

School Lecture Series (SLS) Lecture. 1. 2013

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This lecture series is a collaborative effort between the Central Bank of Trinidad and Tobago and the Department of Economics, UWI, St. Augustine.

These sessions are structured to aid students pursuing qualifications in Economics, specifically the Caribbean Proficiency Examinations. Presentations use the syllabus as a guide but also aim to show the practical applications of the relevant topics.

Lectures for the School Lecture Series are prepared by Central Bank of Trinidad and Tobago research economists and lecturers in the Department of Economics. The views expressed are those of the authors and not necessarily of the Central Bank or the University of the West Indies, St. Augustine.

Outline of Presentation

- 1. History of Money.
- 2. Functions of Money.
- 3. Money Supply, Demand and Interest Rates.
- 4. Central Bank and Monetary Policy.

History of Money

(Money Never Grew on Trees)

Picture 1



- I. Barter
- 3. Representative Money

- 2. Commodity Money
- 4. Fiat Money

Functions of Money

The four main functions of money are:

- 1. A medium of exchange.
- 2. A unit of account.
- 3. A store of value.
- 4. A standard of deferred payment.

Money Supply

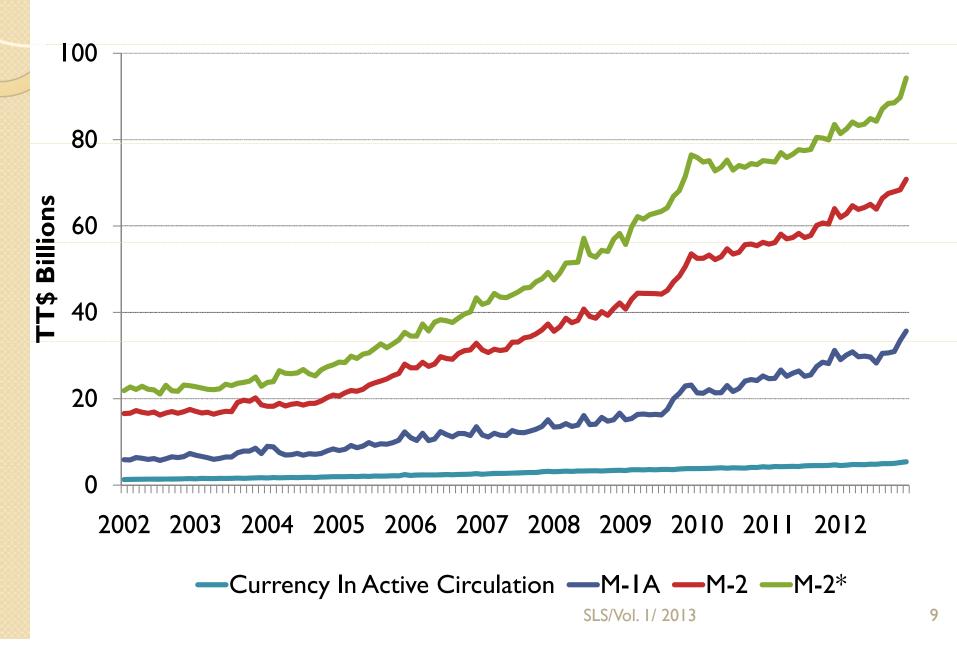
Money Supply – This is a measure of how much money is in circulation in an economy.

The money supply can be measured using various methods or principles.

In Trinidad and Tobago, the main measures of the money supply are M-1A and M-2.

Other measures of the money supply include M-2*, M-3, and M-3*.

The Domestic Monetary Aggregates



Demand for Money

Lord John Maynard Keynes identified 3 motives for holding money:

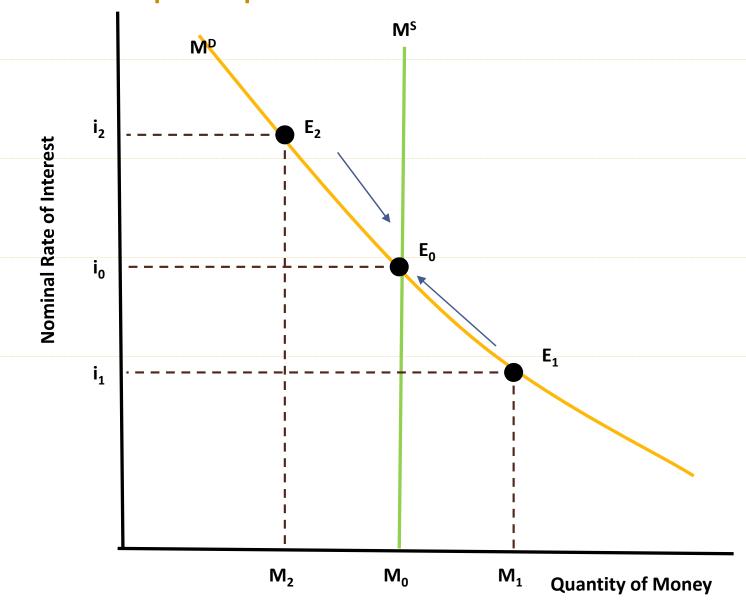
1. **Transactions motive** – day to day transactions.

