



“Identifying China’s Monetary Policy Shocks”

by Kaiji Chen, Patrick Higgins, Daniel F. Waggoner, and Tao Zha



Discussion by Kevin X.D. Huang, Vanderbilt University

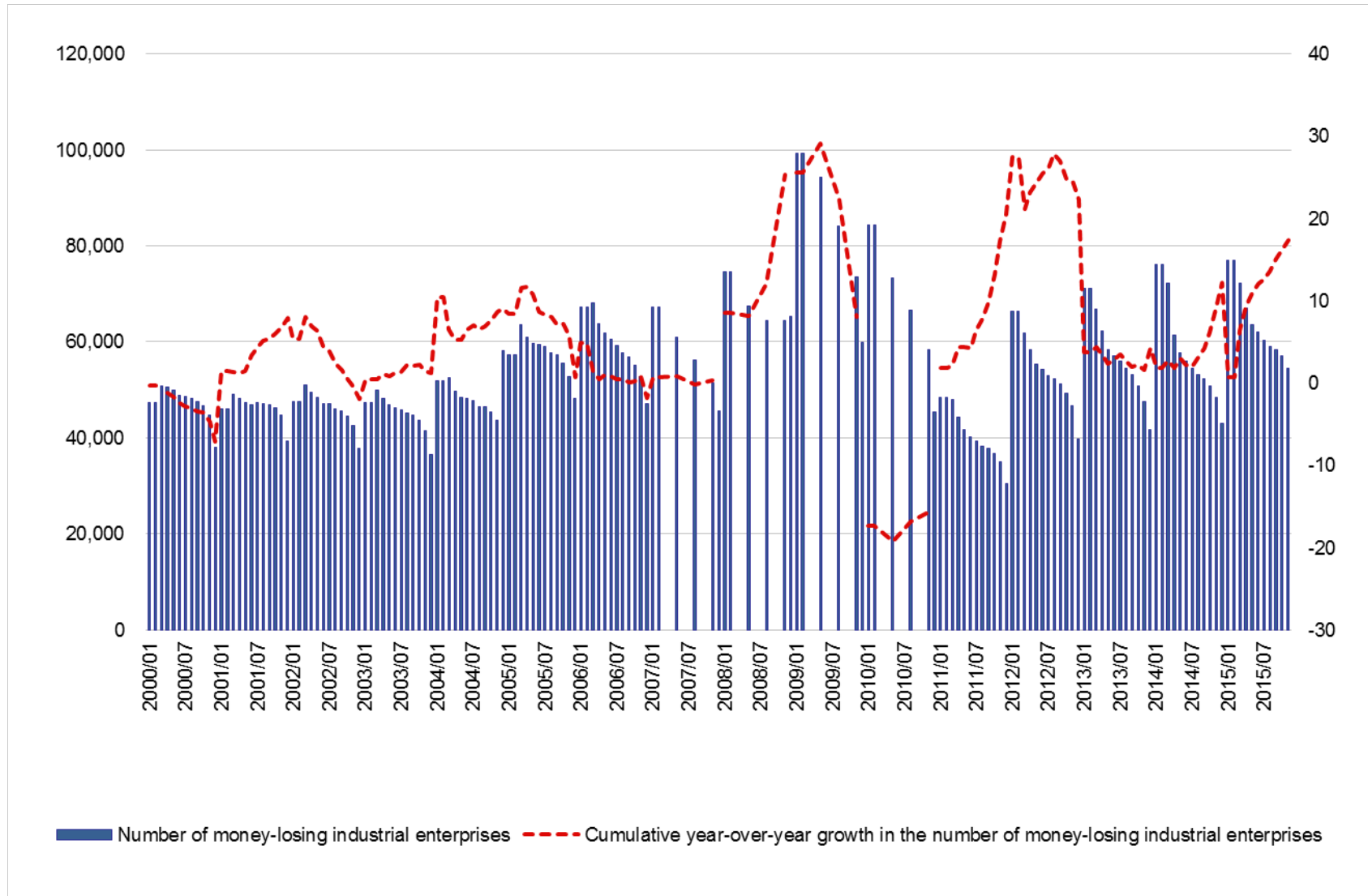
Background: “Trends and Cycles in China’s Macroeconomy”

