The FTPL: some skeptical remarks

Harald Uhlig\textsuperscript{1}

\textsuperscript{1}University of Chicago
Department of Economics
huhlig@uchicago.edu

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Five questions to FTPL advocates

1. What does FTPL want to be?
   - A theory that can be consistent with the data? **OK**
   - An equation needed to complete a system? **OK**
   - A theoretical or extreme possibility? **OK**
   - A set of predictions, which occasionally work in exotic circumstances (“Brazil”)? **PERHAPS**
   - A set of predictions, which help often (“Taylor coeff < 1”? ?
   - A useful framework for practitioners? ?
   - The miracle cure for the failures of other inflation theories? ?
   - A framework for the key interplay of fiscal and monetary policy? ?

2. Where is the “smoking gun”? What set of facts “scream” FTPL? Specific predictions?

3. Why is sovereign default off the table? Sure, a central bank can accommodate by inflating away debt ... is that all?

4. The US, Japan, the Eurozone have a near-deflation problem (is it?). Do you advocate “irresponsible” fiscal policies to solve this?

5. What advice would you give the sunspot-branch of macro?
What determines the price level, $P_t$?

1. FTPL: Gov. budget constraint (without default)

$$\frac{\text{Debt}_{t}^{\text{nom}}}{P_t} = \text{NPV}_{t}^{\text{real}} \text{(Primary fiscal surpluses)}$$

or:

$$\frac{\left(\text{Debt}_{t}^{\text{nom}} / \gamma_{t}^{\text{nom}}\right)}{P_t} = \left(\text{NPV}_{t}^{\text{real}} / \gamma_{t}^{\text{nom}}\right)$$

2. Quantity Theory: define velocity $V_t$,

$$M_t V_t = P_t Y_t = \gamma_{t}^{\text{nom}}$$

3. New Keynesian Theory:

[left intentionally blank]
What determines inflation, $\pi_t$?

1. **FTPL:**

   $\pi_t = g_{\text{Debt}^\text{nom},t} - g_{\text{NPV}^\text{real},t}$

2. **Quantity Theory:**

   $\pi_t = g_{M,t} - g_{Y,t}$
   
   or

   $V_t \equiv \bar{V}$

3. **New Keynesian Theory:**

   **Phillips:** $\pi_t = \beta E_t[\pi_{t+1}] + \kappa x_t + \epsilon_t^p$

   **IS:** $x_t = E_t[x_{t+1}] - \frac{1}{\sigma} (i_t - E_t[\pi_{t+1}] - \bar{r}) + \epsilon_{i}^d$

   **Taylor rule:** $i_t = \bar{r} + \bar{\pi} + \phi_\pi (\pi_t - \bar{\pi}) + \phi_x x_t + \epsilon_{i}^m$
Inflation in the US
Inflation vs Debt Change in the US
DEBT/GDP in the US

Source: Federal Reserve Bank of St. Louis, US. Office of Management and Budget research.stlouisfed.org
Inflation in Japan

Source: World Bank
research.stlouisfed.org

myf.red/g/2nXJ
DEBT/GDP in Japan

Source: International Monetary Fund
research.stlouisfed.org

myf.red/g/2PG2
Velocity of Money (M2): US

Source: Federal Reserve Bank of St. Louis
research.stlouisfed.org
Velocity of Money (M2): Japan, US, Europe

Monetary Policy Rules

\[ M_D \] 

\[ M_S = \bar{M} \] 

\[ M_S: i = \bar{i} \]
The US narrative for inflation
A new US narrative for inflation?

[Graph showing Federal Debt: Total Public Debt and Inflation, consumer prices for the United States from 1970 to 2010.]
Can you calculate the price level, $P_t$?

1. FTPL: Gov. budget constraint (without default)

   \[ P_t = \frac{\text{Debt}_{t}^{\text{nom}}}{\text{NPV}_{t}^{\text{real}}} \]  

2. Quantity Equation: define velocity $V_t$,

   \[ P_t = \frac{M_t \bar{V}}{Y_t} \]  

3. I would use (1), not (2).

4. Ok, “calculate” does not mean “determine”. Still ...
Conclusions of a Skeptic

1. Lots of colleagues now dismiss FTPL out of hand. Perhaps, they shouldn’t be. Scientists should remain open-minded (how long?).

2. Inflation is hard to explain. If FTPL wants to be the alternative, make it compelling.

3. Fiscal-monetary policy interaction is interesting. Much of that is outside FTPL.

4. How to bring back dismissive colleagues? Tough. Compelling narratives, compelling evidence and “smoking guns” may be a good start.