2. Precautionary motive – unforeseen situations.

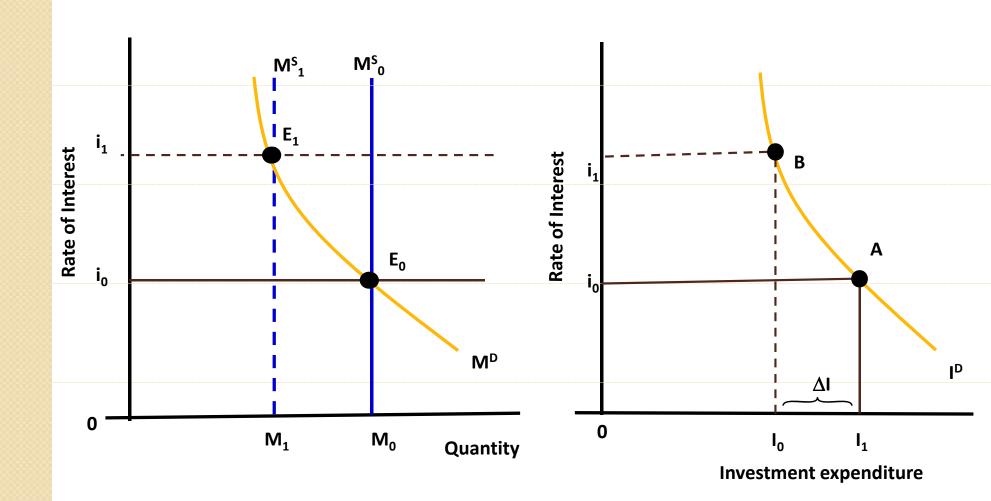
3. Speculative motive – to guard against possible capital loss.

Money Supply and Interest Rates





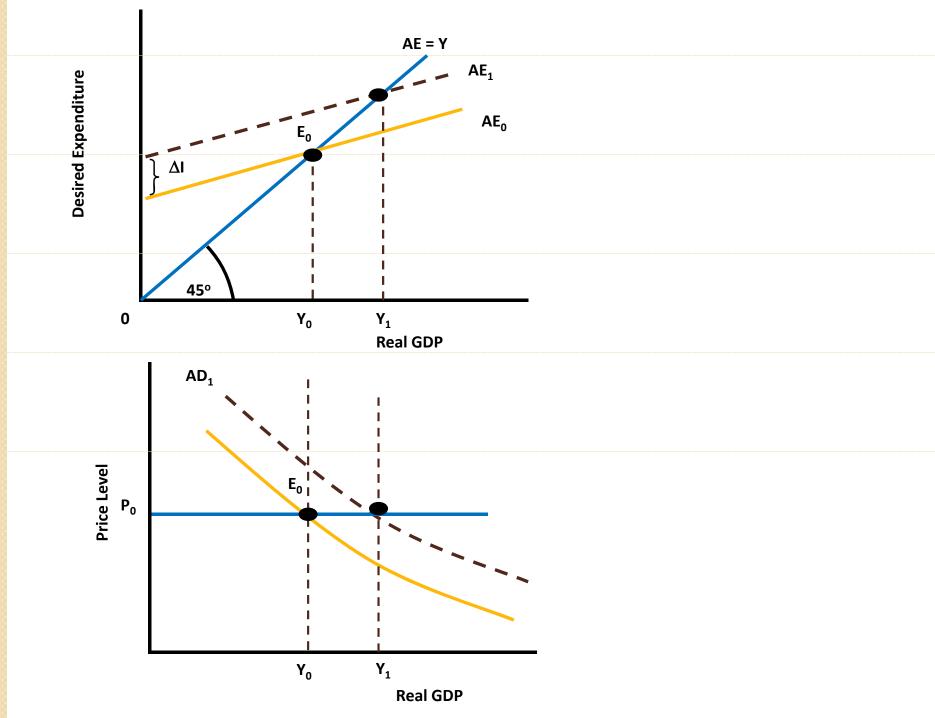
Graph 2: Interest rate and Investment Spending