by Chun Chang, Kaiji Chen, Daniel F. Waggoner, and Tao Zha

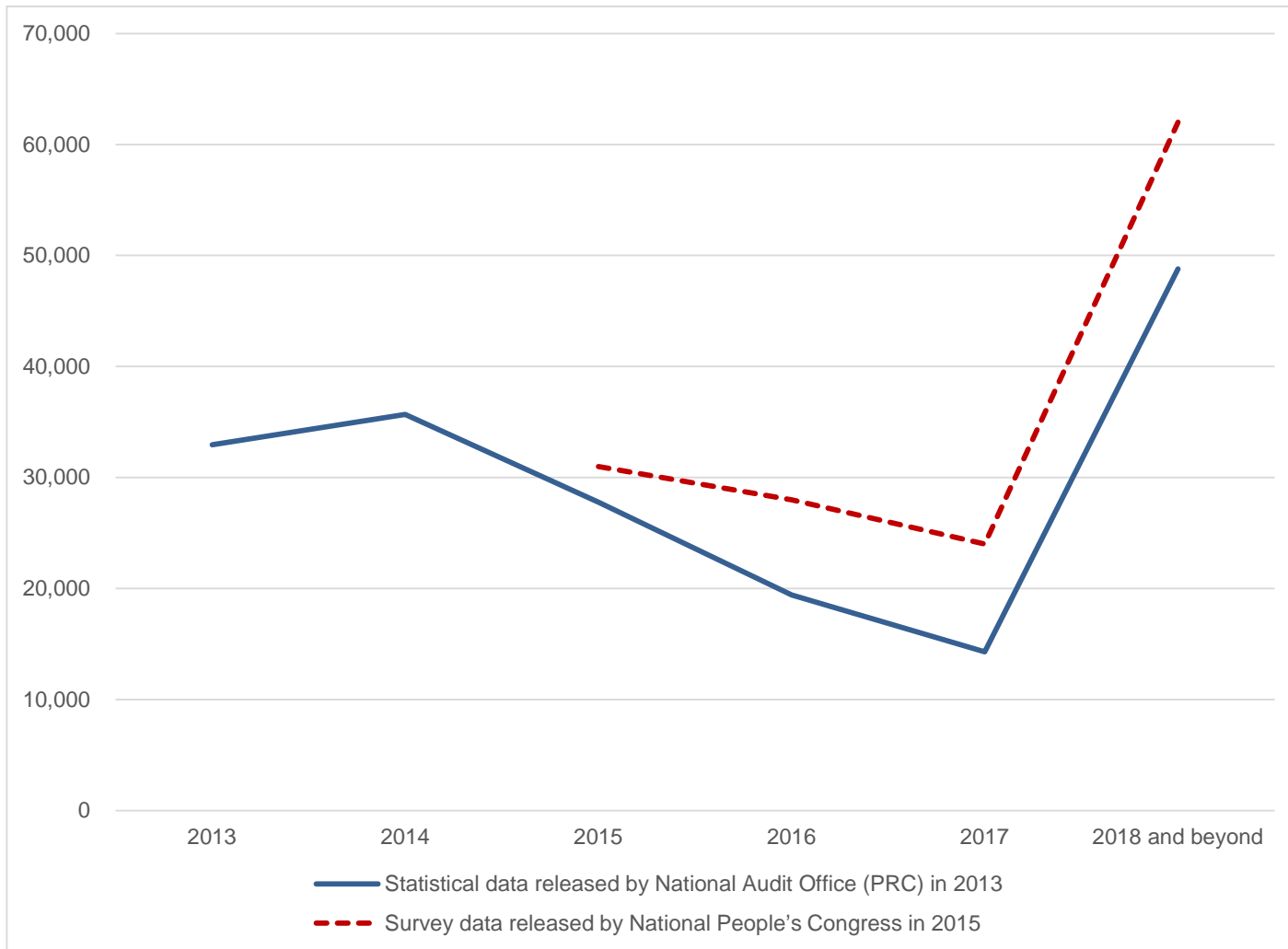
- Investment-led growth/cycles **since mid 1990s** fueled by preferential credit policy favoring ‘heavy industries’ as opposed to ‘light industries’.
- Consumption and labor income move in the opposite direction as does investment both along trend and over cycles.
- A rise in the ratio of LTLs (for financing K-firm’s fixed investment) to STLs (for financing L-firm’s wage bill) along trend and a negative co-movement between the two over cycles.
- Theoretical model modifies Song, Storesletten, and Zilibotti (2011) with **collateral constraint** embedding implicit government guarantees for K-firms and **financing frictions** for L-firms whose financing cost increases with the size of total loans.
- Credit shock (to LTL guarantees by government to K-firms) is the only shock driving cycles in the theoretical model.
- However, measured loans don’t factor into account **informal financing**, which is important in China, especially for ‘disfavored firms’.

