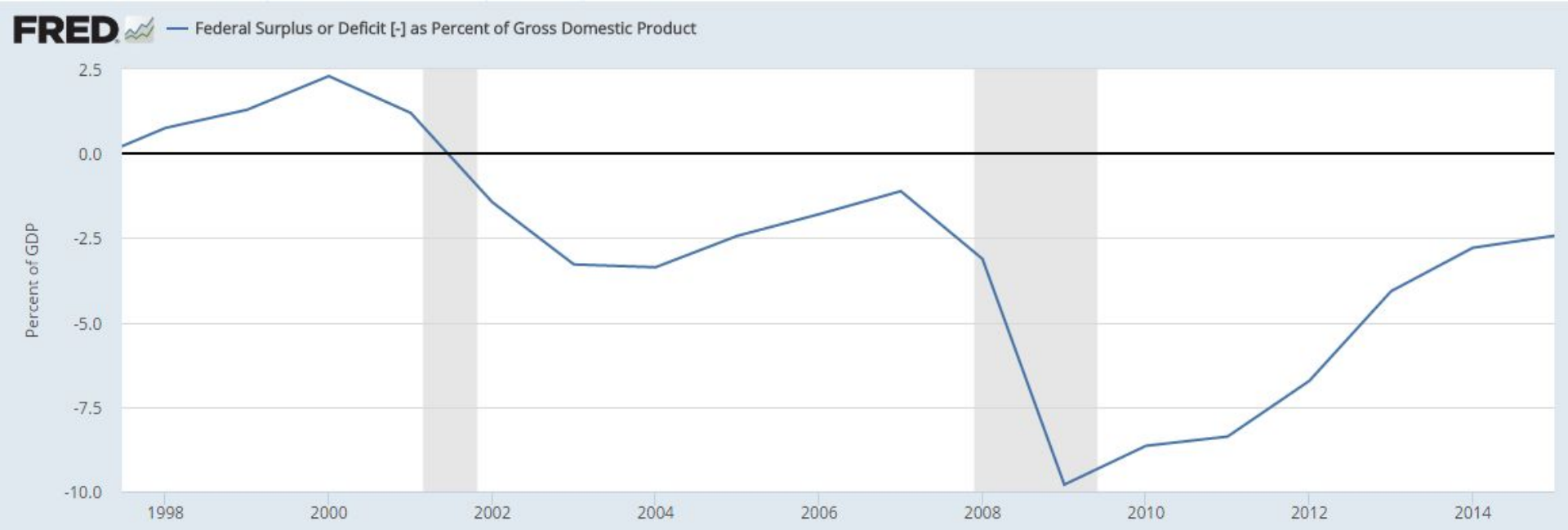
The Fed Aggressively Lowered Rates



Employment Has Not Recovered



Federal Deficit



GDP is at Stall Speed



Monetary Policy Doesn't Work

- The government is a net payer of interest to the economy
- Positive rates are a subsidy, negative rates are a tax
- The price level is a function of prices paid by government
- The term structure of prices is a function of Fed rate policy
- After over 20 years of 0 rates, the BOJ says they just need more time
- After 7 years of 0 rates, the ECB and the Fed say they just need more time

