Thesis Proposal: NGDP Targeting under Fiscal Leadership: A Framework for China's Monetary-Fiscal Interaction

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Motivation

China's monetary policy is increasingly constrained: interest rates are near the zero lower bound (ZLB), and the People's Bank of China (PBoC) lacks full independence. Meanwhile, fiscal policy plays a dominant role in demand management. Traditional inflation targeting may no longer provide a stable nominal anchor. This project explores whether **nominal GDP (NGDP) targeting** can serve as a more effective framework under these conditions.

Research Questions

- How does NGDP targeting compare to inflation targeting in a fiscal-dominant, ZLB-constrained environment?
- Can NGDP targeting improve macroeconomic stability and sectoral balance in China?
- Can NGDP targeting serve as a coordination device between monetary and fiscal authorities?

Model Framework

Stage 1: RANK (Representative Agent New Keynesian) model with sticky prices and ZLB constraint. Includes:

- Monetary policy: Taylor rule vs. NGDP targeting rule
- Fiscal policy: spending rule responding to output or debt

Stage 2: Add game-theoretic structure: PBoC and MoF minimize separate loss functions.

• Stackelberg game (MoF leads), or Nash game (simultaneous moves)

Stage 3: Introduce sectoral heterogeneity (e.g., real estate, manufacturing) in production side for policy transmission analysis.

Empirical Strategy (Optional)

Use macro and sector-level data (e.g., NBS, IMF, CEIC) to:

- Calibrate sectoral elasticities to monetary/fiscal shocks
- Estimate reaction functions of policy instruments to NGDP or inflation

Contribution

- Develops a theoretical framework reflecting China's institutional context
- Provides normative case for NGDP targeting under fiscal dominance
- Offers a foundation for sectoral and empirical extensions