Comments on "Japan's Banking Crisis and Lost Decades"

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Before I start …

OK, "Lost Decade**s**" is too much…

Too early to conclude that we are in twenty years of slump (I hope).

Model of the Paper

Flow of funds

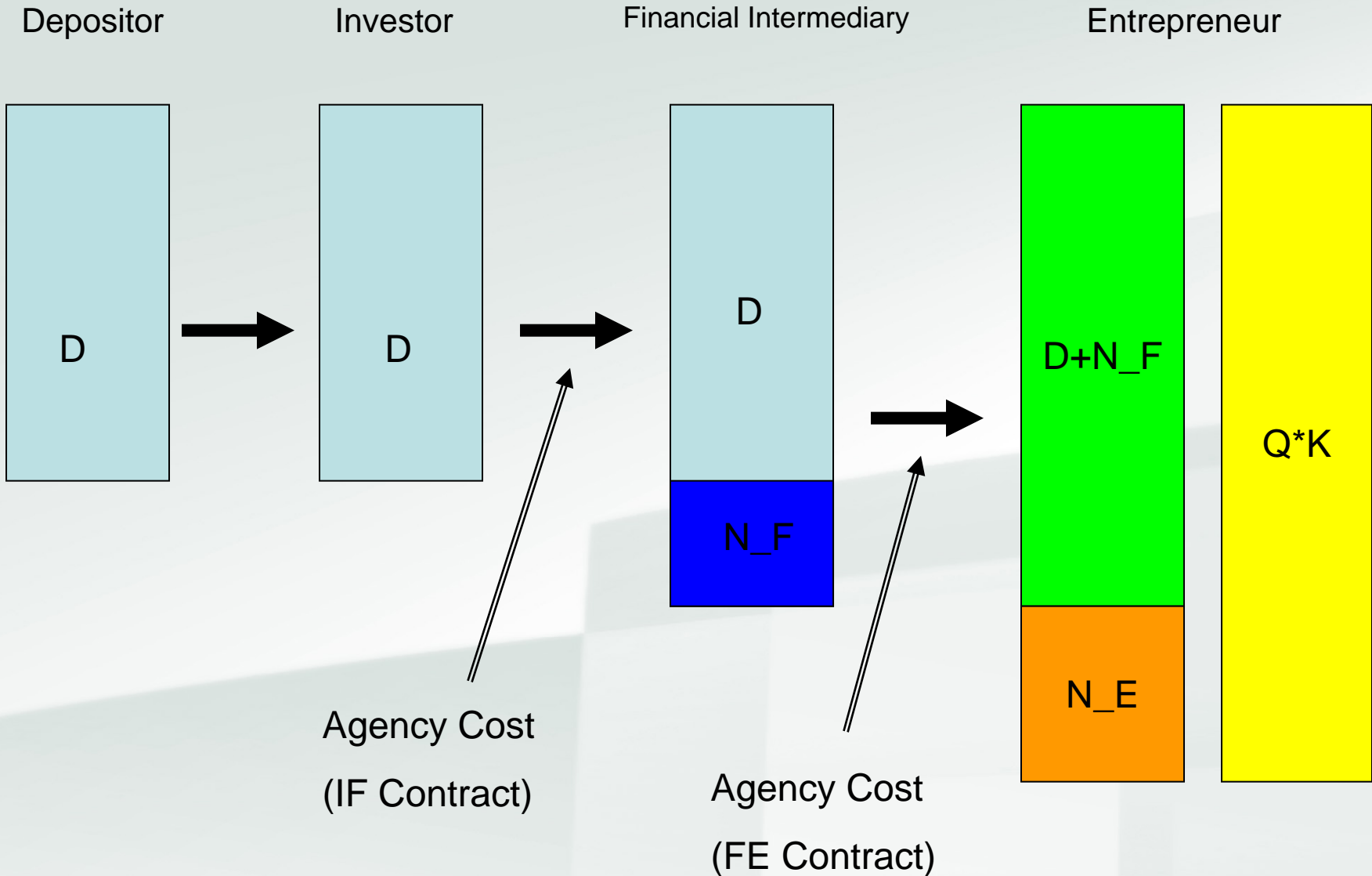Depositor $\Rightarrow$ Investor $\Rightarrow$ Financial Intermediary $\Rightarrow$ Entrepreneur

Depositor: risk-averse, ultimate lender

Investor: risk-neutral, faces agency cost (IF contract)

