Comments: A Theory of Macroprudential Policies in the Presence of Nominal Rigidities

Gauti Eggertsson,

Brown University

Motivation

- Macroprudential policy
  - Regulations/taxes on financial variables to reduce the risk and the macroeconomic costs of financial instability
- Macroprudential vs. microprudential policy
  - Micro-prudential aimed at soundness of individual institutions
  - Macroprudential focus on macroeconomic system as a whole
- Lots of discussion following the crisis calling for much bigger role for macroprudential policy.
- Key theoretical underpinning of macroprudential policy
  - Externalities

Externalities and macroprudential policy

- Until now much of the work on macroprudential policy is focused on
  - Pecuniary externalities – externalities through prices Grenwald and Stigliz (1986).
  - Cancel each other under complete markets
  - Macroprudential policy justified when incomplete markets.
- My view: Does not really capture why people are asking for macro prudential policy.
  - Want it to avoid events like we see today: Big recession that can't be cured by cutting nominal interest rates.
  - Perception this was triggered by problems in finance … need more regulation/taxes on finance.

This paper: Demand Externalities

- These arise even when asset markets are complete.
- Key frictions: Prices are rigid and policy constrained for some reason.
- Demand externalities can also be used to justify “macro-prudential policy”.
- My suspicion: Much closer to the actual rationale people give for macroprudentials.

What is aggregate demand externality?

- My interpretation: If I buy stuff this increases the overall level of output for everybody in the economy beyond my private benefits which is good in a recession.
- Loosely speaking: My spending – your income and your spending – somebodies else income and spending …… etc …… old multiplier argument

What is aggregate demand externality? – and elegant formulation

With recession looming George Bush encourages people to go shopping more.

- As we to meet the challenges of the 21st century, we must also work together to achieve important goals for the American people here at home. **This work begins with keeping our economy growing. … And I encourage you all to go shopping more.**

What is aggregate demand externality?

- Isn’t this just some old Keynesian fairytale?
- When does it apply in modern models?

Key contribution of paper

- Take aggregate demand externalities from a fairytale to series of propositions.
- Loosely speaking….
- Ex ante it mattes a lot who has the money (MPC different) in a recession for aggregate output when policy constrained.
- This fact is not internalized by private agents when signing financial contracts.
- Contribution here: Show this has important implications for macro-prudential policy

This paper

- Proposes a unified framework for analyzing demand externalities and macro prudential policy
- Ex ante people don't take into account the positive (negative) externality their asset positions has on aggregate demand in the future.
- Authors provide formulas that precisely calculate those externalities and taxes to correct them.
- Show examples when they apply (and when not)
- Also compute ex post optimal policy.

Approach of paper

- Characterize optimal policy with certain set of tax instruments in an elegant abstract example.
  - Rule out commodity taxes that would do away with the inefficiencies associated with monetary policy.
- Show how these instruments are set so as to make agent internalize aggregate demand externalities.
- Show that these instruments imply active ex ante "macroprudential policy" in specific examples.
- Also show ex post optimal redistribution
- Outline: First general → Various examples

Synthesis of authors work

- Dealing with the Trilemma: Optimal Capital Controls and fixed Exchange Rates.
- Fiscal Unions
- Work on the zero bound.

Eggertsson-Krugman (2012) economy

$$E_0 \sum_{t=0}^{\infty} \beta(i)^t \log C_t(i) \text{ with } i = s \text{ or b}$$

$$D_t(i) = (1 + r_{t-1}) D_{t-1}(i) - \frac{1}{2} Y + C_t(i)$$

$$(1 + r_t) D_t(i) \leq D^{high} > 0$$

$$\beta(s) = \beta$$

Experiment: “Deleveraging” shock

- Minsky Moment→ A reduction (unexpected) in this limit.
- Need to deleverage: Unexpected exogenous drop in the debt limit the borrower *must* satisfy

- Debtor cuts down his spending. $D^{high} \longrightarrow D^{low}$
- Real interest rate needs to drop to get saver to spend
- With nominal frictions, may not be possible (real interest rate stuck due to zero bound), can have serious macroeconomic consequences.
- Large demand side recession

Here: Add prior state

- Suppose we consider period 0 when the agents contracted the debt
- Key point, debtors do not take into account the negative externality of deleveraging, even ***if they anticipate a "Minsky moment".***
- Policy: Want to impose a tighter cap on lending to have people internalize this.
- Show policy will choose lower D than given by model.
- Good example of "macro-prudential".

Intuition

- In a liquidity trap you want to borrowers to have more wealth because they have higher MPC.
- Macro prudential policy limits the their ability to borrow ex ante, hence they have more resources in recession→ more spending → more output.
- Nice bottom-line
  - You want to use macro prudential policy in period 0
  - You don't want to "curb the bubble" by raising rates at that time.

Only one examples of a general principle

- Demand externalities prevalent whenever monetary policy is constrained.
  - Zero bound in general
  - Currency pegs
    - Capital controls
  - Monetary Union
    - Large scope for for intervention
  - Insight even more general that this. Not crisis specific

Comment

- Can even take this further.
  - Any model with an inflation-output tradeoff and some agent heterogeneity.

  →Scope for corrective taxes on financial transactions.

  →Bottom-line: With demand externalities financial ***markets inefficient in general.***

  →***Somewhat disturbing and radical conclusion.***

Comment: Practicalities

- Do we know enough to implement effective macro prudential policies?
- Example: What is the right “cap” on lending?
- How do we intervene in asset markets?

Conclusion

- There is role for macroprudential policy.

But…..

…..we know very little about how to do it.