JOHN TAYLOR'S CONTRIBUTIONS TO ECONOMICS

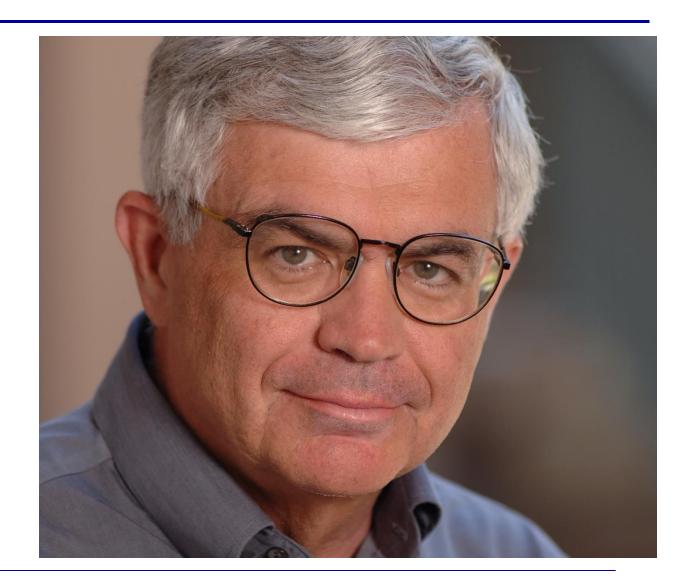
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IN PREPARATION FOR "CELEBRATION IN HONOR OF JOHN TAYLOR" HOOVER CONFERENCE

Introduction

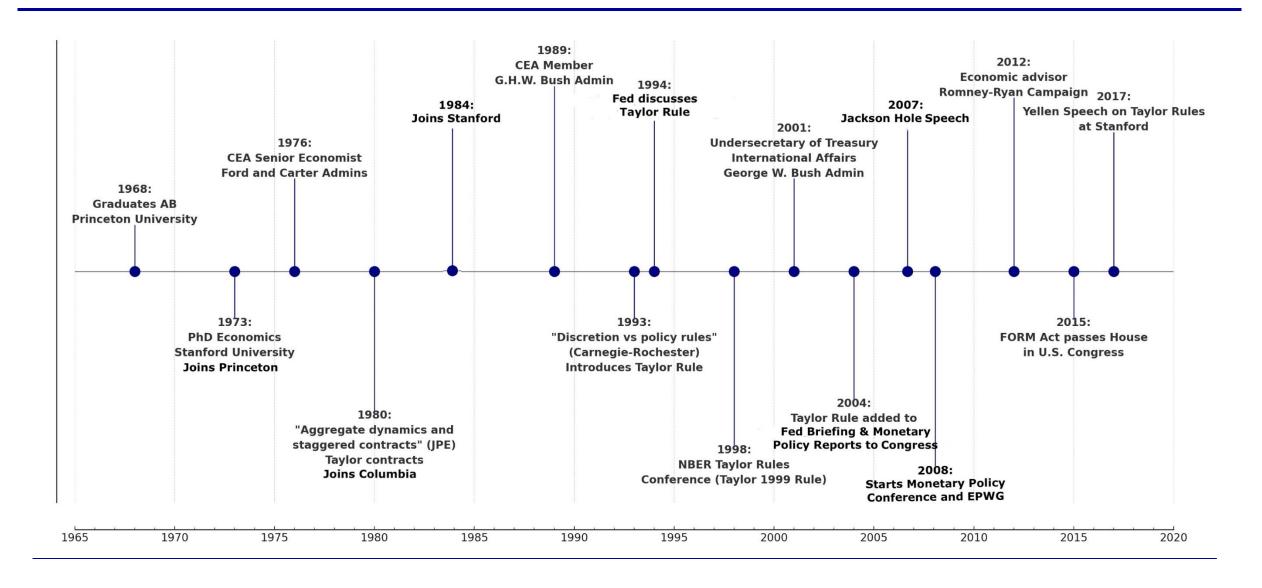
- John B Taylor is one of the greatest and most influential economists of the past 50 years
- His contributions transformed economic thinking and monetary policy making



Introduction: His Contributions

- Macroeconomic theory and econometrics with rational expectations.
- Staggered wage contracts. Early "sticky price" model, in which monetary policy affects output, and inflation with lags. Foundation of New-Keynesian macro.
- Taylor rule for monetary policy. Used by all central banks. JT developed it to a systematic framework for monetary policy.
- International policy interdependence. Following his rule avoids spillover effects
- Fiscal policy
- Warned of the Global Financial Crisis (2007), critique of policies that led to the GFC, and the following stimulus, QE, and slow recovery.
- A skilled US policy maker in the early 2000s.