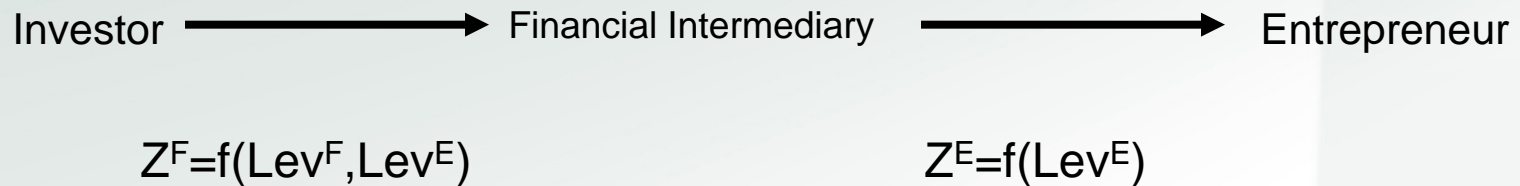Financial Intermediary: risk-neutral, faces agency cost (FE contract)

Entrepreneur: risk-neutral, ultimate borrower

Model of the Paper

Model of the Paper

Borrowing rate and Lending rate:

Investor $\longrightarrow$ Financial Intermediary $\longrightarrow$ Entrepreneur

$Z^F = f(Lev^F, Lev^E)$ $\qquad\qquad$ $Z^E = f(Lev^E)$

IF contract depends on leverage of F.I. and entrepreneur.

FE contract depends on leverage of entrepreneur.

Model of the Paper

- Contribution of the paper:

1. Incorporates banking and corporate sector balance sheets in one model.

Previous studies – only corporate sector (e.g. BGG(1999)) or only banking sector. Two sectors in one model is rare.

2. Embeds corporate net worth shock and banking net worth shock

$\Rightarrow$ Useful for analyzing U.S. financial crisis and Japanese lost decade.

Empirical Results

1. Japanese data from 1981 to 2007
   - Includes 'zero' interest rate era

2. Analyze the importance of financial shocks (corporate and banking net worth shocks) during the lost decade.

Previous studies emphasized the importance of TFP shock (Hayashi+Prescott 2002) and Investment-specific technology shock (Hirose+Kurozumi 2010).

Empirical Results

- Empirical findings of this paper:

Both corporate and banking net worth shocks are important in accounting for the Japanese lost decade, especially for business fixed investment.

Two net worth shocks are as important as investment-specific technology shocks in accounting for the variation in business fixed investment.

$\Rightarrow$ Sheds a new light in understanding Japan's Lost Decade.

Some Comments: Model

1. Where is the foreign sector? Exchange rate?

    Net export and real exchange rate movement are also important factors of business cycle in Japan. (e.g. During the Lost Decade, there was strong appreciation of Yen.)

$\Rightarrow$ At least need to expand the model to <u>small-open economy model</u>. Closed economy model is not appropriate for Japanese economy.

Some Comments: Theory

2. Regarding IF contract, premium depends on the leverage ratios of banking sector and corporate sector.

    Further, it seems to be that IF contract is dictated by financial intermediary, not investor. Is this realistic? Shouldn't the investor dictate the contract?

    Idyosyncratic shock to financial intermediary (i.e., ω^F). What is this?

Some Comments: Empirical

3.   Data used for estimation:

GDP, Consumption, Investment, GDP Deflator, Call rate, Net worth of banking and corporate sectors.

$\Rightarrow$ Why not use credit spread data or other financial variables? Since the model has rich structure in financial sector, better utilize more financial data.

$\Rightarrow$ In the paper, you compare with financial indicators. Why not utilize these indicators?

$\Rightarrow$ Data-Rich Estimation (Boivin+Giannoni 2006)

Some Comments: Empirical

4.   Identifications of net worth shocks:

So the financial data observed in the model are call rate, net worth of banking and corporate sectors. (Only three data)

$\Rightarrow$ Can you identify the financial shocks without external finance premium information (e.g., credit spread data)?

$\Rightarrow$ Non-financial data won't help you identify the financial shocks (they are both aggregate supply shock).

