

The Elusive Gains from Nationally Oriented Monetary Policy¹

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May 2022

¹The views expressed in this paper/presentation are solely the responsibility of the authors and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or any other person associated with the Federal Reserve System.

Motivation and Question

- Consensus view: The gains from global monetary cooperation are negligible, and so are the costs of a breakdown in cooperation.
- The literature supporting this consensus suggests virtually no welfare cost of switching from cooperation to non-cooperation.
 - ▶ Even under forceful pursuit of national objectives.
 - ▶ Even under aggressive retaliation.
- Can this theory provide reliable guidance for policy decisions?

Findings

We use the framework that provided the analytical backbone of the consensus view (see Corsetti et al 2010) but follow a less restrictive approach which overturns key results.

- We assess how the gains from cooperation depend on and evolve dynamically with prevailing economic conditions (conditional analysis).
 - ▶ Today: focus on accumulation of net foreign debt/asset (NFA) positions.
- The distance between cooperative and non-cooperative policies widens with large (external or internal) imbalances.
- The cost of pursuing purely domestic objectives can rise to multiple times the cost of business cycles.

Our Model

- Includes two countries, each specialized in the production of one good that is traded internationally.
- Prices and wages are sticky, creating trade-offs for monetary policy.
- We consider alternative financial market arrangements across countries.
 - ▶ but focus today on a setup with a limited number of bonds that render financial arrangements incomplete.
- We consider cooperative and non-cooperative, nationally-oriented equilibria with Ramsey optimal strategies for monetary policy in each country.

Our Novel Approach to a Classic Question

We offer a novel perspective by conditioning the welfare analysis on states of the economy that may be more or less likely according to the model itself.

- We characterize numerically the endogenous distribution of key macroeconomic variables, such as output, real wages, inflation and net foreign assets.
- Drawing economic conditions from this distribution, we assess the gains from cooperation relative to non-cooperative behavior.
- We show that with incomplete international financial markets, the critical state variable is the net-foreign-asset position.
- The gains from cooperation grow larger when net-foreign-asset positions widen.

Trade Imbalances and Strategic Interactions

Under **nationally-oriented** policymaking:

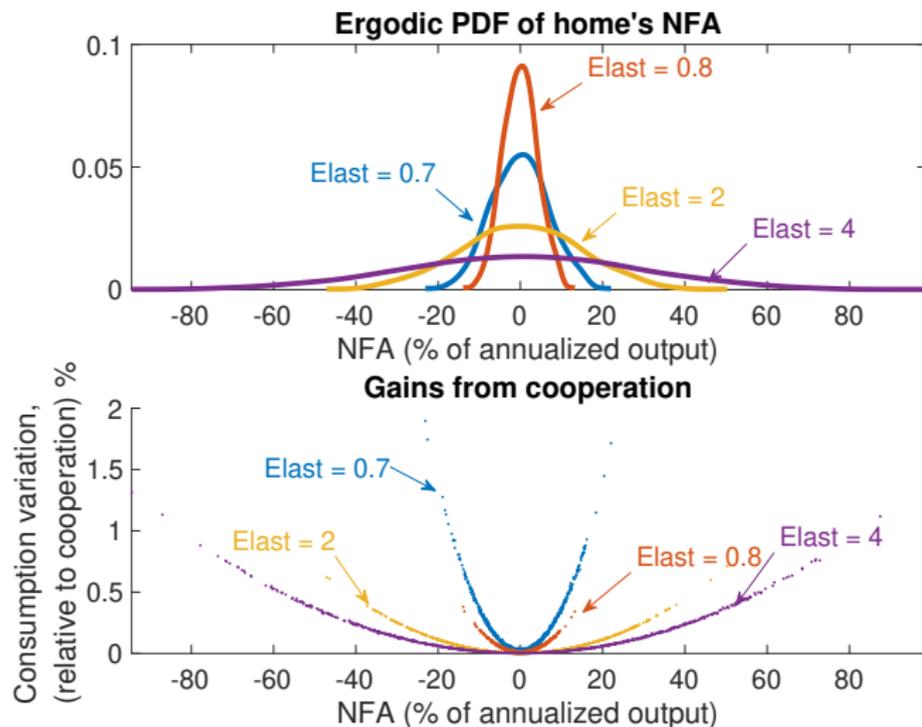
- As trade imbalances grow, the creditor country has a high consumption profile and correspondingly a low marginal utility of consumption because of the transfers it receives from the debtor.
⇒ Falling marginal utility of consumption makes policymakers increasingly willing to trade consumption for leisure.
⇒ The effects of the contraction in activity on consumption are cushioned by terms of trade movements.
- The global efficiency losses grow with the intensity of the creditor's monetary contraction and the correlated monetary stance of the debtor's.

Under **cooperation**:

- Policymakers Internalize cross-border spillovers (the terms-of-trade externality) allowing both countries to sustain a constrained-efficient allocation.