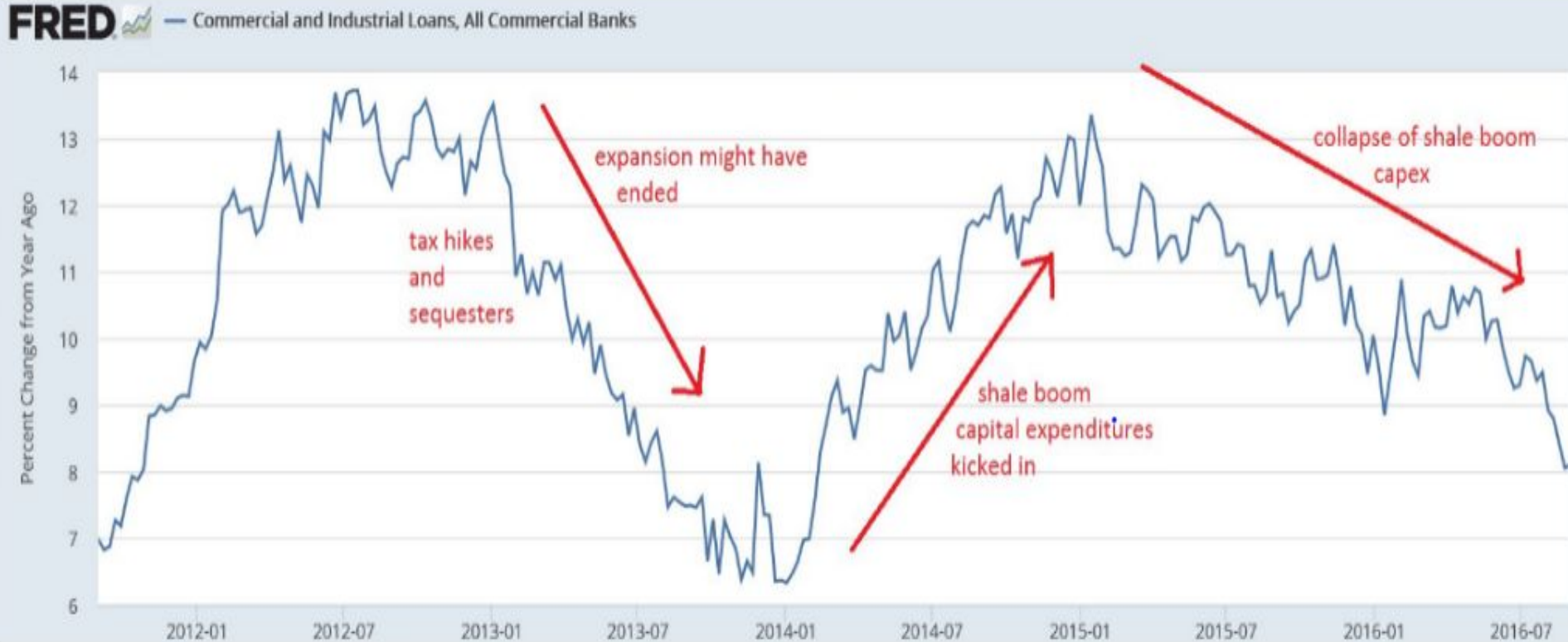
Fiscal Policy Does Work

- Tax cuts add to take home pay
- Deficit spending adds directly to sales and income
- Every analyst paid to be right agrees

Aversion to Public Debt

- Presumed limits
- Presumed consequences
- Reversed perception of sequence of events
- <The story of Pompei>