$\Rightarrow$ Check your IRF regarding net worth and verify that they are qualitatively different.
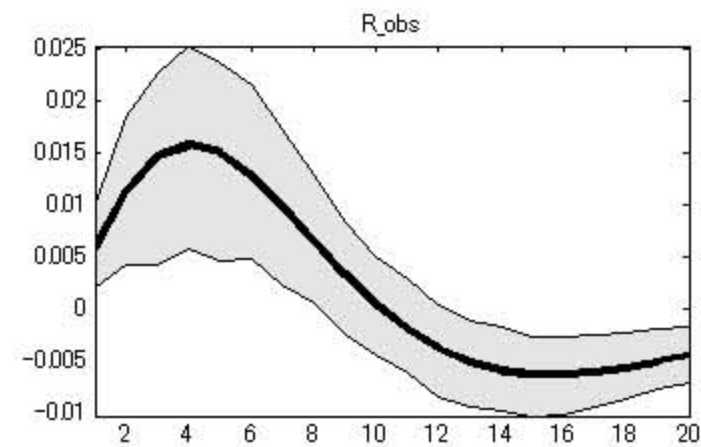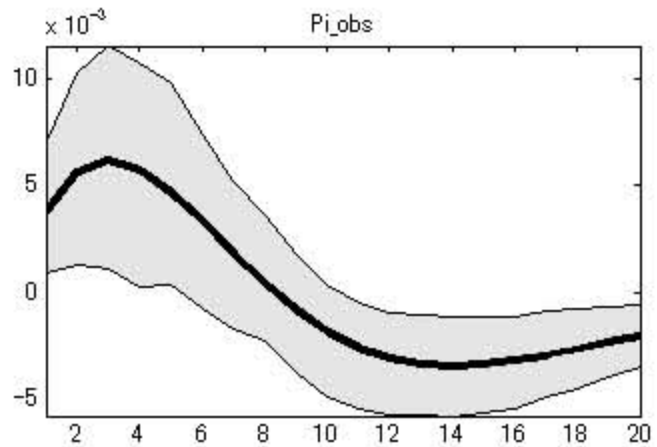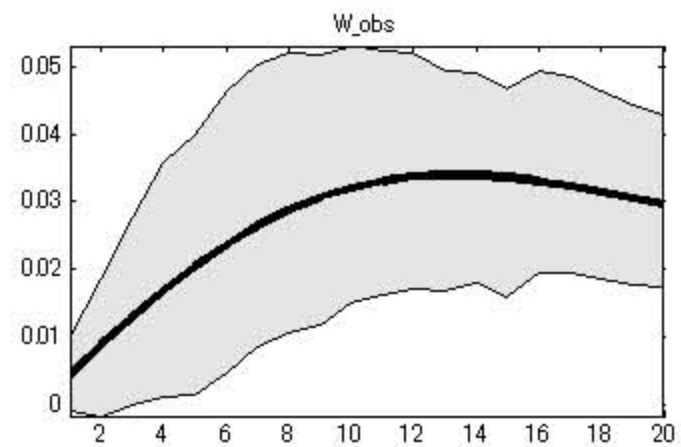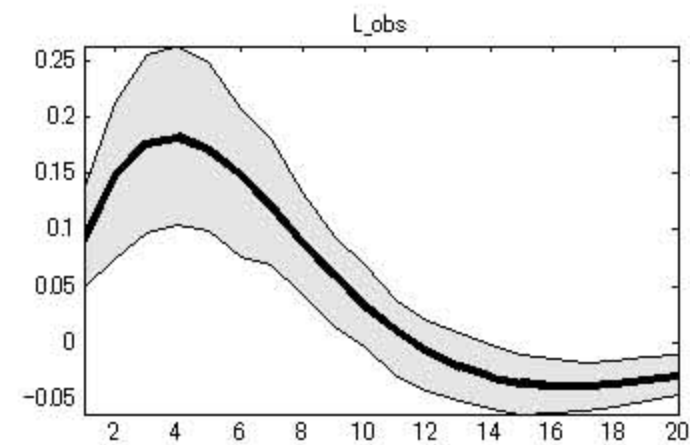