CENTRAL BANK OF SURINAME

The Feasibility of Open Market Operations in Suriname:

The pass-through of the policy interest rate

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Presentation outline

- Introduction
- Objective
- Institutional Framework
- Theoretical & Empirical Literature review
- Methodology & Results
- Conclusions & Recommendations

Introduction

- Country's market expand, direct control becomes ineffective;
- Direct control encourages disintermediation growth of the financial sector; defeat policy objective;
- Hampered competition.

Therefore:

- Shift to market-based instruments;
- Suriname has the intention to follow suit.

Introduction : Objective

To ascertain the implementation of open market operations in Suriname.

Institutional Framework

- **Monetary policy in Suriname**
  - Credit ceilings (1957 - mid-2001) and;
  - Reserve requirements (May 2001 – present).

Institutional Framework (cont'd)

- **Overview of government securities**
  - 6% government bonds in 1990 and 1992 with maturities of five years;
  - Treasury bills with maturities of six months (7.5%) and one year (8%), since 2000.

    - CBvS inquires demand
    - Price not market determined
    - Market participants: commercial banks (80%); insurance companies and pension funds

Literature review: Theoretical

Preconditions of OMOs:

- Interest rate should be liberalized and sensitive;
- A wide range of market participants;
- Independency of the CB;
- Sound institutional arrangements;
- Various maturities of securities;
- An active interbank market.

Literature review: Empirical

Reference	Period	Country	Methodology	Determinants	Results
Beremunt, H. & Malatyali, K. (2001)	1989.11-1990.6 (monthly)	Turkey	VAR/ GARCH	TB rate; inflation risk; expected inflation & days of maturity.	Steady relation between interest rate and expected inflation; real interest declined with high inflation; government uses both auction rate as maturity as monetary policy.
Kendall, P. (2001)	1991-1998 (quarterly)	Bahamas, Barbados, Belize, Guyana, Jamaica & Trinidad	VAR	Lending - & deposit rate; reserve ratio; discount rate; TB rate & US TB rate.	Different reaction of the variables, but in general the lending rate tends to response fast to the policy rate.
Mamingi N., Boamah D. and Jackman N. (2008)	1980-2007 (quarterly)	Barbados	ARDL	Minimum deposit rate & lending rate.	The response of the lending rate on changes in the policy rate exists only in the long run.

Literature review: Empirical (cont'd)

Reference	Period	Country	Methodology	Determinants	Results
Saborowski, C. & Weber, S. (2008)	2000.1-2011.2 (monthly)	Set of developed & developing countries	Panel VAR	Indicators of regulatory quality; inflation; financial development and dollarization; exchange rate flexibility; banking sector competition; asset quality and liquidity.	Industrial countries have a higher pass-through than developing countries on the account of a flexible exchange rate and a developed financial market.
Gigineishvili, N. (2011)	2005.12-2010.3 (monthly)	Set of developed & developing countries (70 countries)	Panel VAR	GDP per capita; inflation; interest rates; credit quality; overhead costs and competition among banks.	Industrial countries have a higher pass-through than developing countries on the account of a flexible exchange rate and a developed financial market.
Boamah, D., Jackman, M. & Mamingi N. (2011)	1995-2007 (quaterly)	Barbados & Bahamas	ARDL	Minimum deposit rate & lending rate.	Both short- run as long run pass-through exists in Bahamas, while for Barbados only the long-run pass-through exists.

Empirical model: Model specification

Estimated model:

$$Ln(R_t) = Ln(DR_t) + \epsilon_t$$

Where:

- R_t represents the different interest rates;
- DR_t is the policy rate of the CBvS.

Empirical model: Data analysis

- Monthly data (2008m1 – 2013 m2) is utilized;
- The variables:
  - Domestic Deposit Rate (DDR);
  - Domestic Lending Rate (DLR);
  - Discount Rate (DR).
- Real terms;
- Transformed into logarithms.

Empirical model: Methodology

- Unit root tests (ADF and PP);

- VAR:
  - Lag length criteria;
  - Diagnostics tests;
  - Impulse response function.