Allocative Role of the Preferential Credit Policy in CCWZ (2015)

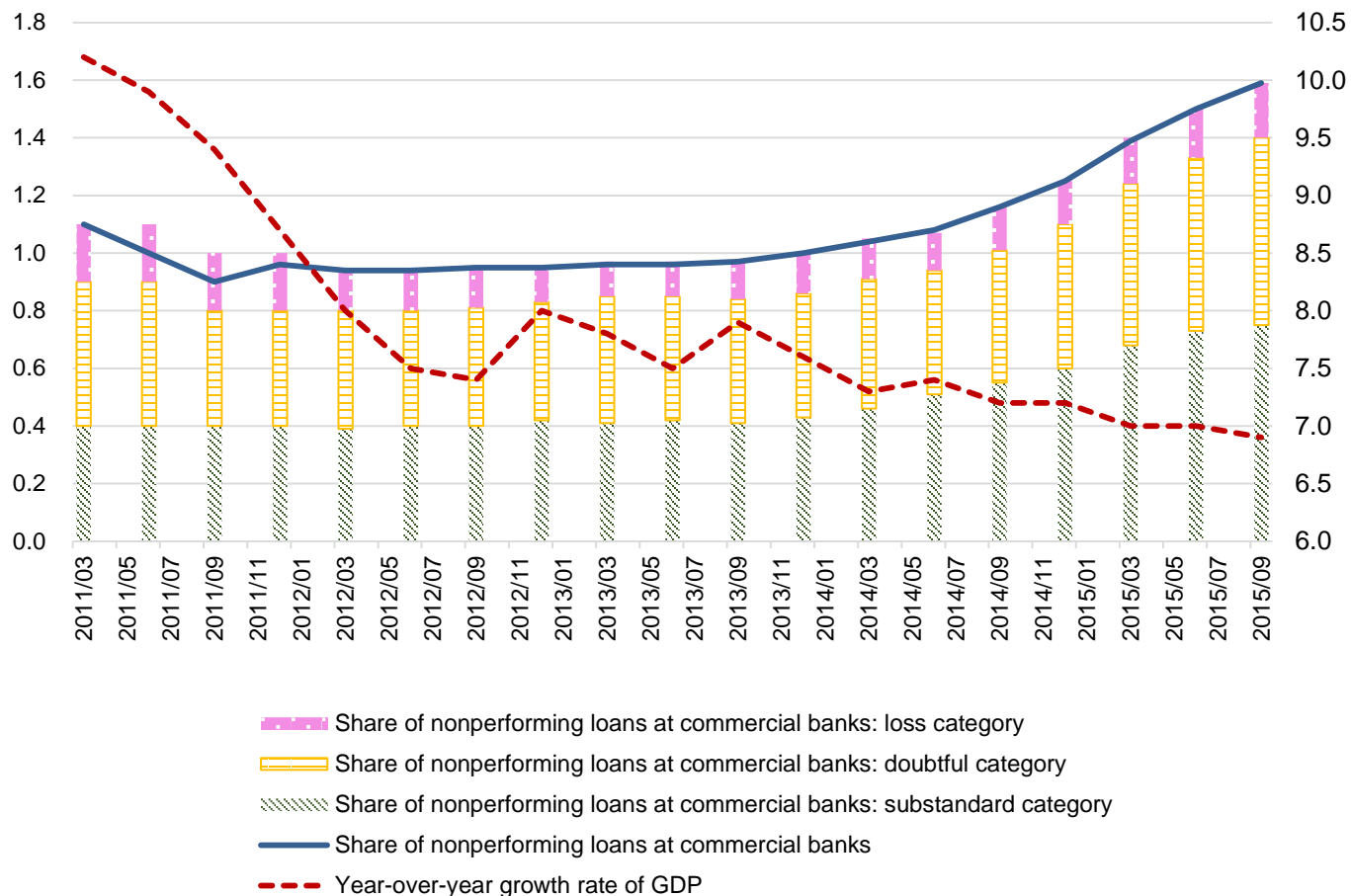
- A major goal of National Economic and Social Development and Ninth Five-Year Program: Vision and Goals for 2010 (passed by the 14th CPC in September 1995 and by the 8th NPC in March 1996) that CCWZ (2015) appeal to in motivating the preferential credit policy is **more efficient resource allocation** (this goal is emphasized three times in Section Two: Major Goals and Guidance).
- But, in CCWZ, **allocation of resources may become less efficient over time** as capital is reallocated from light to heavy industries, contrasting SSZ in which capital allocation improves over time as resources are reallocated from less to more productive firms.
- Also, **capital allocation efficiency is counter-cyclical** in CCWZ.
- **But what does the data have to say about these?**
- This is important as the resultant overcapacity and credit risks associated with bad loans may have implications for monetary/fiscal policy/banking reforms.
- This is relevant for the present work as it aims to identify China's monetary policy shocks by taking account of potential **transmission mechanisms between money, credit, and other economic activities**.
- May want to include some measures of **credit risks** in monetary policy rule or VAR.