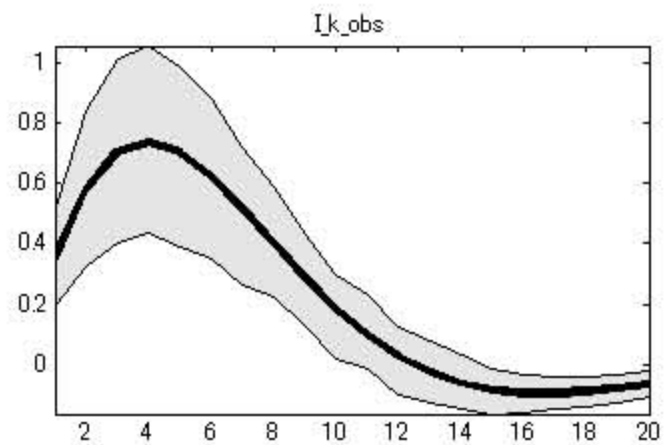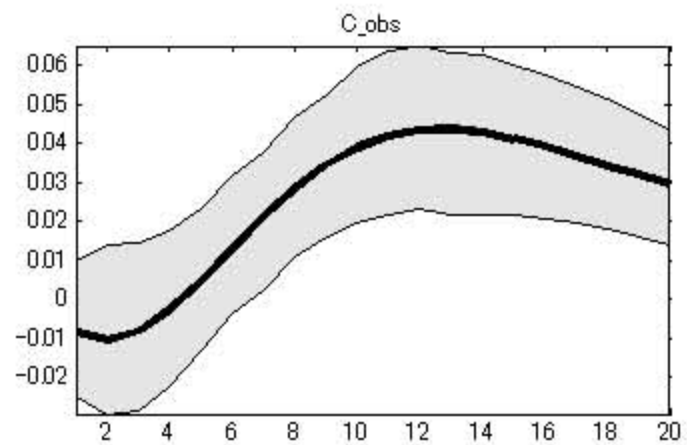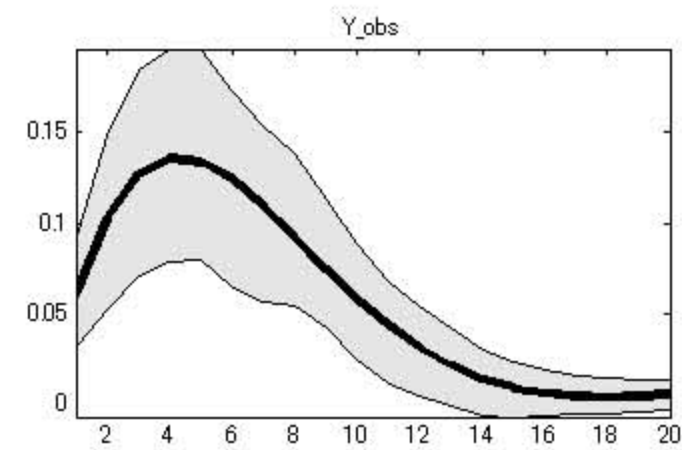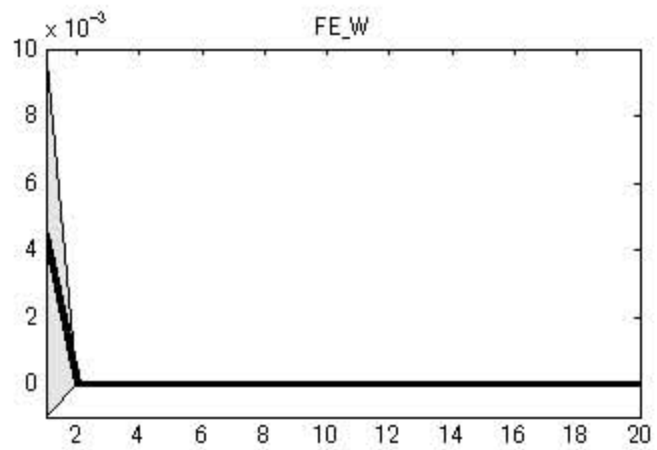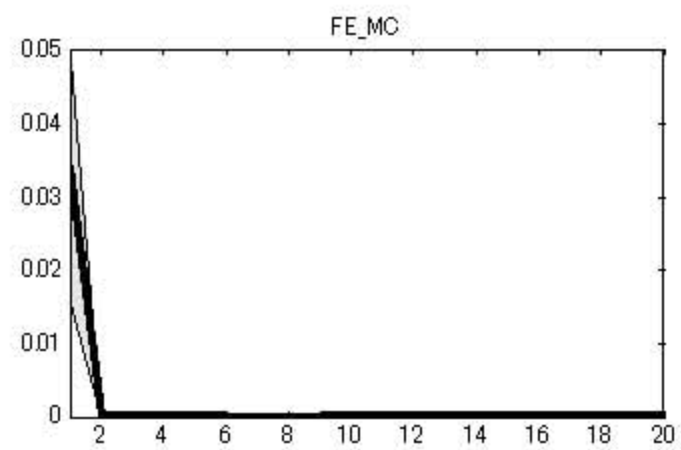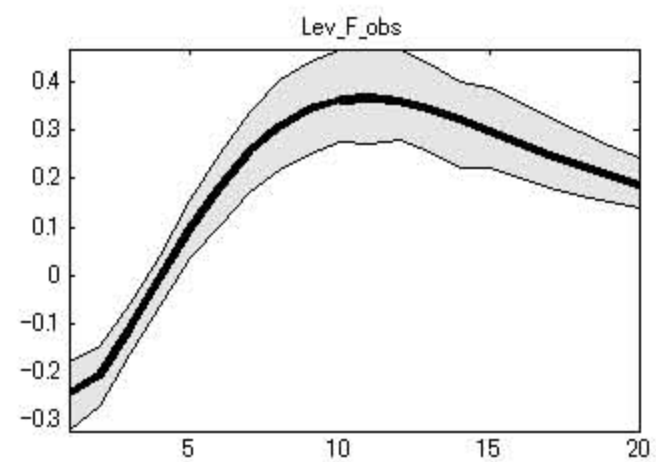