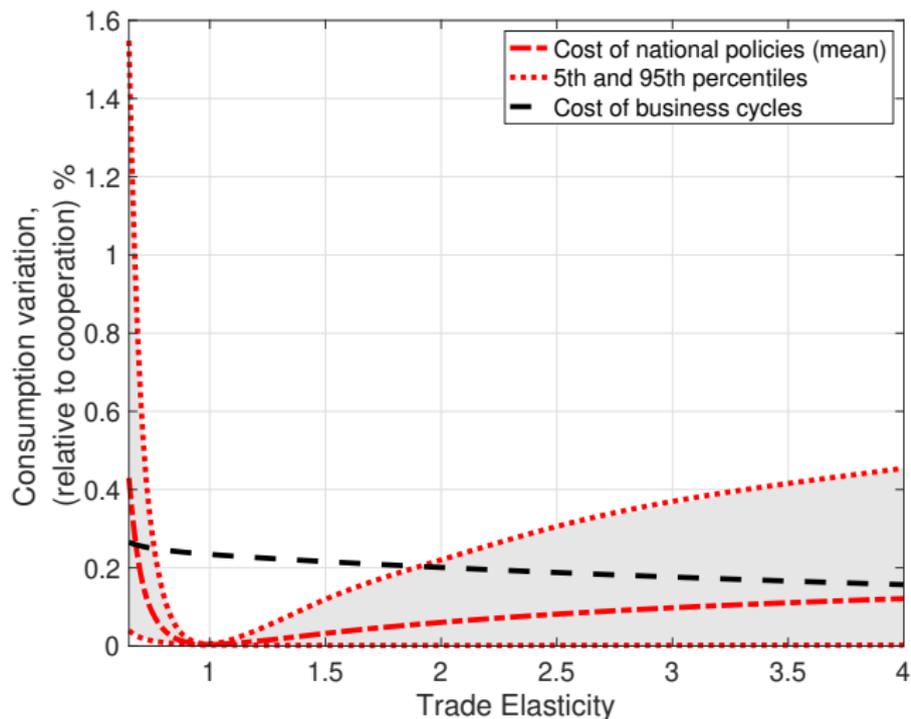
NFA, Trade elasticity, and Gains from Cooperation

Technology shocks only, symmetric bond portfolio



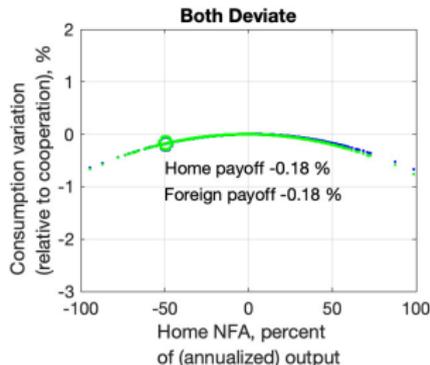
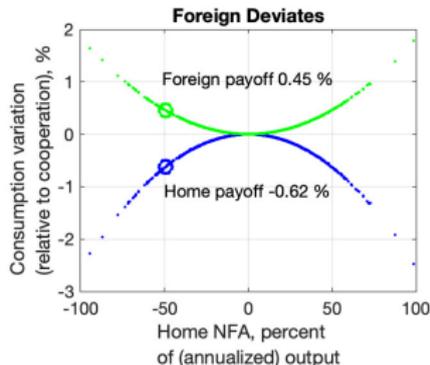
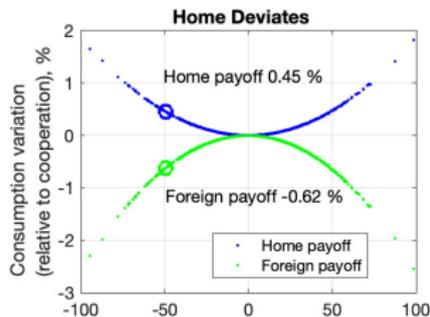
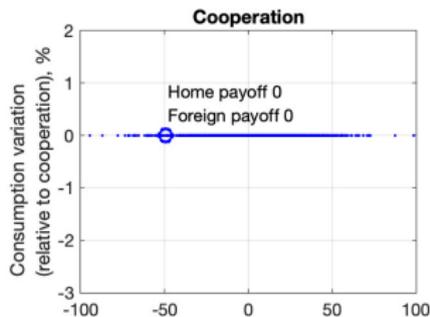
Gains from Cooperation and Trade Elasticity

