

Discussion of:

“Elastic Money, Inflation, and Interest Rate Policy”

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The views expressed herein are my own and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System.

Overview

- Interesting paper
 - takes a serious look at central bank policy tools
 - distinguishes between interest rate target and the money supply
 - says a lot about how policy tools can be used

Outline:

- Review the different policy tools and why they are needed
 - try to build up intuition, step-by-step
- Some specific comments

A Simple Model

- Consider a Lagos-Wright model with one modification
 - aggregate shock to utility in the decentralized market

Q: What is the optimal monetary policy?

A: The Friedman rule

- agents would carry sufficient real balances to purchase the efficient amount of consumption in the *highest* state
- in most periods, agents would end up with “idle balances”
- no loss from this (because of Friedman rule)
- could add credit markets; would not change anything

Death and (inflation) Taxes

- Suppose λ randomly-selected agents die each period
 - shock realized at beginning of decentralized period; death occurs at end of period
 - these agents will spend all of their money (regardless of shock)
- Friedman rule no longer leads to the efficient allocation
 - if everyone carries large real money balances ...
 - exiting agents will consume too much
- Could set M_{t+1} contingent on shock at date t
 - changes in M_{t+1} affect p_t in *previous* decentralized market
 - could inflate away the “excess” balances of exiting agents

Credit Markets and Money Growth

- Of course, this distorts consumption of continuing agents
- So ... suppose these agents have access to credit markets
 - structure markets so that these agents always consume the efficient quantity
 - regardless of changes in money supply, nominal interest rates
- Then CB can use state-contingent money-growth rule to implement efficient allocation (conjecture)
 - continuing agents operate in perfect credit markets
 - active monetary policy ensures efficiency for exiting agents
 - only one policy tool is required for efficiency

Interest Rates

- Now suppose CB can only adjust money supply infrequently
 - two “decentralized” subperiods per “centralized” one
 - different preference shocks in each subperiod
- Then one policy tool (the money supply) is no longer sufficient
- Short-term interest rate (at which CB will borrow/lend)
 - affects nominal spending of continuing agents
 - ⇒ affects price level in decentralized market
- Now CB has three tools and two objectives
 - problem would be solved, except ...

Balancing Act

- Zero lower bound on nominal interest rates
 - When A_t is very low, want price level to be high
- ⇒ set interest rate low to raise nominal spending
 - but ... may not be able to set it low enough
 - inflation can partially mitigate this problem
- Optimal policy is not simple
- Interest-rate and money-supply policies both play important roles

(1) The Meaning of Life ... and Death

- Exiting agents described as “lacking access to loan market”
- But death (in this model) is more than that
 - these agents do not care about future consumption
 - otherwise, they would carry excess money balances into centralized market
 - Friedman rule would implement the efficient allocation (even with many subperiods, shocks, etc.)
- How should we think about these agents?
 - for example: how would one “calibrate” λ ?
 - needs to be significant (20% per period in examples)

(2) The Goal of Policy

- Useful to keep in mind what policy is trying to achieve
- Here: *increase* the volatility of consumption
 - basic problem: consumption decisions of exiting agents are insensitive to shocks
 - policy needs to induce volatility in price level
- Different from the “usual” story
 - central bankers try to limit volatility of consumption, output
- Does this difference matter?
 - What is the objective of the paper?

(3) Policy Tools

- Here the central bank is able to set money supply, short-run interest rate independently
 - most central banks cannot do this
 - open market operations are used to set the interest rate
- Paper shows how a CB can separate the two policies
 - a particular way of paying interest on reserves
- If money supply is an independent tool, how should it be set?
 - important question; not much guidance available
 - this paper provides an answer: can target the price level at different horizons

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- FRBNY workshop on Money and Payments
 - October 17, 2008 in New York
 - watch for Call for Papers (deadline: Aug. 1)
- Topic: Implementing Monetary Policy
 - want to encourage research into the details of how central banks operate
- One motivation: Interest on reserves
 - Federal Reserve has been granted authority to begin paying interest on reserves
 - how should this authority be used?