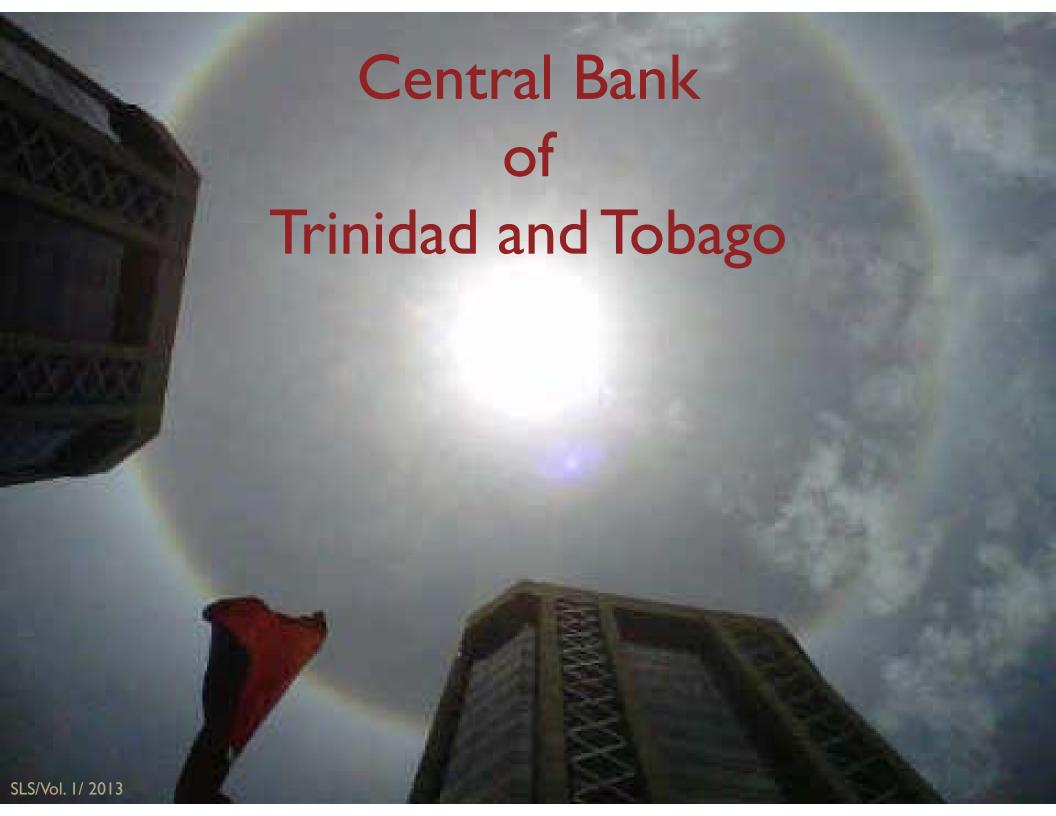


The investment demand function

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Graph 2: Interest Rates and Aggregate Demand and Expenditure





Mission Statement

"The Bank shall have as its purpose the promotion of such monetary, credit and exchange policies as would foster monetary and financial stability and public confidence and be favourable to the economy of Trinidad and Tobago."

Responsibilities of the Central Bank

The Central Bank Act of 1964 entrusts the Central Bank with a range of responsibilities, including:

- 1. Issuing and redeeming currency.
- 2. Developing and implementing monetary policy.
- 3. Acting as banker and advisor to the Government.
- 4. Acting as banker to the commercial banks.
- 5. Issuing securities on behalf of the Government.

Responsibilities of the Central Bank

6. Managing the foreign exchange market and protecting the external value of the currency.

7. Investing the country's external reserves.

8. Fostering and promoting financial stability.

9. Conducting intelligence-gathering and research.

10. Regulating and supervising the banking system.

What is Monetary Policy?

