

Should Financial Stability Considerations Be Included in Monetary Policy Rules or Should They Be Addressed with Separate Financial Policy Rules?



Countries should have two different rules: a monetary policy rule for inefficiency in adjusting prices, and a financial policy rule for inefficiencies originating in financial markets.



A two-rule regime entails lower welfare costs than either a Taylor rule, which reacts to inflation, or a Taylor rule augmented with financial considerations.



When two rules are used, the Nash equilibrium is better than a Taylor rule or an augmented Taylor rule, but worse than a cooperative equilibrium.

CONTEXT

After the 2008 Global Financial Crisis a consensus emerged on incorporating macroprudential financial regulation and financial stability considerations into monetary policy, but translating this idea into practice has proven difficult. Expert opinion is divided between including financial issues in monetary policy (i.e., letting monetary policy “lean against the wind” of financial conditions) and assigning financial policy to a separate authority with its own objective and instrument.

THE PROJECT

To answer the research questions, the authors used a standard New Keynesian model for monetary policy analysis and augmented it with standard features such as financial frictions (following the Bernanke-Gertler financial accelerator mechanism). The authors employed this model to consider the possible responses of i) a standard Taylor rule, ii) an augmented Taylor rule with financial considerations, and iii) two separate policies. The respective welfare costs are then compared for the sample case of the U.S. economy.

Key Concept



TAYLOR RULE

The interest rate is determined by a weighted sum of i) deviation of inflation from its target and ii) past inflation.

Key Concept



NASH EQUILIBRIUM

A situation in which each agent’s strategy choice (in this case the choices of the central bank and the financial authority) is the best response to the strategy actually played by his counterparts.

Key Concept



COOPERATIVE EQUILIBRIUM

A situation in which each agent chooses a strategy that maximizes a weighted combination of every agent's payoff.

4. Strategic interaction is quantitatively significant. The Nash equilibrium yields a welfare loss of about 30 basis points relative to either the Best Policy or Cooperative scenario. Even a regime in which separate authorities engage in non-cooperative Nash competition is better than regimes with just a monetary rule (either simple or augmented Taylor rule) in place.

RESULTS

In the model proposed, two instruments are needed to tackle two inefficiencies affecting the economy: sticky prices and financial frictions arising from the cost of monitoring borrowers. In addition, incentives for strategic interaction between authorities exist because their target variables are influenced by each other's instruments. Inflation, the target of monetary policy, is partly determined by the effect of the financial authority's policy on aggregate demand, and the credit spread, the financial authority's target, is partly determined by the monetary authority's effects on the nominal interest rate. There are four key results:

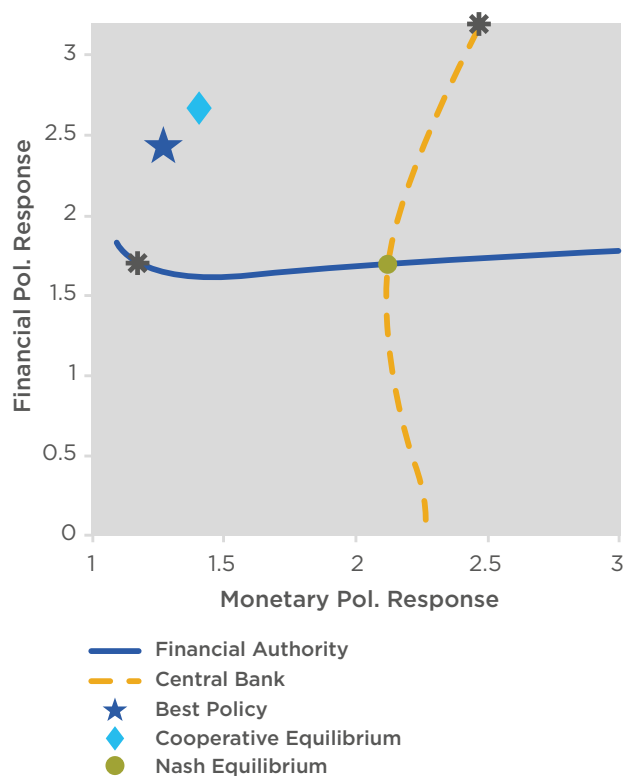
1. In terms of household consumption, welfare costs are generally large in relation to the four main shocks (risk, government expenditure, cost push and technology) considered in the model.
2. Employing an augmented Taylor rule and "leaning against the wind" of financial conditions is welfare-improving relative to the simple Taylor rule approach of not responding to financial conditions at all. Employing two separate rules with their own objectives, however, is significantly better than either of the other approaches.
3. As shown in the figure, the monetary and the financial authorities' reactions to each other's decisions shifts from strategic substitutes to complements in the best choice of policy rule elasticities (i.e., the choice that minimizes consumers' welfare costs).

POLICY IMPLICATIONS

Several insights arise from the exercise. First, monetary policy alone is insufficient to address economic shocks, especially those from financial markets. It is therefore necessary to also have a different policy with a different instrument. Second, costly losses may arise from a bad institutional arrangement in which strategic interaction between the fiscal and monetary authorities involves taking actions that are substitutes rather than complements. This is clearly the case in countries where fiscal and monetary policies are set by separate authorities, or where financial policy is only partially under central bank control.

Strategic interaction can nonetheless be an issue even in countries such as the United Kingdom, where financial and monetary policies are within the central bank's purview but designed by separate committees that could face incentives to act strategically. Ideally, authorities should cooperate and have the same objective to obtain the greatest possible welfare gains; one such objective could be a sum of low and stable inflation and smooth financial markets with low and stable credit spreads. Sound institutional design can help to avoid inefficiencies that can later prove highly difficult to remedy.

Reaction Curves and Equilibrium Outcomes



FULL STUDY

[Carrillo, J. A., E. G. Mendoza, V. Nuguer, and J. Roldán-Peña. 2019. Tight Money-Tight Credit: Coordination Failure in the Conduct of Monetary and Financial Policies](#)

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