Discussion of "Financial Globalization and Monetary Transmission" by Simone Meier

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Paper makes interesting contribution to important policy question

Let me start with the question

- "The literature on globalization is large. The literature on monetary policy is vast. But the literature examining the combination of the two is surprisingly small."

- "The old models simply no longer apply in our globalized, interconnected and expanded economy."
Globalization has had or will soon have dramatic consequences for the nature of the monetary transmission mechanism.

It may threaten the ability of national central banks to control output and inflation within their borders.
Main threats to monetary transmission mechanism

1) Real interest rates will depend on global savings/investment decisions instead of domestic ones

2) Nominal interest rates will be determined by "global liquidity" rather than by the Central Bank’s supply of liquidity

3) Inflation will depend on global slack rather than on domestic output gap

4) More competition or offshoring alter amount of price and wage rigidities
Woodford (2007)

- Studies if globalization of financial, goods or factors markets may lead to threats 1), 2) or 3) in a NK model

- "It is difficult to think of cases under which increased openness should lead either to a reduced effect of domestic monetary policy on domestic aggregate demand or on domestic inflation"

- "When Richard Fisher declares that "the old models simply no longer apply...", but I see no reason to expect this"
Woodford’s analysis of financial globalization builds on Cole and Obstfeld (1991):

- unit elasticity of substitution between domestic and foreign goods, and identical preferences in the two countries,

then finds the result that the degree of international integration of financial markets is irrelevant:

- the same allocation of resources and system of asset prices represents an equilibrium for any cost of asset trade or incompleteness of international financial markets under any monetary policy.
"The fact that complete irrelevance of financial openness is possible (and does not even require an "extreme" preference specification) indicates that the effects of financial globalization need not be large."
Meier (2012)

- Extend Woodford’s analysis to a model with a richer structure in financial markets.

- Study the effects of monetary policy on domestic output and inflation for different costs of international asset trading and levels of gross foreign asset holdings.

- Both forms of financial globalization can affect the monetary transmission mechanism in a NK model.
While some channels of transmission may be weaker, other channels will be stronger. The combined impact is a priori ambiguous.

Simulations of the model show that none of the analyzed forms of financial globalization undermine the impact of monetary policy on output and inflation.

Simone claims that Woodford (2007) results are confirmed:

"It is difficult to construct scenarios in which financial integration or an interaction of financial with other forms of integration materially weaken the impact of monetary policy"
Model

- Differs in many elements from Woodford (2007). Simone’s model is less parsimonious (52 equations characterize linearized model):
  1. Endogenous labor supply
  2. CES preferences over continuum of non-tradables, tradables produced at home and abroad
  3. Both wage and price stickiness
  4. Capital accumulation
  5. Allow for any degree of exchange rate pass-through (from producer currency pricing to local currency pricing)
  6. Four asset markets: two one-period nominal bonds (Home and Foreign currency) and Home and Foreign equity shares (claims on rental rates of capital, not on the capital stock)
  7. Quadratic adjustment costs on changes from last period’s asset holdings and on deviations from the level of steady state holdings
  8. Monetary policy specified by Taylor rule on domestic output and price index of all goods consumed in economy
  9. No process for exogenous shocks is specified
Parameterized model (26 parameters) is solved by linearization around an exogenous steady state asset portfolio

Compares IRs after unexpected positive monetary shock for different parameter values of

1. foreign transaction costs
2. levels of gross foreign steady state asset holdings
3. Interactions of 1) and 2) with lower share of home traded goods
Main results

- Interest rate channel of monetary policy is weaker when agents have better access to risk sharing with another country.
  - After an increase in domestic rates, agents sell assets instead of reducing consumption.

- Exchange rate channel is stronger when asset markets are more integrated: capital flows enhance reaction of exchange rates.
  - Consequences for imports/exports.
  - Larger role for valuation effects.
Goal of paper is to make a contribution to monetary theory. We need more results on what controls strength of policy effects

Tackle Woodford’s conclusion: can we think of cases under which increased openness should lead to a reduced effect of domestic monetary policy on either domestic aggregate demand or domestic inflation?