Left: in number of enterprises. Right: in % (NBSC)



Local Government Debt Matured by Year
NPC, National Audit Office, in hundred million yuan



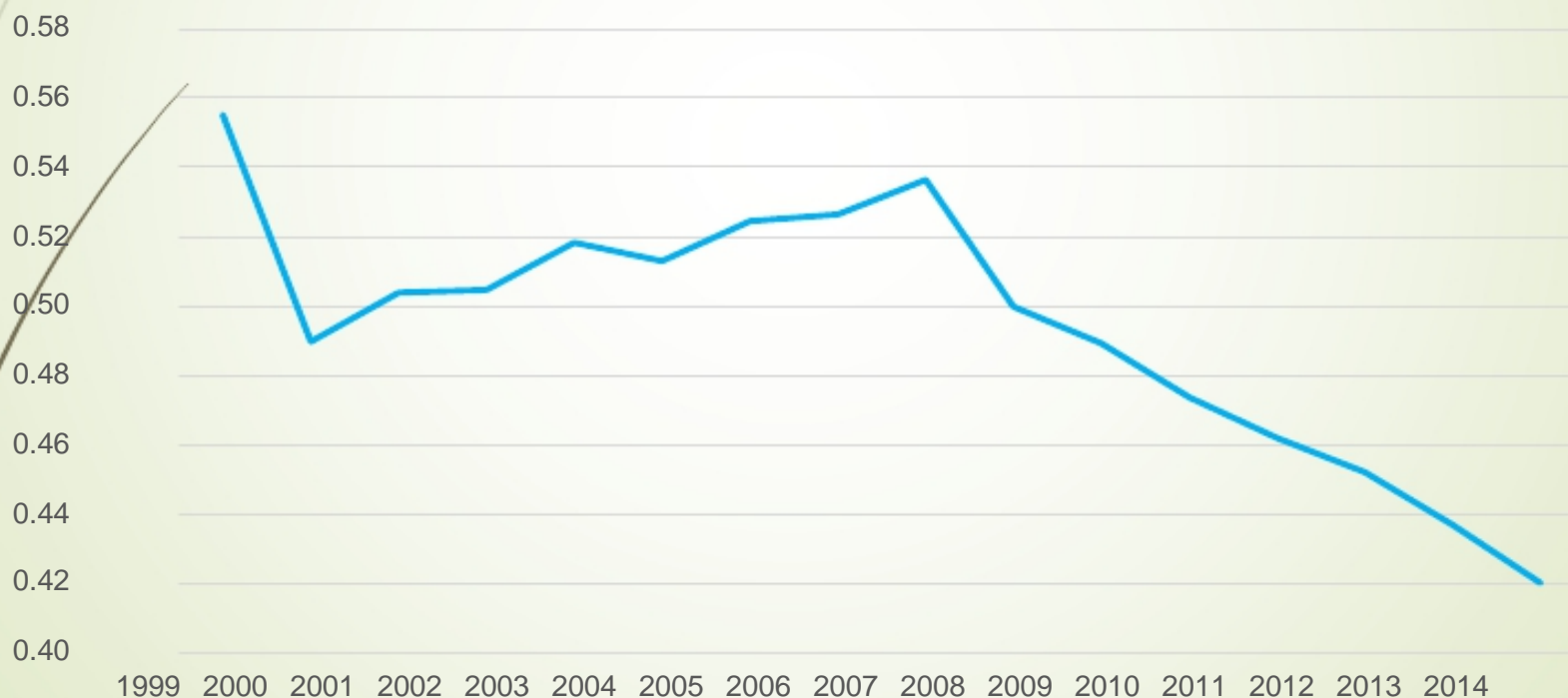
NBSC, China Banking Regulatory Commission, in %

