A Demand Theory of the Price Level

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SUMMARY

How is the price level determined?

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Enough to have two simple assumptions:

1. **Incomplete** markets
    - precautionary saving
2. G and T set in **nominal** terms

The Model

Very nice/clean idea

Simple intuition in Steady State
(paper is more general)

$$Y = C + \frac{\$G}{P}$$

1. Nominal G

   $\Rightarrow$ If $P \uparrow$ lower *real* demand by the gvt

2. Incomplete markets

   $\Rightarrow$ Private demand C does not respond 1-to-1

The Model

When $P \uparrow$, the gvt absorbs fewer resources:

- PIH (steady state):

$$c^i = Assets^i + y^i - \frac{\$T}{P}$$

$\Rightarrow$ Consumption responds 1-to-1: $C \equiv \int c^i = Y - \frac{\$T}{P}$

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- Precautionary saving:

$$c^i = f\left(Assets^i + y^i - \frac{\$T}{P}\right)$$

f concave and $f(x) < x$

$\Rightarrow$ Part of extra income is saved!

The Model

Not so fast:

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Not here: Fiscal & Monetary policies determine real rate:

$$\left.\begin{array}{l} \blacktriangleright \text{ Growth rate of } \$G \Rightarrow \text{inflation} \\ \\ \blacktriangleright \text{ Nominal interest rate set by CB} \end{array}\right\} \Rightarrow \text{real rate}$$

$\Rightarrow$ Only P left to clear goods (and asset) market

Comments

Precautionary saving

Key assumption: C must respond less than 1-to-1

1. Heterogenous agents (borrowers/savers) not enough (Eggertsson and Krugman 2012)
    - but risk + **nominal** contracts should work...
    - reinterpret taxes in Huggett economy?
2. Must ensure that precautionary motive does not vanish (Krusell and Smith 1998)

Comments
Commitment

Key assumption: (Some) spending/taxes are nominal

Different from commitment to *real* surplus in FTPL...

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... but still government needs strong commitment

Suppose P_t grows over time...

- $\$T/P_t, \$G/P_t \to 0$
- Will the government stick to its policy?

Comments

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Agents save with (safe) government bonds

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- What happens when private sector can supply safe assets?

Interesting/novel prediction:

P.S.'s ability to supply safe assets has implications for P_t