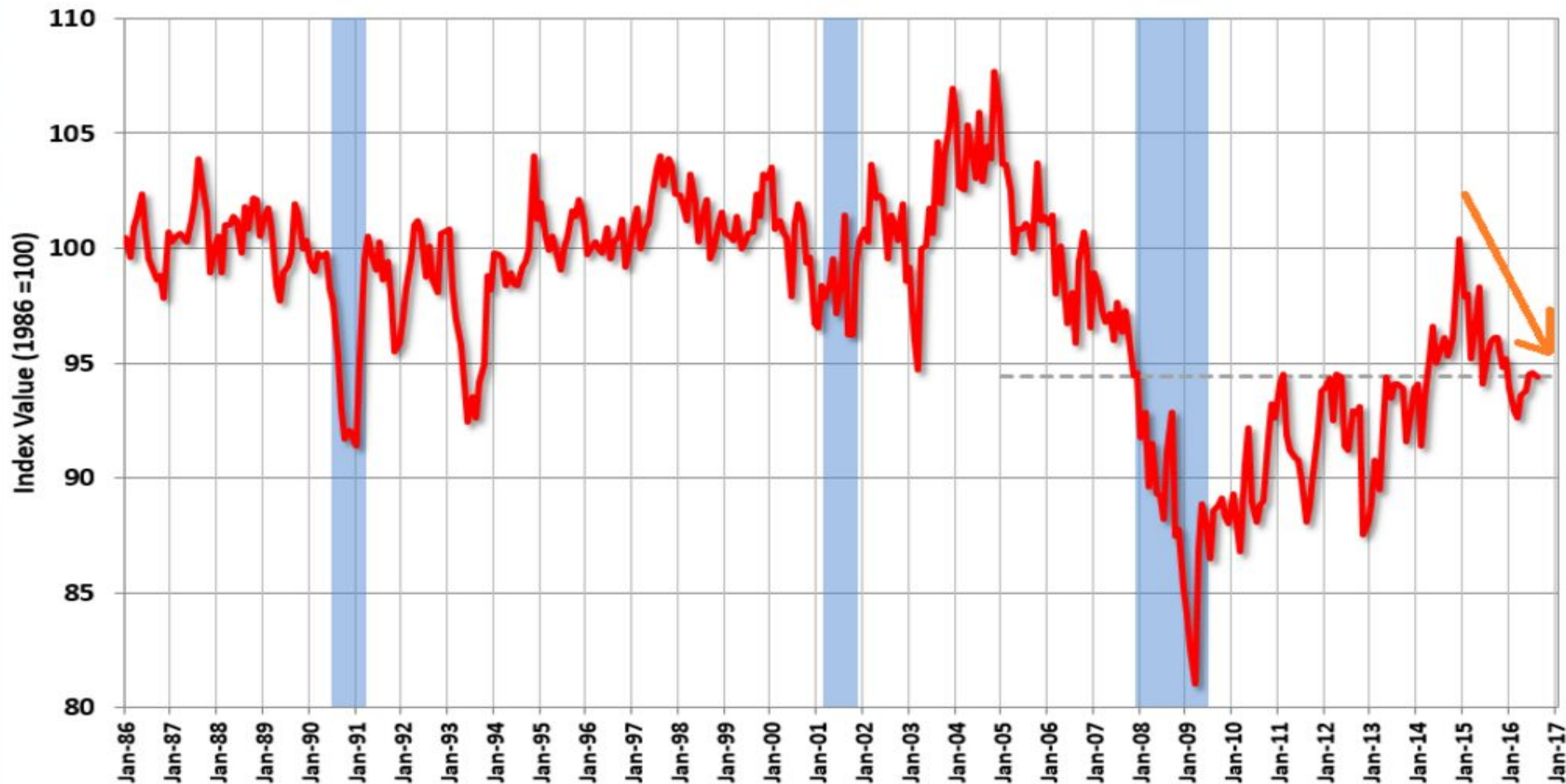
Oil Narrative



Oil Prices

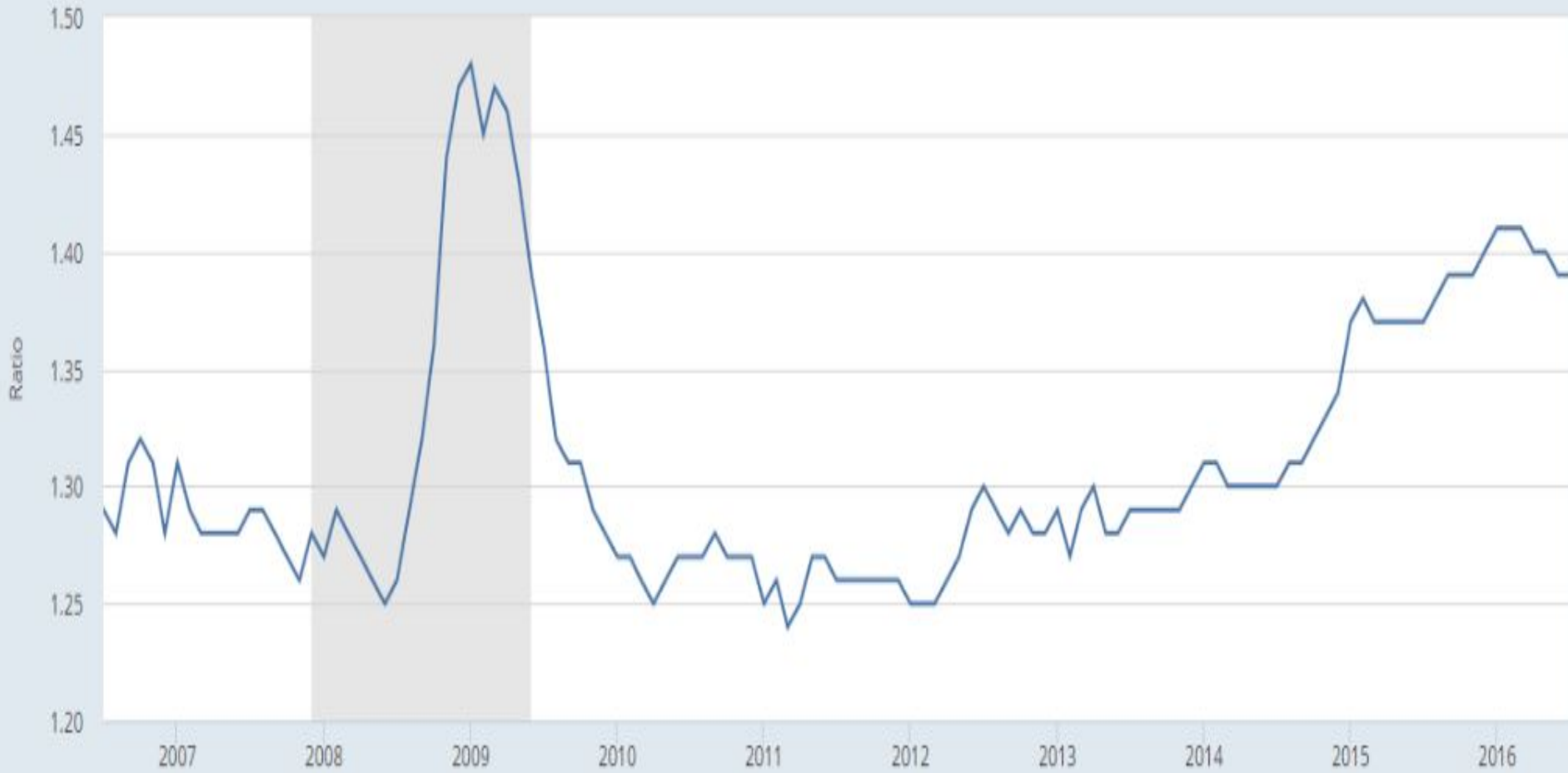
- The oil price drop was and is still viewed as GDP friendly
- The presumption is a net savings for 'the consumer'
- However, for every buyer that saves \$1, a seller loses \$1
- Therefore net benefits can only be due to differing propensities
- The continuing reductions of oil capex are a net loss for the economy
- All the charts have been decelerating due to the capex reductions
- The deceleration ends with sufficient deficit spending, public or private