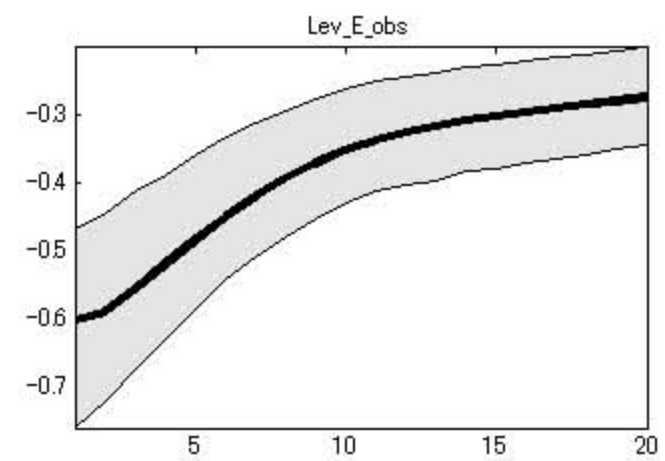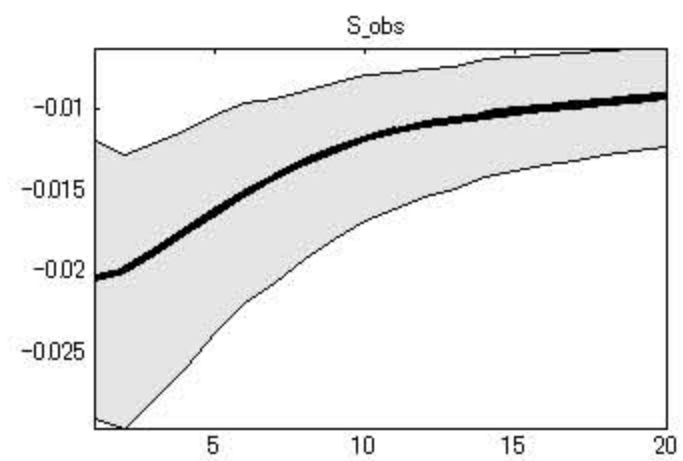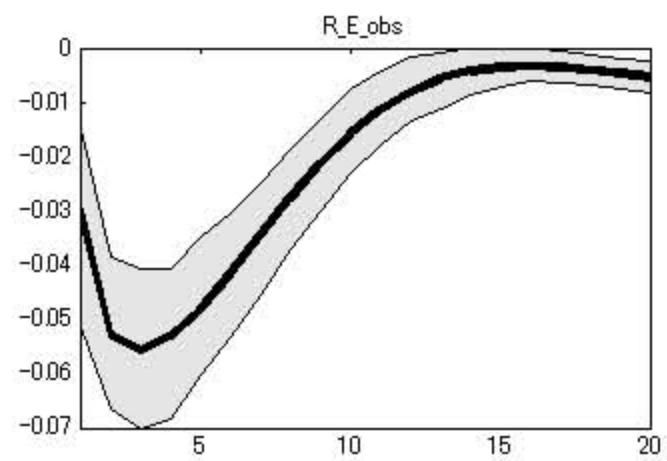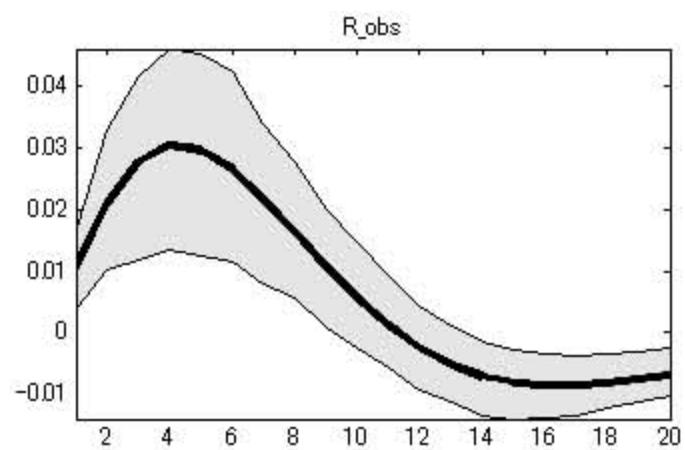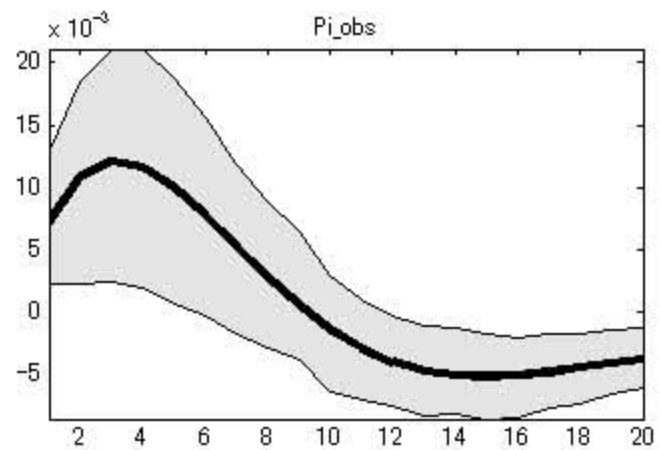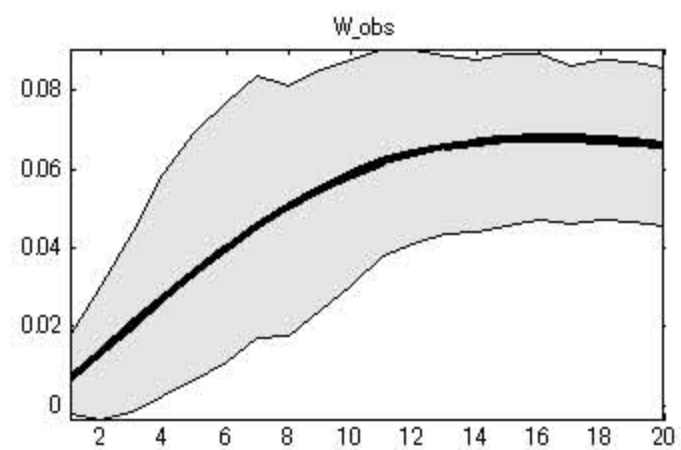