Empirical model: Results (cont'd)

$$Ln(\ DLR_t\ ) = 0.62 \cdot Ln(DR_{t-1}) - 0.52\ \cdot Ln(\ DLR_{t-1}\ ) + 0.21 \cdot dum08 - 0.23\ \cdot dum11\ + 2.35$$

*2.233*** -1.287 6.366*** -8.686*** 5.864****

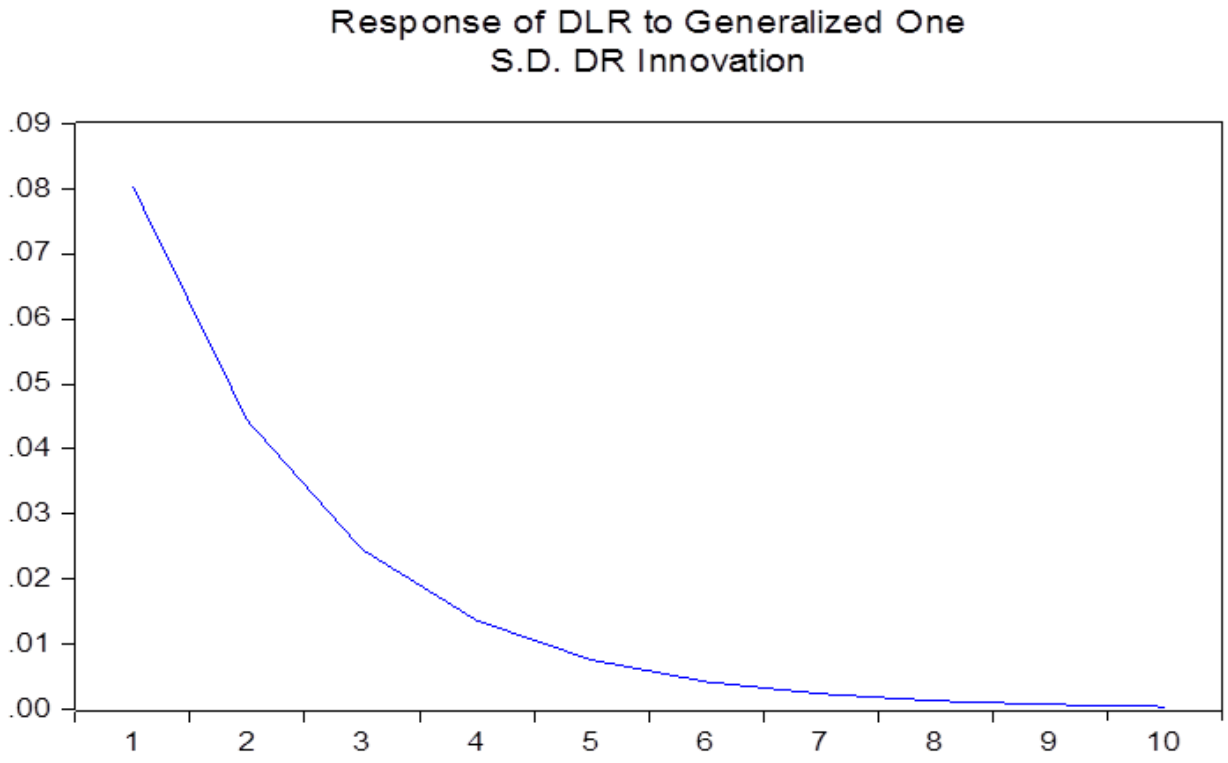
$$Ln(\ DR_t\ ) = -1.670 \cdot Ln(DLR_{t-1}) + 1.544\ \cdot Ln(\ DR_{t-1}\ ) + 0.290 \cdot dum08 - 0.322\ \cdot dum11\ + 2.880$$

*-2.883*** 3.852*** 6.018*** -8.488*** 5.006****

Model Specifications		Residual test	P-value
R-Squared	0.762	**Normality test**	0.214
Adjusted R-Squared	0.745	**Serial correlation (χ2)**	0.266
F-statistics	44.753c	**Heteroskedasticity (χ2)**	0.209

- DR DDR, exclusion of the DDR (insignificant).

Empirical model: Results (cont'd)



Conclusions

- Existence of pass-through of the discount interest rate to the lending rate;
- Shock to the system fades away after nine to ten months;
- The impact on the deposit interest rate was insignificant and therefore excluded in this study;
- Potential opportunity for the implementation of OMOs in Suriname.

Recommendations

- The implementation of OMOs can have the desired effect;
  - Reserve requirements serve as alternative (more flexible);
  - Lending facilities can be formalized;
  - Standing facilities (invest excess liquidity).

- Auction based system for government securities.

Thank you