The Majority of Bank OBS Activities are in Real Estate Development and Local Government Financing Platforms

Notable Labor Reallocation, both along trend and over cycles

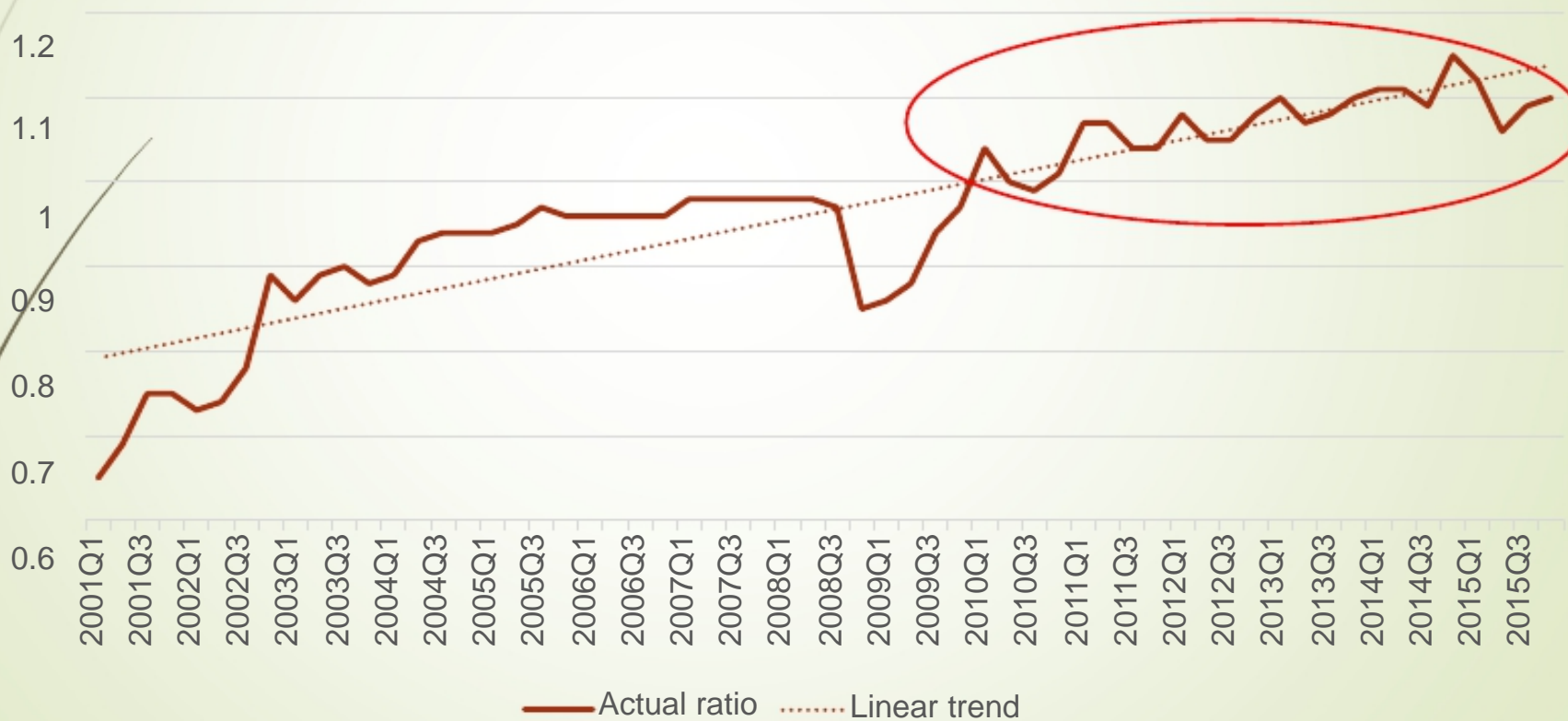
- CCWZ abstract from reallocation of labor.
- But reallocation of labor, for instance, from rural areas to urban industries, is often thought of as a key factor for China's high growth rates in the past two decades.
- The past 20+ years, beginning with the hukou reforms in early 1990s, saw large scale rural-urban migration, with migrant workers registering 274 million in 2014, accounting for about 23.39% of the labor force of 915 million in that year (NBSC).
- This can be a **competing mechanism for lowering wage and consumption share**.
- Labor reallocation (especially that of temporary nature) may be relevant for cycles.
- But, as rapid workforce expansion and mass shift of labor from agricultural into urban industries may have run their courses, and China's working age population has started shrinking and dependence ratio rising, this may reduce the potential and thus **target rate of growth** in formulating China's monetary policy rule.
- Importantly, this may have implications for **structural frictions**, especially in the labor market, in the transitional and restructuring Chinese economy, which can be **relevant for monetary policy transmission mechanisms**.

