Strength of the Pass-Through of the Policy Rate: the Implications for Trinidad and Tobago.

Anthony Birchwood

The University of the West Indies

2013.

Rational for Study

- Industrialised countries are shifting from the use of direct instruments to market based instruments.

- This new style is consistent with inflation targeting.

- This mechanism depend on the country using a representative policy interest rate to guide the market.

- Mechanism presumes that country is capable for achieving a high pass through of the monetary policy rate.

Complete pass through depend on?

Policy
Rate

Market Frictions

Excess Liquidity
Lending Risk
Expectations

Target Rate
Credit Market Rate

- Complete pass through depends on the level of development of financial markets.

- Many studies found that there was less than full pass through in developing countries.

- Many of these studies did not measure the relative strength of the pass through of the policy rate.

  – We investigate how frictions can weaken the pass through of the policy rate.

Transition to market based style

- Hammond (2012) noted that 27 emerging markets and industrialised countries have already pursued full inflation targeting.

- IMF (2004) note that up to 2004 the fund assisted 109 countries to adopt indirect instruments.

- Cas et al (2011) noted that several central banks in Central America are already making the transition to market style monetary policy.

TT Financial Market

- For Trinidad and Tobago (TT) we argue that the frictions are likely to be bank based. It is a small open energy producing. economy that is at a

  - nascent stage in money market development. Central bank is seeking to build an interbank market.

  - with a managed float.

- Given that TT is bank based, the frictions can retard the strength of the pass-through.

Pass through onto the policy rate

- Central Bank introduced a repo rate in 2002 to signal its monetary stance to the market.
  - This is the rate that the central bank charges the commercial banks for the use of overnight funds.
- Frictions we consider are
  - chronic excess liquidity,
  - credit risks.
    - This refers to bank perception of default. Increased credit risk may lead to widening of the spread.
  - Expectations is measured as spill overs arising from changes in the slope of the US yield curve.
    - Yield curve is the difference between 5 year maturity for government bond in the US to 3 month Treasury Bill rate.

Predictable effect on retail lending rate?

- Market Lending rate is the base interest cost of borrowing by households.

- Market lending rate is likely to have an immediate impact on aggregate demand.

- We investigate whether setting the policy lending rate, would have a less than predictable effect on the retail lending rate.

How banks react when the spread is increasing

- Martin and Milas examined where the spread between the policy rate and short term widened.

  – The question then is how the policy rate should be set when this occurs.

- Internal and external frictions to the pass through can cause the market rate to become de-coupled from the central bank rate.

  – This implies that commercial banks may not be forced to adjust their lending rates.

    - For example, banks may not be forced to adjust their lending rates if excess liquidity persists.

Model Specification

$$i_t^{borrow} = \omega_{0t} + \omega_{1t} i_t^{base} + \varepsilon_t$$

$$i_t^{borrow} = \beta_0 + (\beta_1 + \beta_2 exres_t + \beta_3 risk_t + \beta_4 X_t^{US}) i_t^{base} + \varepsilon_t$$

Mechanics of the models

- We use the 91 day Treasury Bill rate as the short term rate.

- We use the prime lending rate as the base cost of credit by commercial banks.

- Study investigate the extent to which the changes in the market credit rate is tied to changes in the short term interest rate.

  - In other words we test whether the long run market rate is decoupled from the short term policy rate.

- We use refer to the first model as the base line model and the second model as the generalised model.

Estimation Model

- Model uses GMM estimation.
- Full pass through exist where beta 1 is equal to 1.
- If beta is less than 1, then we have less than full pass through.
- We use monthly data for the period May 2002 when the repo rate was introduced to December 2012.
- The instruments are 6 month lags of the endogenous variables and the Federal Reserve rate.

Results and Conclusion

- The results suggest that all the frictions considered are significant.

- For the base line model, the was less than full pass through of the policy rate to the credit market lending rate.

- The pass through is weakened when frictions are included.

- We find that the inclusion of friction causes the term lending rate and mortgage rate to weaken.