- Local currency pricing? Slow pass-through of exchange-rate changes to import/export prices reduces the size of the effect on inflation
Monetary policy is effective because rigidities allow monetary policy to affect real variables, how does financial globalization affect the rigidities?
Devereux and Sutherland (2006) show that time variation in portfolio shares is mostly irrelevant for all questions regarding the first-order responses of macroeconomic variables like consumption, output, real exchange rates, etc. Only a solution for the Steady State portfolio is required.

Here we linearize, assume an exogenous Steady State portfolio and impose portfolio adjustment costs to ensure stationarity around the exogenously chosen SS
In the linear solution, any risk-related effects are shut down, because the model exhibits certainty equivalence.

Here portfolio holdings are not indeterminate because of portfolio adjustment costs. They ensure excess returns are non-zero.

\[
\left( \text{pret} \right)_t \approx E_t \left\{ \Delta \hat{g}_{t+1} \right\} + E_t \left\{ \hat{\gamma}_{t+1} \right\} - E_t \left\{ \hat{\gamma}_{t+1} \right\}
\]

\[
\approx \gamma_{BF} \left( E_t \left\{ \hat{b}_{Ft+1} \right\} - \hat{b}_{Ft} \right) - \beta \left( \begin{array}{c} \gamma_{BF} E_t \left\{ \hat{b}_{Ft+2} - \hat{b}_{Ft+1} \right\} \\ -\psi_{BF} E_t \left\{ \hat{b}_{Ft+1} \right\} \end{array} \right) \\
- \left[ \gamma_{BH} \left( E_t \left\{ \hat{b}_{Ht+1} \right\} - \hat{b}_{Ht} \right) - \beta \left( \begin{array}{c} \gamma_{BH} E_t \left\{ \hat{b}_{Ht+2} - \hat{b}_{Ht+1} \right\} \\ -\psi_{BH} E_t \left\{ \hat{b}_{Ht+1} \right\} \end{array} \right) \right]
\]
The asset holding dynamics are then driven exclusively by transaction costs, which seems implausible.

Holdings should depend, among other things, on agents’ attitudes towards risk, the structure of shocks, and the impact of different shocks on the risk of agents’ portfolios.

Monetary policy affects risk premiums (E.g. Diebold, Piazzesi and Rudebusch 2005, Palomino 2012), and financial globalization may alter how.
A doubt

- Exogenous steady State has zero net foreign asset positions
- NFA and related variables do not seem to return to initial Steady State
Some comments that imply changing the model

- Does the model give a picture of the transmission of monetary policy through financial markets that is consistent with the dynamics observed in the data?

- When we study financial integration without a financial sector, what are we missing?

- For example, the model assumes the central bank has no problem controlling the interest rate that matters for consumption/savings decisions. Empirically we know this is not always true. I’d say it’s a main effect of globalization on the monetary transmission channel.
Figure 2. US short term and long term nominal interest rates

- Federal funds rate (3 month)
- Long rate 10 year

Source: Federal Reserve Economic Data (FRED)
Bob Hall’s comment:
The recent crisis illustrates some other effects of financial globalization:

- Fire sales of assets may transmit a shock from the US to the euro area if institutions that need liquidity in the US sell assets in Europe. And the ECB may find it harder to control the economies of the euro area when there is a crisis in the US.

- Large gross positions increase balance-sheet risks, like liquidity problems in the dollar denominated market in Europe that prompted the central bank swaps in 2008.
Should we agree with Woodford (2007)?

- "Increased international trade in financial assets, consumer goods and factors of production should lead to quantitative changes in the magnitudes of various key response elasticities relevant to the transmission mechanism for monetary policy, but should not require fundamental reconsideration of the framework of monetary policy analysis."