Technology shocks only, symmetric bond portfolio



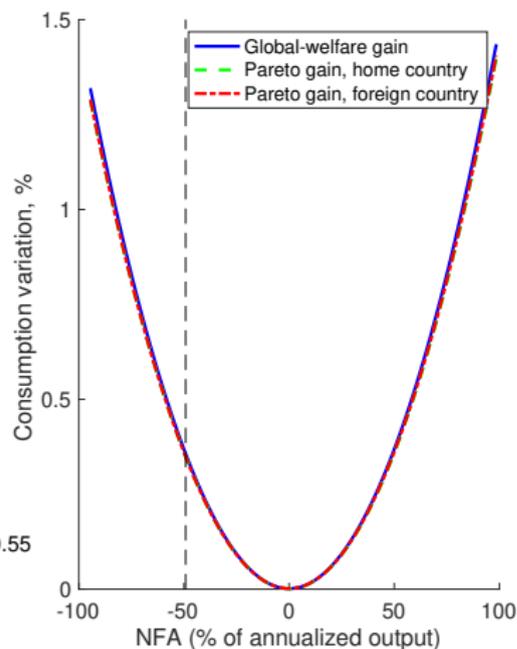
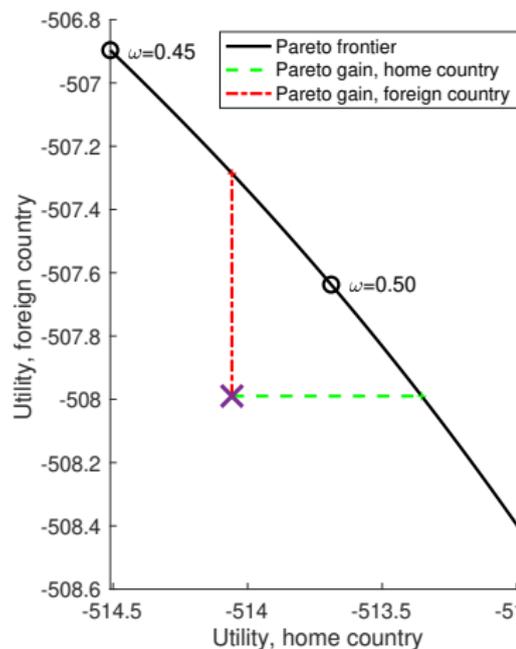
Distribution of Gains and Losses in Two-Stage Game

Technology shocks only, symmetric bond portfolio, $\varepsilon_T = 4$



Pareto Frontier and Efficiency Gains from Cooperation

Technology shocks only, symmetric bond portfolio, $\varepsilon_T = 4$



Keep Your House in Order

National IT as Proxy for Global Cooperation

Just theory? In practice, central banks

- have assigned mandates and are not “maximizing the utility of the representative household,”
- the mandates are national and do not explicitly incorporate the well-being of other countries.

If countries pursue

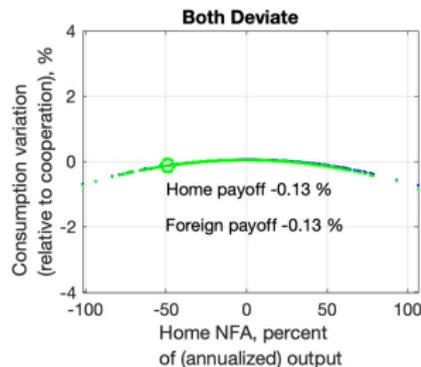
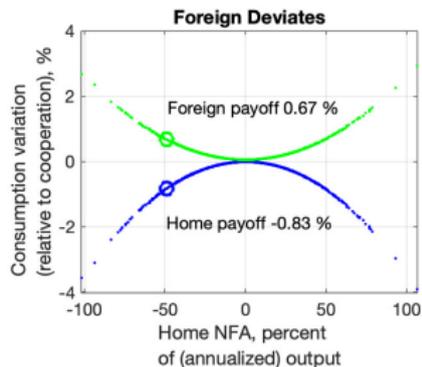
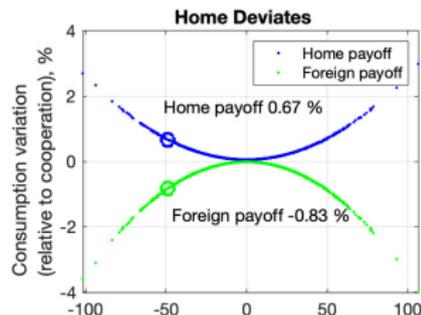
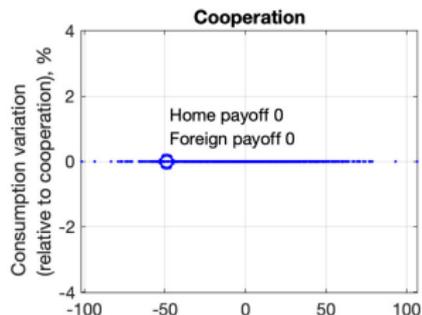
- **IT** (price stability and full resource utilization)
- without global cooperation

allocations **close to cooperation** under global welfare function.

But, incentives to deviate from IT to nationally-oriented policies are almost indistinguishable from the incentives to deviate from cooperation.

Incentives to deviate from IT

Technology shocks only, symmetric bond portfolio, $\varepsilon_T = 4$



Conclusion, Analytical Results and Generalizations

Gains from cooperation can be several times larger than the cost of economic fluctuations in workhorse model of Obstfeld and Rogoff (2002).

- 1 We prove analytically that the gains from cooperations depend on trade imbalances
- 2 We also consider:
 - ▶ Asymmetric asset portfolios and valuation effects
 - ▶ Exchange rate passthrough
 - ▶ Valuation shocks
 - ▶ Complete financial markets
 - ▶ Financial autarky