Small Business: Optimism Index



Index of Industrial Production





REDBOOK y/y change

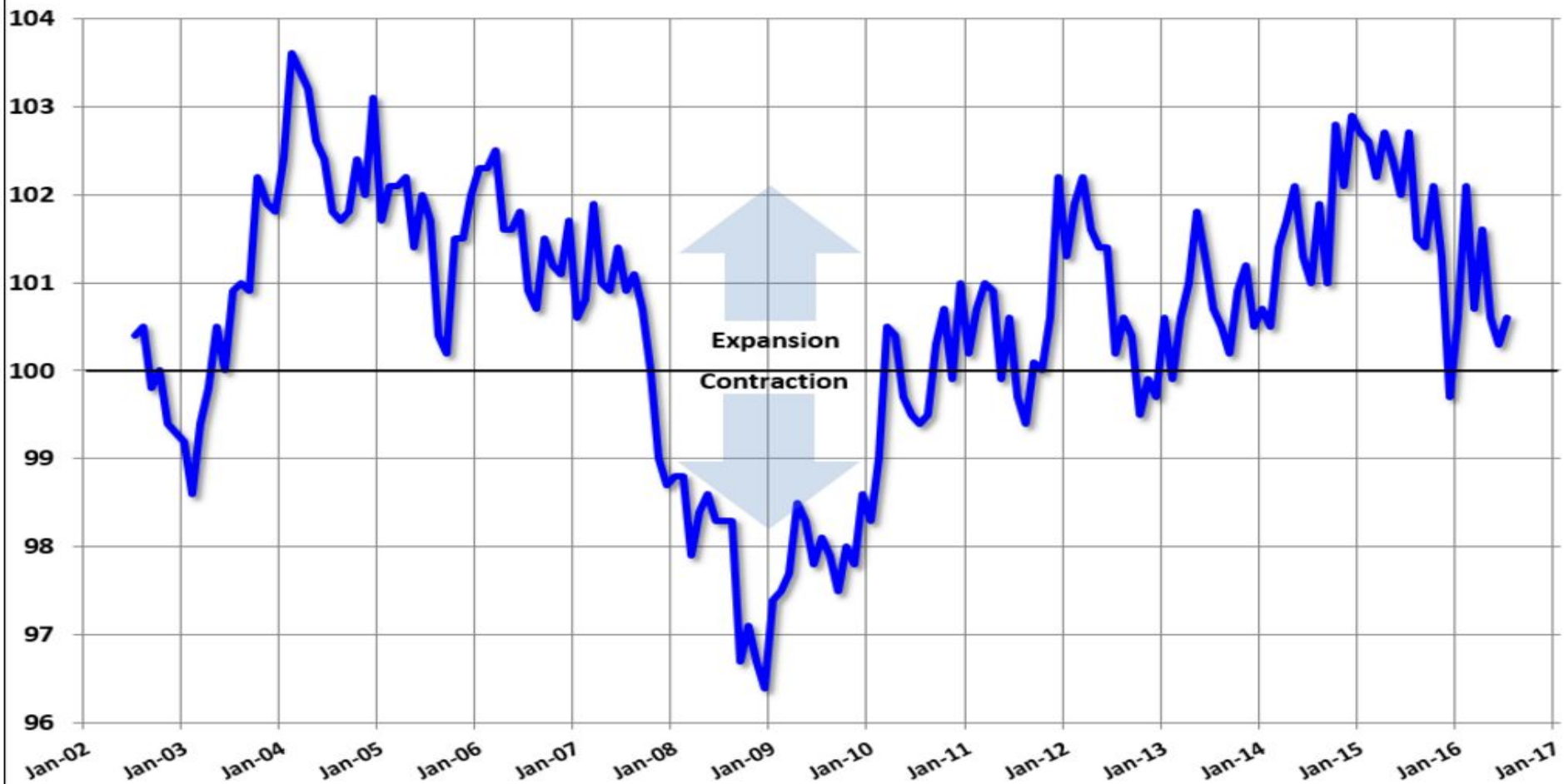
As Released, With No Revisions



ISM Non-manufacturing Composite Index



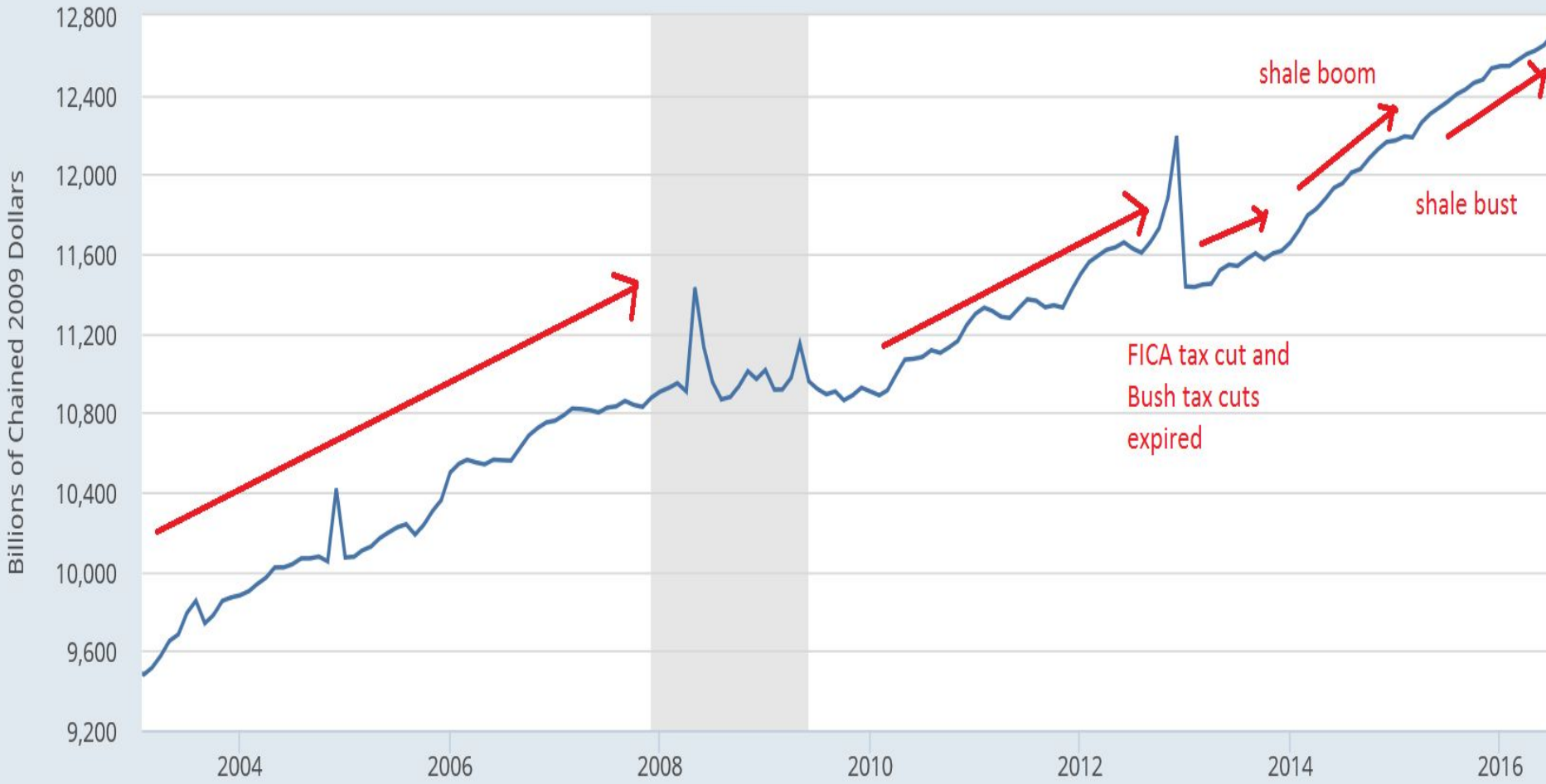
