FEDERAL RESERVE BANK of NEW YORK

Investing Like China

by Chong-en Bai, Qing Liu, and Wen Yao

Discussion by Hunter Clark

2016 PBOC-FRBNY Joint Symposium, March 1 – 2, 2016

Overview of comments

- Highly relevant paper – captures challenges China faces along multiple dimensions.

- Comments in three areas:

1. Central planning versus the market

2. Avoiding the “middle income trap”

3. Implications for macroeconomic and structural policies

High level summary of model framework

- Bai, Liu, and Yao (BLY) build a model which captures three stylized facts about the Chinese economy
- Since 2008:
  1. The wage premium that high school and college graduates earn relative to lower skilled workers has declined.
  2. Investment/GDP ratio surged to nearly 50% of GDP, disproportionately concentrated in non-residential structures.
  3. Lower-skill intensity firms have shown lower return to capital

- Model has four sectors (household, production, banking, and government).
  - Production comprises 2 intermediate goods and 1 final good.
  - Infrastructure sector uses unskilled labor and can borrow at subsidized rate. Government sets subsidized rate below market rate
  - General goods sector uses skilled and unskilled labor and borrows at a market rate.
  - Financial repression captured by depression of household deposit rates below market levels.

Key conclusions – highly relevant to China today

- Simulations include scenarios with and without rural to urban migration:
- General results:

1. Unskilled wages rise relative to skilled wages.
2. Capital and labor migrate into the unskilled infrastructure sector.
3. Market interest rate rises and infrastructure sector "crowds out" investment in the general goods sector. Return to investment falls in aggregate.
4. Without migration: Output rises temporarily, but then falls. Consumption falls throughout.
5. Without migration: Welfare falls as interest rate distortion increases.

6. With migration: Output rises then falls, but consumption rises initially – with excess labor supply, capital market distortion could potentially increase consumption in the short-run.
7. With migration: Welfare increases as size of distortion increases, so long as distortion is not *too* large.

Comment 1: Central planning versus markets

- BLY provide a framework for understanding China's gradualist approach to reform ("crossing the river by feeling the stones").
  - With excess labor, government planning (capital market distortions, industrial policy, etc) can boost incomes and raise consumption.
  - China's development *has* been extremely successful.
- But benefits to income and welfare from planning eventually fade, and then reverse. Reform is eventually necessary.

Comment 1: Central planning versus markets

- Economic distortions eventually contribute to familiar problems:
  - Inefficient investment directed into overcapacity sectors.
  - Crowding out of investment opportunities by larger SOEs and associated declining efficiency of investment.
  - Elevated levels of debt at enterprises and local governments.
  - Incipient asset quality problems for creditors.
  - Environmental and income inequality issues.

- Completing the transition from planning to market is not addressed in the paper (appropriately so).

Comment 2: The importance of education

- BLY dispute the claim that college graduates are facing stagnate wages and limited jobs because there are too many of them.

- The problem is not too much education, it is too much inefficient investment and too much crowding out of skilled job opportunities!