JOHN TAYLOR KEY EVENTS TIMELINE



THE TAYLOR RULE

The Taylor Rule is a monetary policy guideline that prescribes how a central bank should adjust **nominal interest rates** based on deviations of inflation from its target and the output gap (actual and potential GDP).

$$i_t = \pi_t + r^* + 0.5(\pi_t - \pi^*) + 0.5(y_t - y_t^*)$$

Where:

- i_t is the nominal interest rate at time t.
- π_t is the rate of inflation at time t.
- π^* is the target inflation rate.
- r^* is the equilibrium real interest rate.
- y_t is the log of real GDP at time t.
- ullet y_t^* is the log of potential GDP at time t (so that $y_t-y_t^*$ represents the output gap).

TAYLOR RULE KEY IMPORTANCE

Policy Framework:

The Taylor rule uses the interest rate to control inflation while allowing countercyclical policy

The rule stems from the gold standard and money growth rules for predictable policy It establishes a strategic guideline for conducting and evaluating monetary policy that avoids discretionary policy mistakes

It provides critical information about how the CB will respond to future inflation and economic conditions, enhancing communications and transparency

It is easy to understand by policymakers

Taylor Principle:

Central banks should raise interest rates more than one-for-one when inflation rises

TAYLOR RULE KEY IMPORTANCE

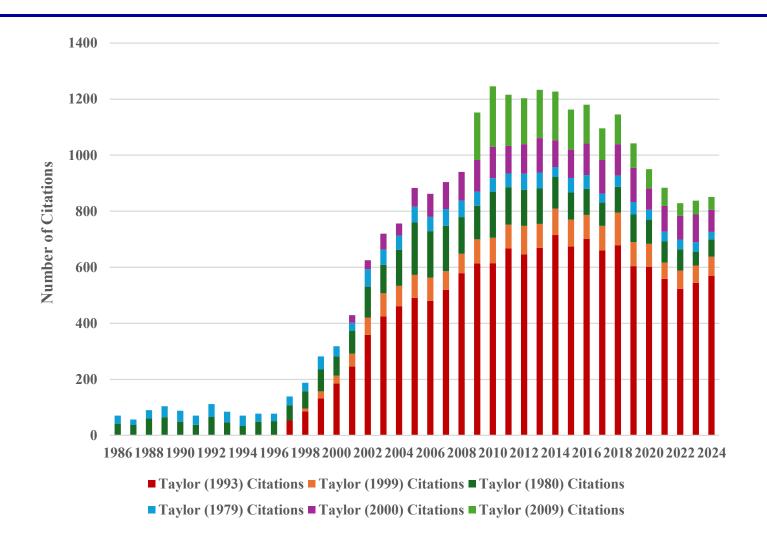
Theory:

The Taylor rule performs well in a wide variety of models. (Taylor and Weiland 2012). Robust to our imperfect models.

Active research: Best rule? Inflation only? Price level? Slow adjustment? Foreign exchange rates? (Taylor, no!) Varying r*? "Supply" shocks?...

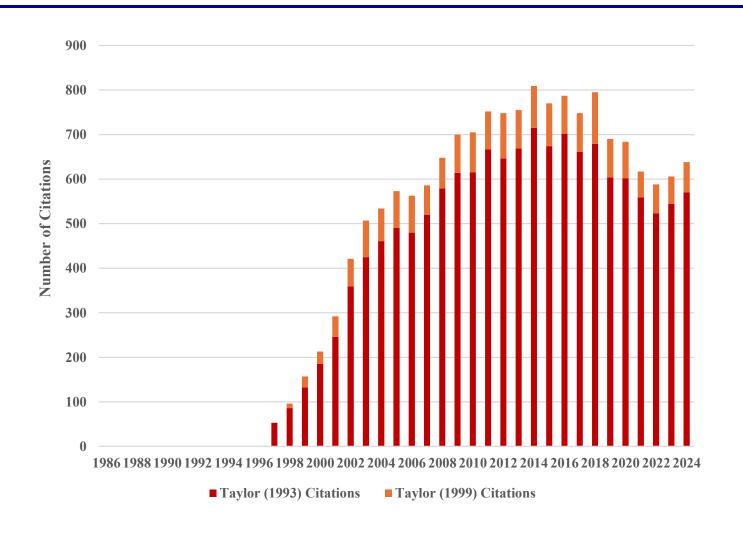
But keep it simple, transparent, accountable!

MOST CITED JOHN TAYLOR PAPERS

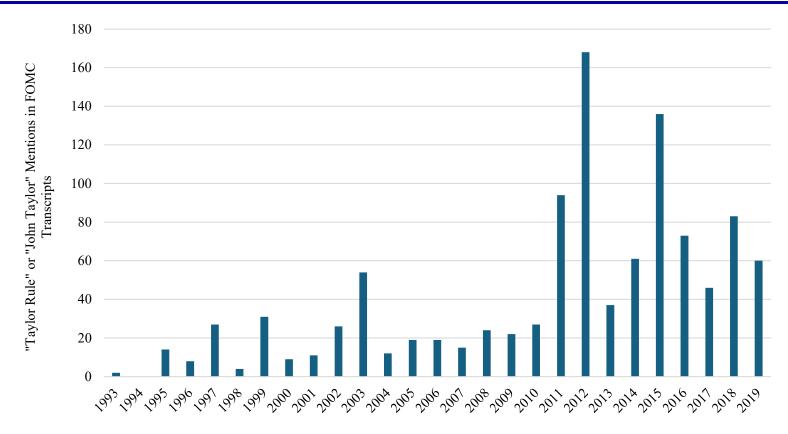


Source: Google Scholar

THE CITATION IMPACT OF TAYLOR (1993) AND TAYLOR (1999)