- * Monetary Policy refers to those actions and decisions undertaken by the monetary authority to create appropriate monetary conditions in line with the economic objectives of the country.
- * These actions and decisions are designed to influence interest rates and the money supply which impact on credit demand and investment, which in turn ultimately affect the overall demand for goods and services.
- The Central Bank of T&T conducts monetary policy geared towards the promotion of low inflation and a stable foreign exchange market that is conducive to sustained growth in output and employment.

Monetary Policy Instruments Pre-Liberalization (1993)

Direct Instruments/Less Market Based

- 1. Interest rate controls
- 2. Selective credit controls
- 3. Statutory reserve requirements
- 4. Rediscount (or discount) rate
- 5. Exchange rate controls
- 6. Moral Suasion

Monetary Policy Instruments Post-Liberalization

- Emphasis on more market based instruments.
- Monetary policy tools now include:
 - 1. The 'Repo' rate
 - 2. Open Market Operations (OMO)
 - 3. Liquidity sterilization bonds
 - 4. Rediscount (or discount) rate
 - 5. Statutory reserve requirements
 - 6. Requested fixed deposit accounts
 - 7. Moral Suasion
 - 8. FX Interventions

Monetary Policy Formulation

- Monetary Policy Committee
 - Meets monthly to make decisions related to monetary policy.
 - Responsible for setting the 'Repo rate', reserve requirement and other policy tools.
 - Articulates monetary policy through the 'Repo' rate announcement on a monthly basis and through the bi-annual Monetary Policy Report.

Picture 2: Channels of Monetary Transmission

Link between Monetary Policy and GDP: Monetary Transmission Mechanism

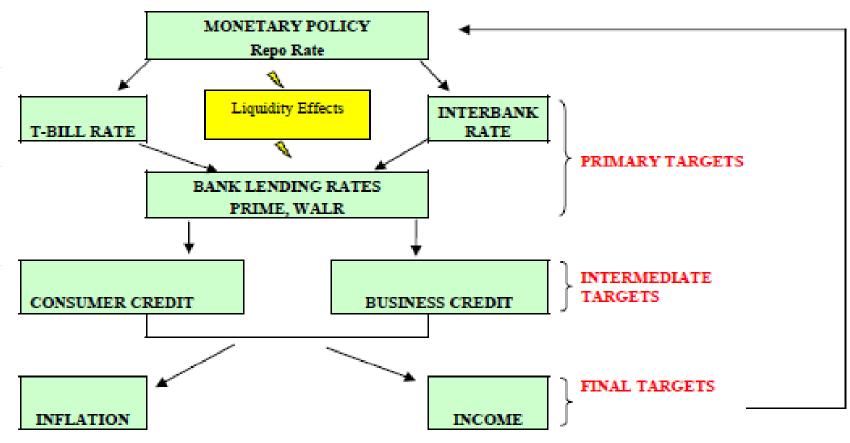
Other asset price effects				Credit view				
Traditional interest rate effects	Exchange rate effects on net exports	Tobin's q theory	Wealth effects	Bank lending channel	Balance sheet channel	Cash flow channel	Unanticipated price level channel	Household liquidity effects
Monetary policy	Monetary policy	Monetary policy	Monetary policy	Monetary policy	Monetary policy	Monetary policy	Monetary policy	Monetary policy
1	1	1	1	\downarrow	\downarrow	1	1	\downarrow
Real interest rates	Real interest rates	Stock prices	Stock prices	Bank deposits	Stock prices	Nominal interest rates	Unanticipated price level	Stock prices
•	Exchange rate	Tobin's q	Financial wealth	Bank loans	Moral hazard adverse selection Lending activity	Cash flow Moral hazard adverse selection Lending activity	Moral hazard adverse selection Lending activity	Financial wealth Probability of financial distress
Investment Residential housing Consumer durable expenditure	Net exports	Investment	consumption	Investment Residential housing	Investment	Investment	Investment	Residential housing Consumer durable expenditure

Source: Boodoo and Cheong, 2010.