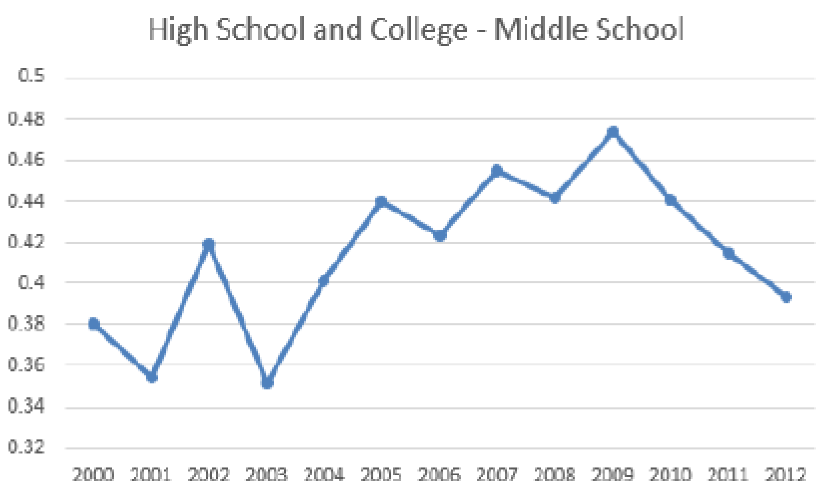
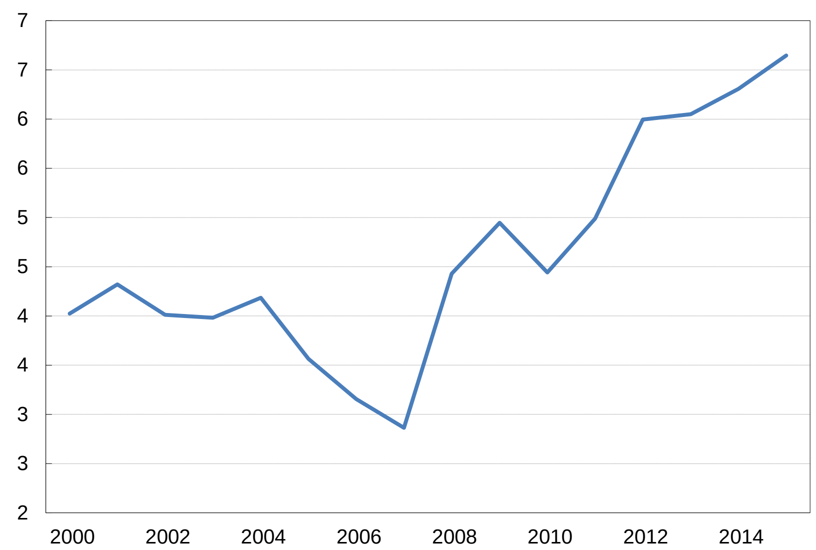
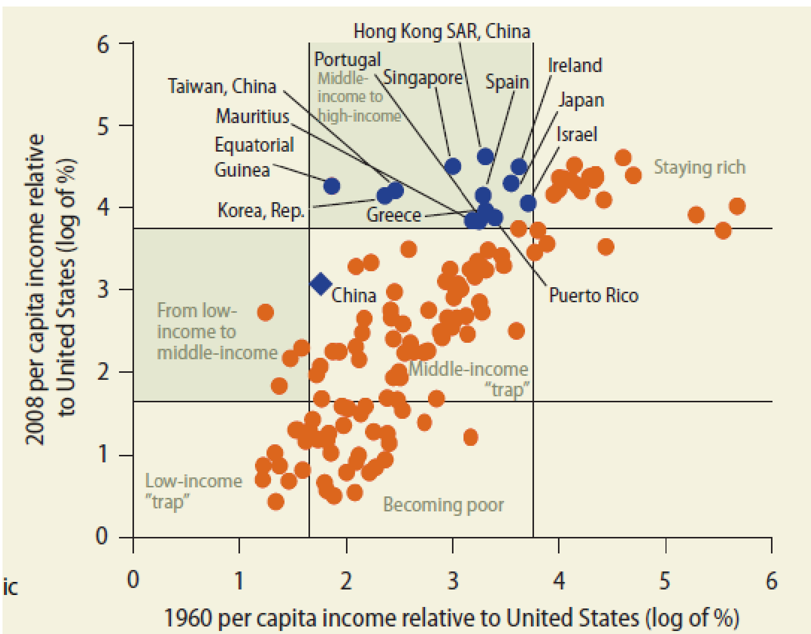