Labor market matching efficiency has started declining in 2008, coinciding in timing with when the two key monetary policy instruments (i.e., required reserve ratio and loan-to-deposit ratio) became ineffective (and fiscal stimulus came into play)



Source: China's Macroeconomic Analysis, IAR, SHUFE, April 19, 2016

Job Vacancy-Seeker Ratio

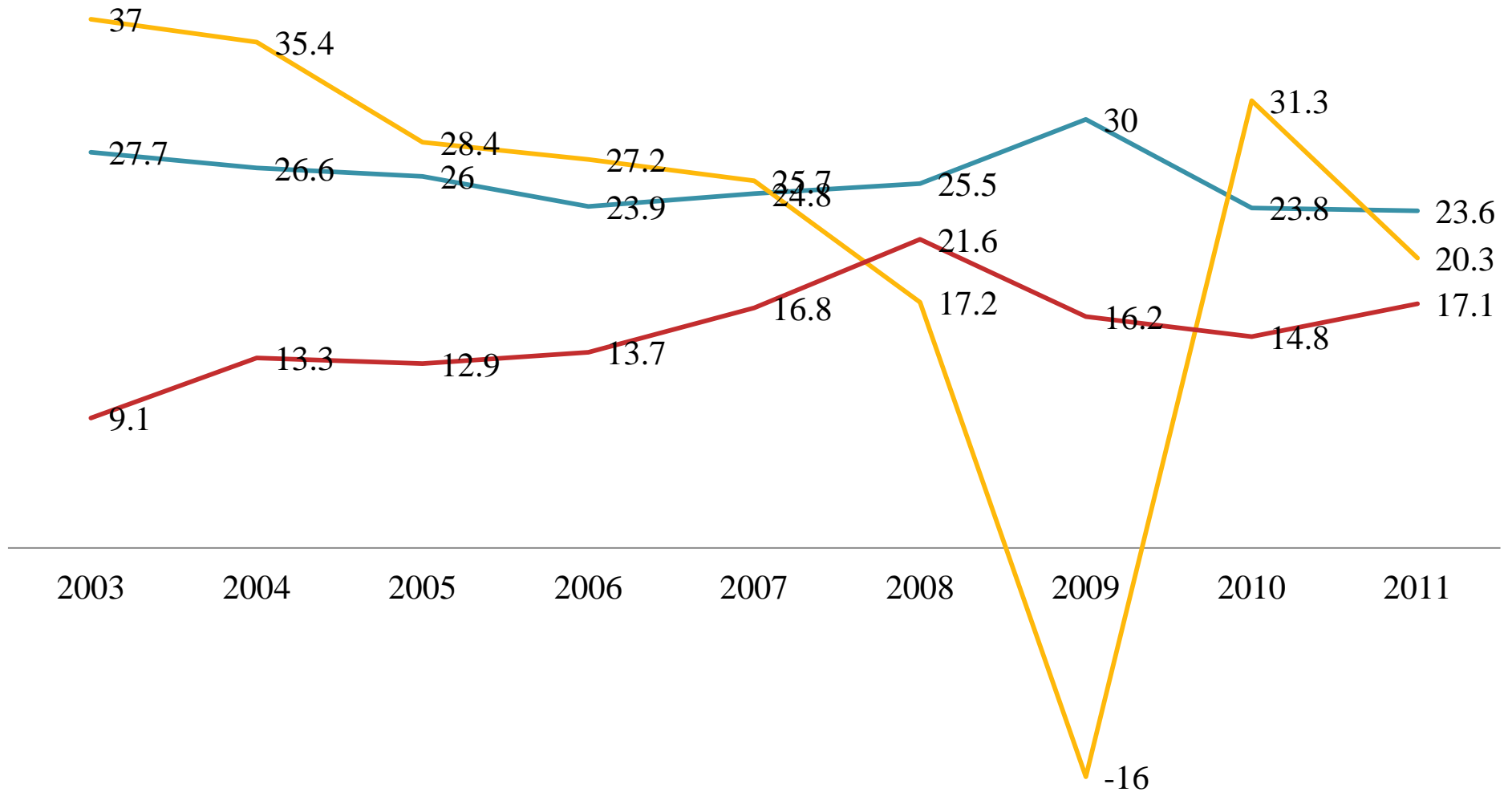


Other Competing Mechanisms Potentially Relevant for Policy

- Rising risk and uncertainty associated with demographic factors, underdeveloped financial system, SOE and related institutional reforms on housing, education, healthcare, unemployment benefits, retirement/pension schemes, lack of social safety nets, and rising income and wealth inequality might have all contributed to raising savings and lowering consumption rates.
- **Housing** may be particularly important also because investment in real estate development has been a main supporter of China's growth, and as it is often an important factor in monetary policy directives.
- **Exports** may also be important, as another main engine supporting China's growth between 2003-2007, and presumably also a crucial factor in monetary policy directives.

Two-Engine vs. Investment Driven Economy: Exports dropped in 2007-08 when RRR & LCR become ineffective in the face of falling loan demand

— FAI Growth Rate (%) — Export Growth Rate (%) — Real Consumption Growth Rate (%)