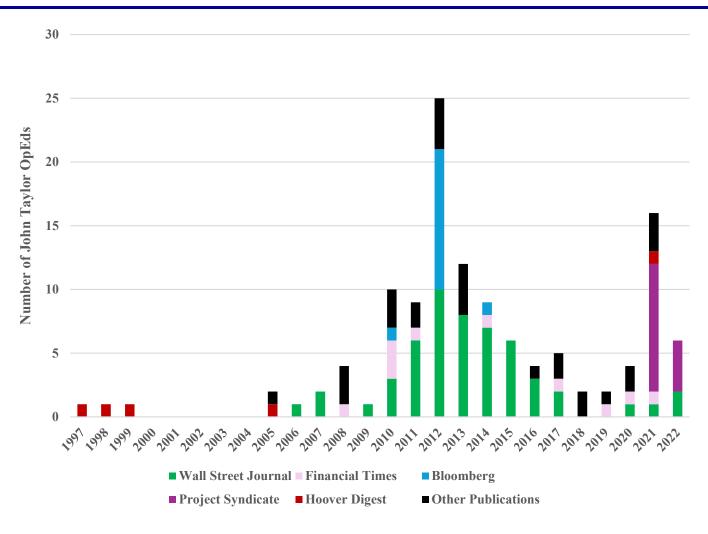
NUMBER OF "TAYLOR RULE" OR "JOHN TAYLOR" MENTIONS IN FOMC TRANSCRIPTS



"John Taylor has certainly been crazy successful in his promulgation of the Taylor rule"
- Jim Bullard, FOMC Meeting Transcript, March 19-20, 2019

Source: Federal Reserve Board, Inclusive of Any Mentions of "Taylor Rule", "Taylor (1993) Rule", "Taylor (1999) Rule", "Taylor (1993)", "Taylor (1999)", "Taylor-type Rule", "John Taylor", "Taylor" in a John Taylor specific-context ("Taylor 2 percent", or "Taylor uses GDP deflator", or "Taylor equation")

Number of John Taylor OpEds



Source: John Taylor Archives, Marie-Christine, John Taylor Personal Website (https://web.stanford.edu/~johntayl/)

IV. INTERNATIONAL MACRO POLICY INTERDEPENDENCE

- Should central banks react to exchange rates or foreign interest rates?
- Taylor: No, so long as they follow domestic (inflation, unemployment)
 policy rules. Now standard in large country central banks, and some
 smaller.
- "Great Deviation" (after Great Moderation). Too low rates, QE, international reactions and race to the bottom made things worse.
- The IMF should aid EMEs in adopting rules-based policies rather than advocate capital controls

The Global Financial Crisis and the Slow Recovery

- John Taylor (2007) saw the debt financed 2000-2007 housing boom, as a consequence of "too low for too long "policy.
- He warned of the GFC and was a prescient critic of the Fed and Administration's policies throughout the GFC and the Slow Recovery

Chart from *The Economist*, October 18, 2007



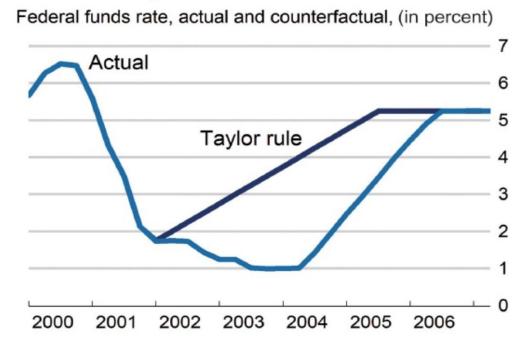


FIGURE 1.

THE GLOBAL FINANCIAL CRISIS AND SLOW RECOVERY

- Taylor and Williams (2009): Interest spreads largely reflected fears of insolvency, not illiquidity, as the Fed argued.
- The Term Auction Facility aimed at liquidity in December 2007 had little impact
- JT criticized Bear Stearns and AIG bailouts; discretionary TARP and bailouts increased policy uncertainty worsening the crisis.
- JT was an early and strong critic of 2009 fiscal stimulus.
- JT attributed the 2008-2016 slow recovery to QE and forward guidance as significant deviations from rules- based policy. Exchange rates transmitted Fed policies abroad.

JOHN TAYLOR IN GOVERNMENT

- John Taylor was Under Secretary of the U.S. Treasury for International Affairs 2001-2005 in the crisis years after 9/11
- Based on his rules-based approach in economics, his team of 'financial warriors" tackled many challenges:
- Creation of a new currency for Iraq; Saddam Hussein debt; financial reconstruction of Afghanistan; Argentine debt and currency crisis 2001 -2002; IMF reform (the Collective Action Clauses); World Bank marketoriented reform.