Figure1 Source: UHS survey data



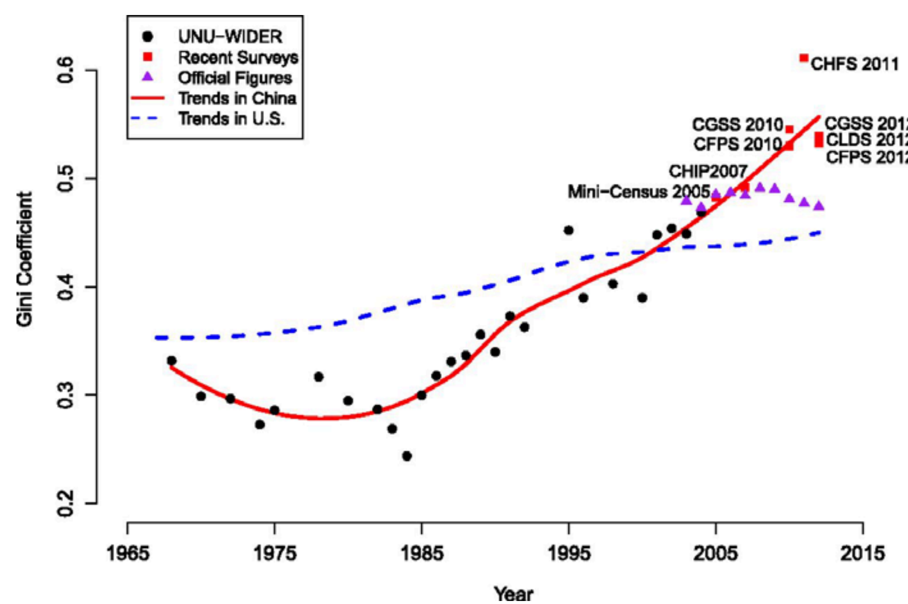
Comment 2: The importance of education

- China could fall into the "middle income trap" (MIT) if it does not avoid a sustained deep growth slowdown.
  - Enhancing opportunities for skilled workers is central to avoiding the MIT.
  - Income inequality is another key issue (which model in paper does not address).



China 2030, Building a Modern, Harmonious, and Creative Society. The World Bank and Development Research Center of the State Council, the People's Republic of China

Trends in Gini coefficient of family income in China and the United States.



Yu Xie, and Xiang Zhou PNAS 2014;111:6928-6933

Comment 2: The importance of education

- Sustained shifts away from economies' convergence paths tend to be driven by shocks to total factor productivity (TFP).

- Institutional weaknesses often contribute to downshifts in productivity growth.
  - Detriments to innovation (red tape, excessive bureaucracy).
  - Inefficient resource allocation (subsidies, misallocation of credit).
  - Reduced returns to entrepreneurship (property rights, contract enforcement).
  - Depth and flexibility of financial markets.

Comment 3: Fiscal and monetary policy implications

- Completing the transition from plan to market will have many important implications for macroeconomic policy—an area of much research and analysis.

- **Monetary policy:** Market-determined financial system will be one where interest rates, term structure, risk, expectations, and communications all play central roles in the transmission mechanism.
  - Evident in the PBOC's gradual transition from direct to indirect monetary policy tools.
  - Will require reforms for deepening the financial market, promoting competition, reinforcing property rights, and improving corporate governance of financial institutions[1].

- **Fiscal policy:** BLY note their model can explain high local government debt (easy access to subsidized credit, incentives to boost growth in the short-run).
  - Controlling local government borrowing will require substantial fiscal tightening at local level.
  - Institutional reforms for long-term fiscal discipline and sustainability.

[1]See, for example, remarks by Yi Gang in "PBC and IMF Joint Conference, "New Issues in Monetary Policy, International Experience and Relevance for China", March 27, 2014

Comment 3: Fiscal and monetary policy implications

- **Financial sector:** Reforms will be needed to address China's credit boom.
  - IMF finds that roughly 30% of credit booms result in a banking crisis within three years and 30% result in below-trend growth in subsequent years[1].
  - Financial system is critical for channeling saving into efficient investment.

- **Enterprise sector:** Sustained and credible reductions in financial risk and investment inefficiency will require fundamental reforms in the enterprise sector.
  - Hardening of budget constraints.
  - Reducing industrial overcapacity.
  - Closing/restructuring of "zombie companies".
  - Privatization and corporate governance reforms.

[1] Policies for Macrofinancial Stability: How to Deal with Credit Booms, Giovanni Dell'Ariccia, Deniz Igan, Luc Laeven, and Hui Tong, IMF Staff Discussion Note June 7, 2012

Thank you.