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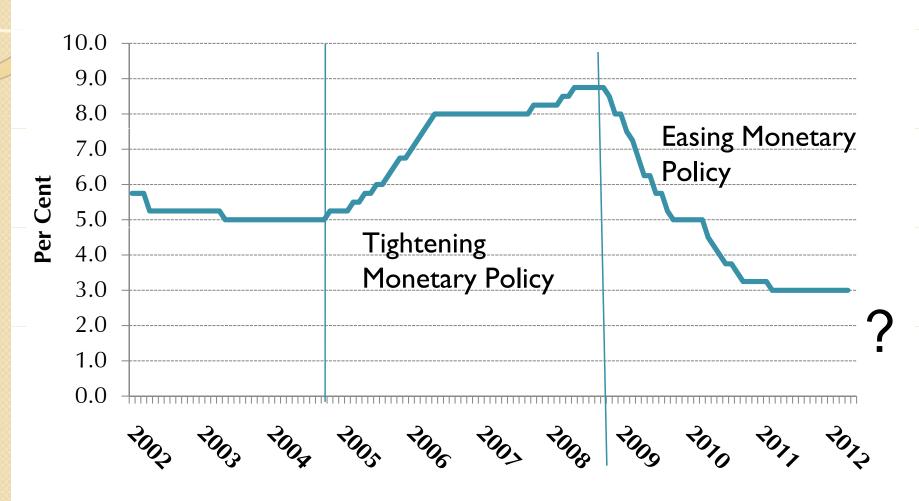
The Interest Rate Channel

Interest Rate Transmission Mechanism in Trinidad and Tobago



Source: Boodoo and Cheong, 2010.

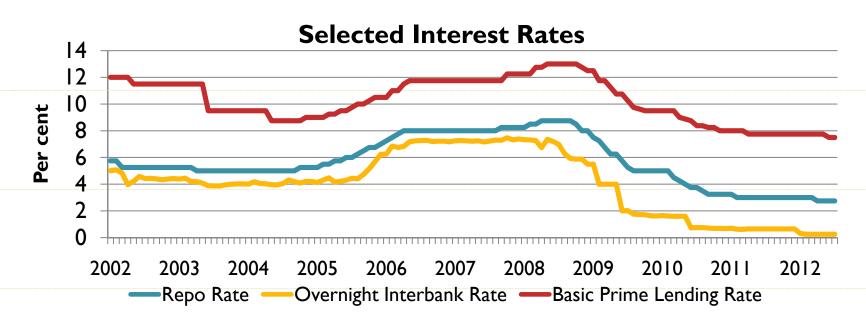
The 'Repo' Rate 2002-2012

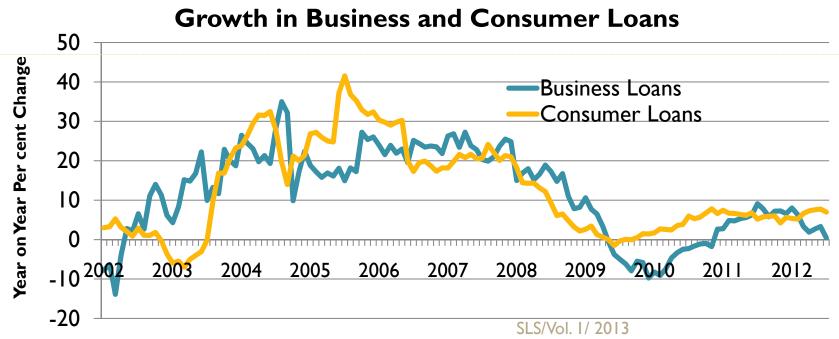


The Repo rate announcement occurs monthly and can be obtained on the Central Bank's website or within the semi-annual Monetary Policy Report.

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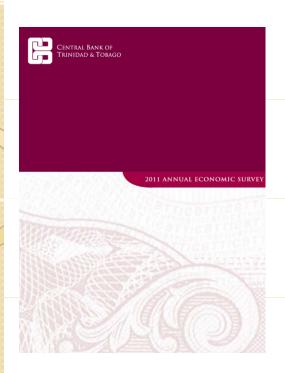
Trends in Interest Rates and Loan Growth

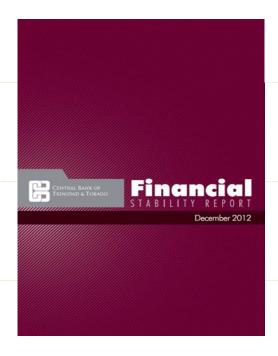




Summary

- * Economic theory shows the relationship between the money supply and interest rates; and the relationship between interest rates, investment and economic growth.
- The Central Bank Act (1964) entrusts the Bank with several key functions, including the design and implementation of monetary policy.
- The Bank uses its arsenal of monetary policy tools such as the 'repo' rate, OMOs and reserve requirements to foster monetary, credit and exchange conditions that are favourable to economic growth.
- There are several channels of the monetary transmission. One particularly relevant channel to Trinidad and Tobago is the interest rate channel.
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Questions?