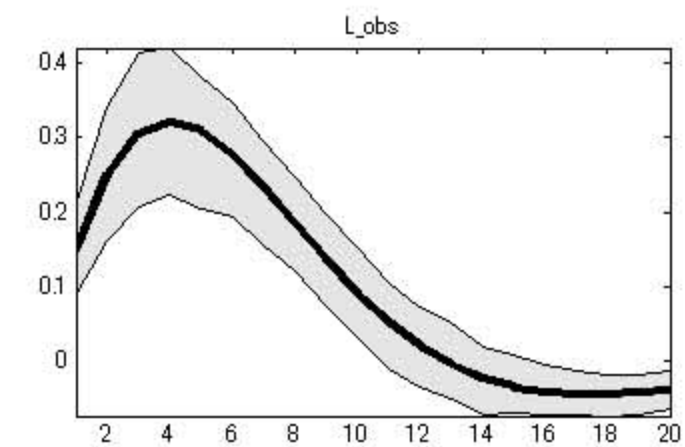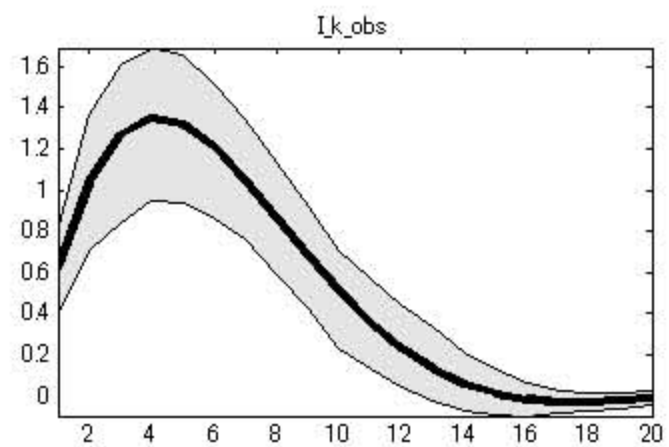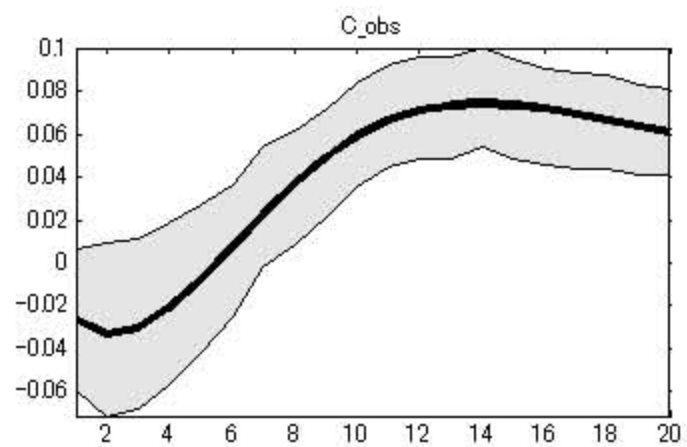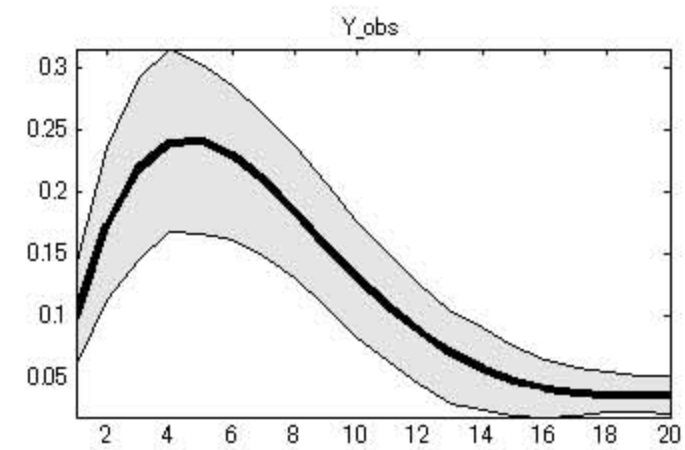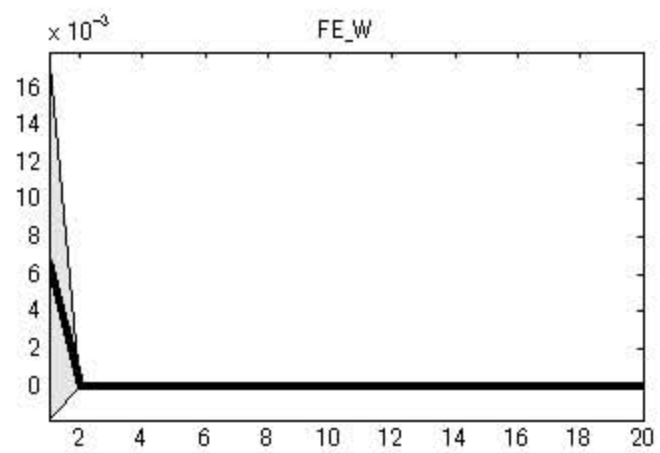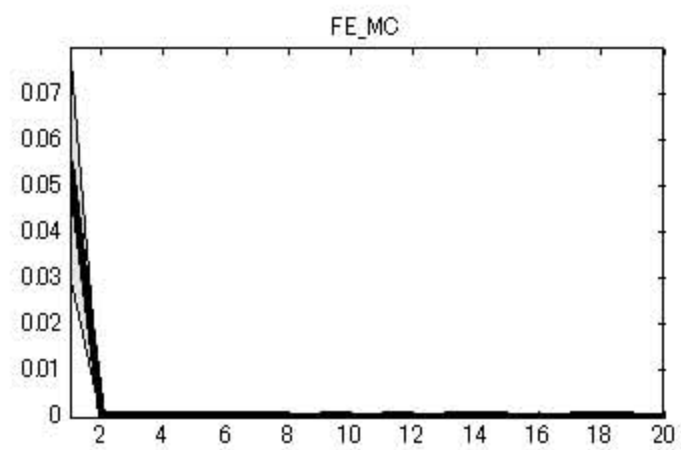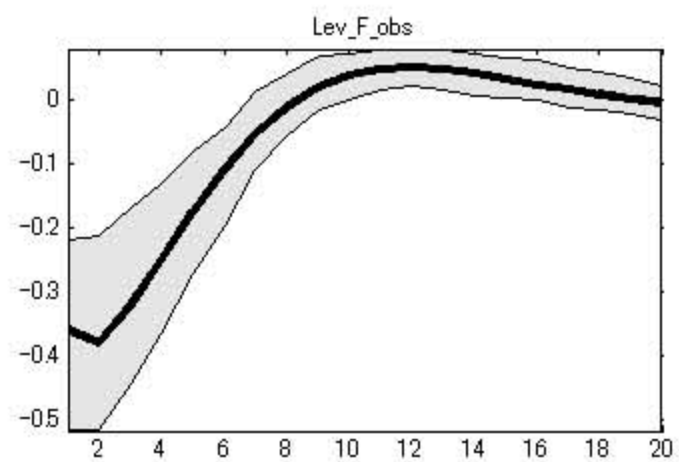