# Discussion of A Neoclassical Analysis of the Asian Crisis: Business Cycle Accounting for a Small Open Economy

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#### Motivation of the paper

- 1. Present a *new* set of facts about the Asian Crisis.
- 2. Use these new facts to assess alternative explanations about the causes of the Asian crisis.

## The Asian crisis was an event. How does one summarize the key facts associated with that event

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#### What are the old facts?

- Old style facts:
  - □ Document percent decline in output and other variables
    - □ impact
    - □ Persistence (how quickly these variables recovered)
  - □Example of old style facts
    - Fact: Output and consumption decline by about the same amount.
    - Researchers then try to produce a model that can reproduce this fact.

#### New Facts

- Recently a number of different researchers have proposed that we can learn more by imposing priors on the data.
- Old facts impose a form of prior:
  - ☐ Which facts are important?
    - Response of output as compared to the response of inventories.
    - How to filter the data
- New Facts impose much stronger priors:
  - □ Structural VARs (How monetary policy effect output, prices and interest rates)
  - ☐ Business Cycle Accounting. (Representative agent model)

### Why might we need a new set of facts to account for the Asian Crisis?

- Bob Lucas' view: there are too many facts already!
- Other views:
  - □Old facts aren't sharp enough to distinguish between competing theories (Observational equivalence?).
  - □New facts may shed light on which theory offers the best explanation.

### All of the New facts are highly contentious

- Structural VAR's
  - ☐Do the priors make sense? Does a surprise increase in money supply actually lower the nominal interest rate? (Liquidity Effect)
  - □ Do structural VARs uncover structure?
- Real Business Cycle Accounting
  - □ Do the priors make sense?
  - Does this method uncover structure?

### What are the maintained priors in BCA?

- 1. The good allocations are those associated with a social planners problem for a representative agent economy.
- 2. The *functional form* and the *specific values* of the structural parameters are known.
- 3. It is OK to ignore correlation among the wedges.

#### Representative agent model

- There are different views in the profession.
  - One view is that the representative agent model is dead. Its unlikely that we'll resolve asset pricing anomalies in a representative agent model.
  - ☐ Alternative view: representative agent model is perfectly fine for considering aggregate risk events. These events can't be insured.
  - ☐ My view is its fine to limit attention to that model.

### Functional Form and specific values of the parameters are known

- Do producers in Thailand operate the same equipment, structures as in the U.S.?
- Is it reasonable to ignore farming in Thailand?
- Are preferences the same in all countries?

#### Correlation among wedges

 Impossible to identify the individual contribution of a single wedge until it is purged of its correlation with other wedges.

### If "it works" these details may not matter!

- "It Works" (defined)
  - □ Does this new set of facts rule out any *existing* theories?
  - □ Does this new set of facts lead to the development of a *new* theory?

### Does this new set of facts rule out any existing theories?

- No.
- This could be explored: derive the efficiency and other wedges in other models. Show that they can't reproduce movements in this wedge.
  - 1. Solve and simulate data from the candidate model.
  - 2. Use the simulated data to conduct a wedge analysis.
  - 3. Compare the resulting simulated wedges with wedges based on actual data.

### Sometimes thinking about wedges helps come up with new ideas

#### Example:

Difficult to come up with ways to decentralize efficient allocations in dynamic models with private information. Tyvinski and Goloslev(2005) came up with a way to decentralize a model with disability by thinking about what taxes distort which wedges and were able to derive a competitive decentralization scheme.

### Does this paper deliver a new and better model?

No.

#### How to build a better new model?

- My view of BCA accounting
  - □ Something that you try late at nite in your office when you are trying to come up with a new model.
- The punch line though is *not* to describe what you do late at nite in your office!
- But to deliver a new model and document how well it performs:
  - □Old facts (reproduces output and consumption declines
  - □ New facts (and thereby produces wedges that are small).

### Three strategies for strengthening the paper

- 1) Show that these new facts help to build a new and better model.
- 2) Show that these new facts rule out particular existing theories of the Asian Crisis.
- 3) Look for robust conclusions across a variety of models.

#### Smaller points: about the new facts

- 1. Decline in efficiency wedge in all countries
- 2. Decline in labor wedge in all countries
- 3. Decline in investment wedge in all countries
- 4. Foreign debt wedges rise in Korea, Singapore and Hong Kong.

#### Efficiency wedge falls

$$Y_t = F(A_t, K_t H_t)$$

- A) Output fell a lot
- B) Capital didn't change
- C) If labor didn't fall, how did output fall by so much?
  - 1) Do Hong-Kong, Singapore and Thailand have great insurance?
  - 2) Do the official statistics on the labor market represent what actually happened in the labor market in these economies?

#### Labor wedge falls

Conclusions about labor wedge depend on preferences.

Previous work on emerging countries finds that it is difficult to reproduce the facts with a standard utility function. Resolution is to use GHH.

From the perspective of wedge analysis changing the utility function from that used by CKM doesn't make sense. Do agents in Thailand have different preferences for leisure than Americans?

#### Role of preferences in labor wedge

- If it is assumed that the preferences are Cobb-Douglas instead the results line up better with my priors about what happened in Asia during this period.
- 1) Labor wedge shoots up at the time of the Asian crisis.
- 2) Foreign debt wedges decrease.

### Which model preferences makes more sense?

- Do we really think that labor wedges fell during this period?
- My priors lead me to place more weight on a utility function where labor supply responds to changes in income and interest rates. With this specification the labor wedge rises.

#### Investment wedge falls in all countries

- Wrong sign!
- Christiano and Davis (2006) report specifications in which the sign of the investment wedge are flipped and its role is much more important.
- Could this happen here?

#### Foreign debt wedge

3) Nature of the Foreign Debt wedge.

CKM: shocks to the trade balance are demand shocks. Sudden improvements in the trade balance during crises represent sudden stops of capital inflows.

Otsu: shocks are to the domestic real interest rate premium.

### Foreign debt wedge (What is exogenous?)

- Did shocks to exogenous interest rates improve the trade balance
- Or did exogenous shocks to the trade balance move interest rates?
- Hard to say. Probably makes sense to try both hypotheses.