Restaurant Performance Index







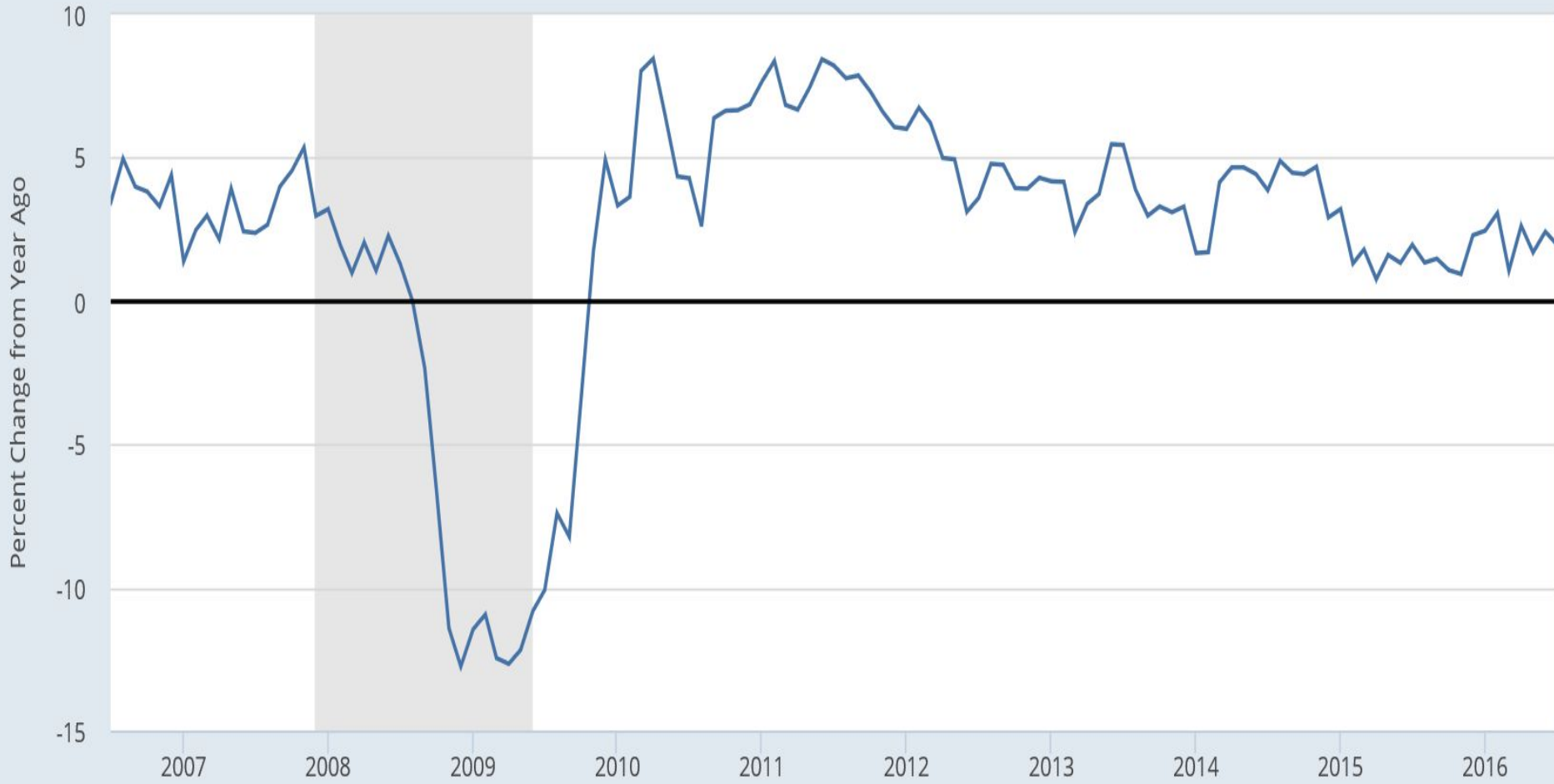
— Real Disposable Personal Income

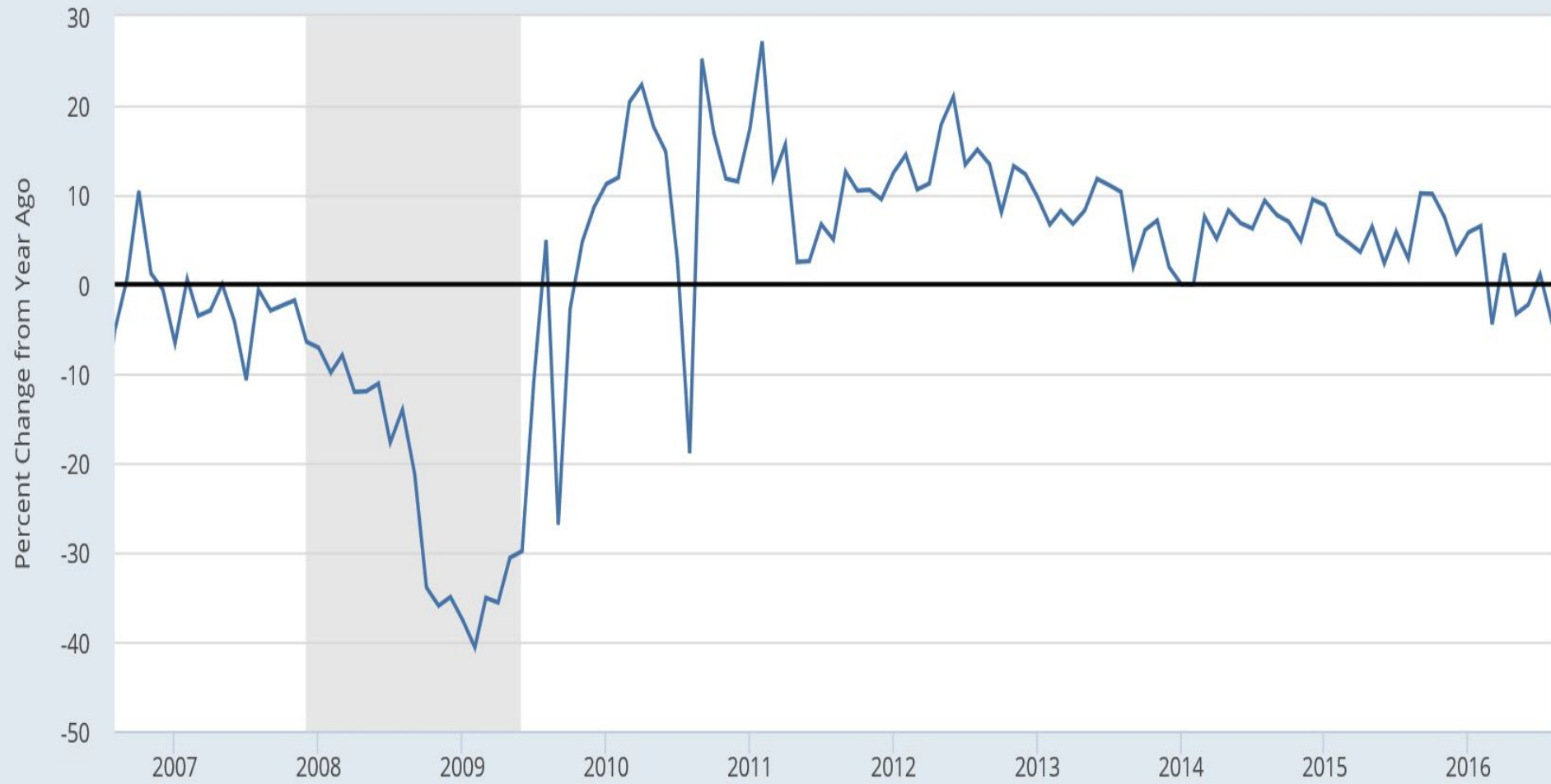




— All Employees: Total Nonfarm Payrolls

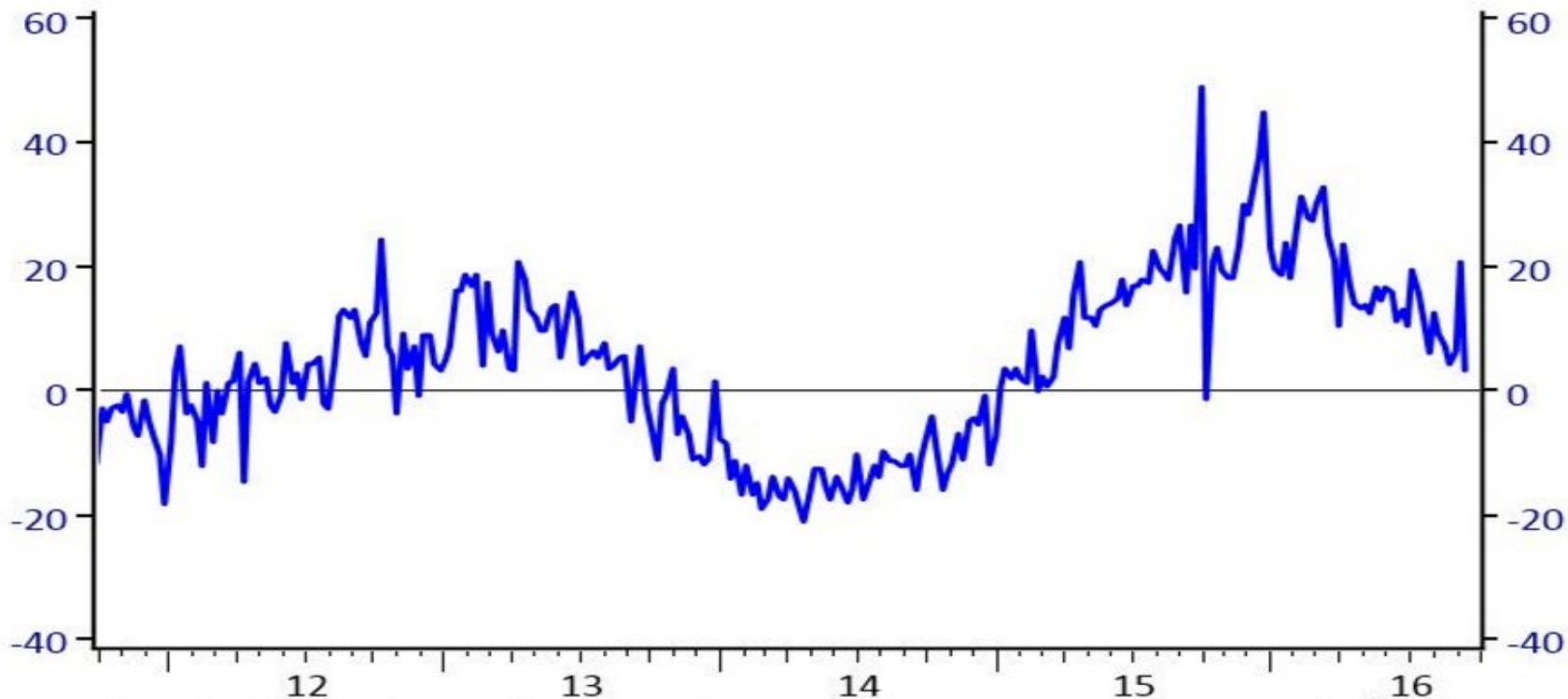






Mortgage Loan Applications for Home Purchase

% Change - Year to Year



Source: Mortgage Bankers Association

09/21/16



Housing Starts: Total: New Privately Owned Housing Units Started



Conclusions

- 2013's tax hikes and sequesters removed income and reduced spending
- 2014's oil capital expenditure boom supported positive spending growth
- The collapse in oil capex the end of 2014 removed that source of growth
- Nothing has replaced the lost spending
- The deceleration is likely to continue until spending more than their incomes sufficiently increases