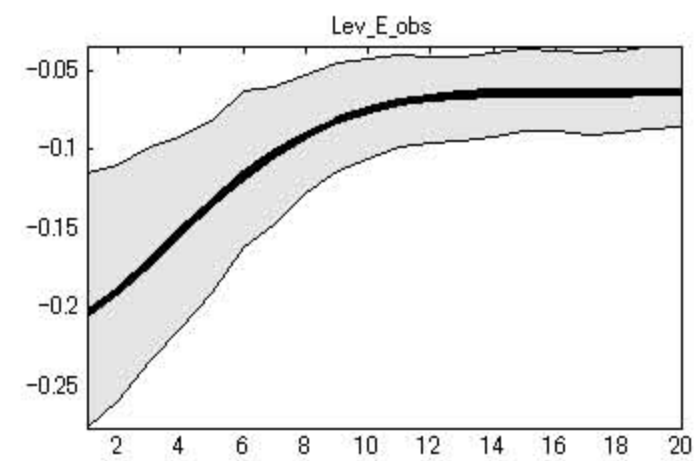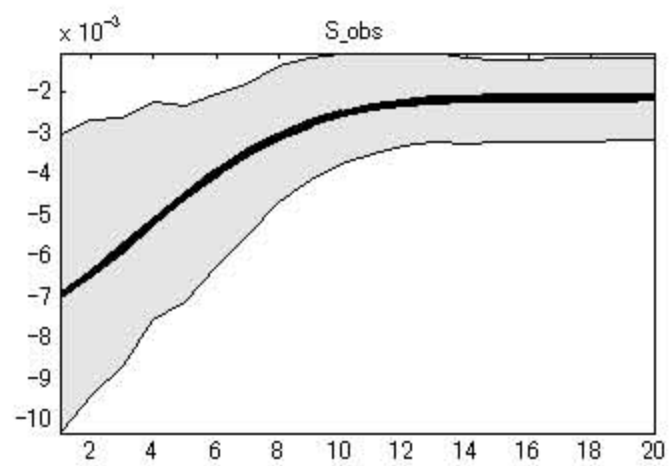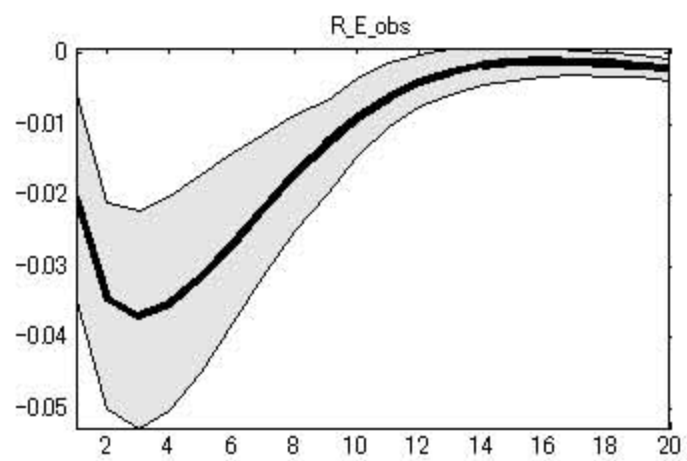
Some Comments: Empirical

5. Miscellaneous (but very important) issues related to Japanese data:

   A. How to deal with zero-bound problem which introduces non-linearity to the model? (e.g. Kitamura (2010), Yano (2009), Juillard+Adjemian (2010))

   B. How many trend breaks are there? Is piece-wise linear detrending good enough? (See, for instance, Iiboshi (2010))