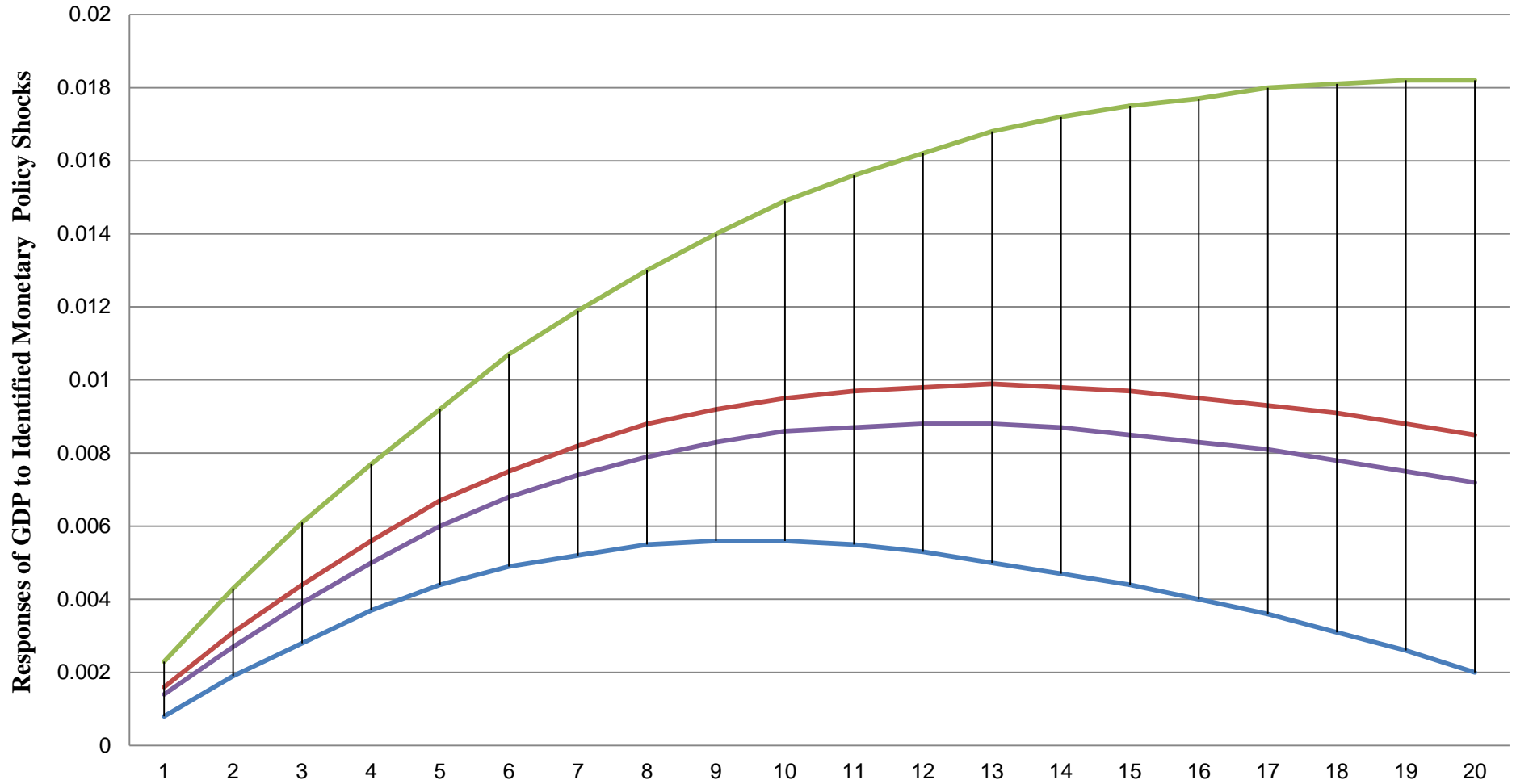


This is also indicative of **China's monetary policy operation mechanism**.

The accumulation of net foreign assets via an export-led growth, to the extent the exchange rate is managed in the face of semi-perfect capital mobility, often leads us to consider Chinese monetary policy within the context of the *trilemma* (or *dilemma*).

The fact that there are **weak correlations between the growth rates of foreign reserves and monetary aggregates** suggests that a **richer compensation thesis** may be more appropriate for describing the money supply mechanism and credit creation process within the banking system through banks' overdraft accounts with the PBC.

Benchmark vs. Adding Foreign Reserves



Yet the similarity between the results of the benchmark model and the simple model is a bit surprising, especially because required reserve ratio and loan-to-deposit ratio are both included in the VAR.

Nevertheless, the effectiveness of monetary policy in stimulating the economy depends on sufficient loan demand. For instance, from fall 2008 to mid 2012 and later, the two key monetary policy instruments were largely ineffective due to falling loan demand, and this is perhaps why a fiscal stimulus package was put in place in 2008.

China's fiscal and monetary policy interactions in general.

Operation of Monetary-Fiscal Policy

- Decision by Politburo Standing Committee (**PSC**) to boost growth
- Investment projects established by State (Development) Planning Commission/National Development and Reform Commission
- Budgetary expansion implemented by **Ministry of Finance** and financed by money/credit expansion by **PBC** and Banks

THANK YOU!