



## How do Interest Rates Work?

An interest rate, or rate of return, is a rate which is charged or paid for the use of money. Often expressed as an annual percentage of the principal, interest rates can be either nominal or real. A nominal interest rate is one that disregards the effects of inflation, while real interest rates account for these effects. Nominal rates are typically used in day to day life.

Just as the price of goods and services are determined by the supply and demand of these goods and services, so too is the price of money (i.e. the interest rate). In the last eight years Trinidad & Tobago has witnessed significant changes in these forces resulting in the fluctuation of interest rates. In the last 24 months alone, retail deposit rates have dropped 300bps from 6.00% to 3.00%.

To understand why interest rates can be so volatile, we will explore these primary forces that influence interest rates and the factors affecting them.

### SUPPLY OF MONEY

The supply of money is directly controlled by the Central Bank of Trinidad & Tobago (CBTT) through Monetary Policy; the supply is also impacted upon by several other factors most notably in our country of Trinidad & Tobago (T&T) by Government Fiscal Policy.

Monetary Policy refers to those actions and decisions undertaken by the Monetary Authority (CBTT) to regulate the Money Supply with a view to achieve, amongst other things, a target rate of interest. The three (3) primary instruments used to propagate monetary policy are: (1) The Reserve Requirement (2) Open Market Operations (OMO's) and (3) The Repo Rate. The first two directly impact the Money Supply while the latter is used to send direct signals to Commercial Banks of the level at which target interest rates should be.

Fiscal policy refers to actions by the Government to raise revenue and regulate public spending in the economy with a view to achieve macroeconomic policy and influence economic growth.

Expansionary and contractionary fiscal policies directly impact the money supply e.g. the non-energy fiscal deficit undertaken by the Government of Trinidad & Tobago (GOTT) in recent years, pumped billions of energy earned revenue into capital projects and current expenditure. This would have had an inflationary impact upon the money supply.

Now that we have an understanding of factors affecting the Supply of money, we can explore the environment in which they operate i.e. the factors affecting the demand for money and how the two interact.

## **DEMAND FOR MONEY**

GOTT and CBTT operate and make decisions within the local and wider global economy at large. The basic measure of economic performance is the Gross Domestic Product (GDP), which is measured as:

### **Consumption + Government Expenditure + Investment + (Exports-Imports)**

This equation represents what is known as 'Aggregate Demand', and for the purposes of this article will serve as an indicator for the demand for money or credit. However it must be kept in mind that these variables are affected by the factors of price stability, income levels, psychological factors and interest rates themselves.

To bring this assumption into perspective think about each factor as follows; for consumers to consume they require money whether from salaries or consumer credit, for Businesses to invest they require income or commercial credit and for governments to spend they need money from taxes or debt. Indeed Money makes the world go round.

## **WHERE DEMAND & SUPPLY MEET**

Our history will show that it is impractical to think about Trinidad and Tobago operating within its own bubble. We are inherently tied to the rest of the world and the global economy. This was evident in the period 2002-2007 where robust global growth and demand for raw materials greatly benefited our nation which was uniquely positioned as an LNG exporter; this was a period of Economic Boom. More recently, we have experienced the opposite side of this where the financial crisis in the US quickly turned into a global economic crisis plunging our country into its first recession in 16 years. These swings between economic booms and busts (recessions) greatly impact the factors affecting the supply and demand for money and hence are inherently tied to the movement of interest rates.

### *Economic Boom*

An economic boom is generally characterised as a period of rapid, steady and consistent economic growth. Trinidad & Tobago experienced this during 2002-2007 where high levels of revenue from energy exports led the government to embark on heavy expenditure which resulted in low unemployment, high salaries and commercial income. This boosted our economy's GDP, and the increase in aggregate demand led to an increase in the demand for money and credit. Similar to the impact of an increase in demand for goods on their price, an increase in demand for money will exert upward pressure on the interest rate. However, on the supply side the government's high expenditure levels (Fiscal Policy) would have inflated the money supply, resulting in downward pressure on interest rates. The strong favourable outlook for the economy and easily available money and credit would encourage Consumers and Businesses to increase consumption and investment. The downside of this is the exponential increase in demand for goods and services which would create upward pressure on prices or what is known as inflation.

CBTT would now adjust their Monetary Policy in a bid to reduce the demand for goods and services thereby promoting

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price stability (reduce inflation). As such they will reduce the money supply through increasing the Reserve Requirement and the issuance of OMO's. Additionally they will directly signal higher interest rates to the Bank's through the Repo rate. The result being higher interest rates, market wide, which is what investors have become accustomed to over the last eight years.

### *Economic Recession*

During an economic recession, the exact opposite occurs, where demand for money falters due to declining aggregate demand. Trinidad & Tobago's current experience is such that increasing unemployment is hampering income levels and consumption. Additionally, the negative outlook of the economy results in many businesses reducing capital investments. The resulting fall in demand for money creates downward pressure on interest rates. Consequently, for the economy to return to the path of growth, the Government must continue high levels of expenditure. In this instance, the CBTT will adjust their monetary policy to encourage expansion (demand for money) in an attempt to spur aggregate demand. This will be done by reducing the repo rate, which will then result in interest rates being reduced throughout the market.

In conclusion, to understand interest rate movements requires an understanding of economic forces and fiscal and monetary policy. The budget that is to be presented on 8 September 2010 will paint a clearer picture of where interest rates in T&T will be heading in the next 12 months. Governments planned revenues and expenditures will have a great impact on the money supply and consequently on interest rates for this period. We must keep in mind however that there are numerous factors affecting interest rates and not just the aforementioned. As such, predicting interest rates is an imperfect science by any measure, but at least we now have an understanding of why our fixed deposit that once yielded 8.00% is now yielding 3.00%.

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## FINANCIAL & ECONOMIC INDICATORS

As at 26 August, 2010

<u>Exchange Rate/US\$</u>	<u>Closing Value</u>	<u>Previous Week</u>
Yen	84.67	85.32
Euro	1.27	1.28
Jamaica	85.18	85.33
Guyana	204.90	204.40

<u>Commodity Prices</u>	<u>Closing Value</u>	<u>Previous Week</u>
Crude oil (US\$/bbl)	73.36	74.43
Natural Gas (US\$/mmbtu)	3.85	4.29
Gold (US\$/Troy Ounce)	1,236.65	1,233.10

### Eurobond Indices (As at 26-August-10)

JP Morgan EMBI+ (Basis points)	293
JP Morgan Central America and Caribbean Index (CACI) (YTD return %)	N/A

<u>Policy Interest Rates (%)</u>	<u>Closing Value</u>	<u>Previous Week</u>
United States	0.25	0.25
Euro Zone	1.00	1.00
Japan	0.10	0.10
Brazil	10.66	10.66
Trinidad	5.00	5.00
Jamaica	8.50	8.50
Barbados	2.50	2.50

<u>Market Interest Rates (%)</u>	<u>Closing Value</u>	<u>Previous Week</u>
US 90-day T-Bill	0.15	0.15
US 10-Yr Treasury	2.48	2.58
3-month UK Libor	0.72	0.73
Japan 90-day T-Bill	0.28	0.28
Brazil 90-day T-Bill	10.60	10.65
TT 90-day T-Bill	0.48	0.48
Jamaica 90-day T-Bill	8.06	8.32
Barbados 90-day T-Bill	3.29	3.29

Sources: Bloomberg, CMMB, Central Bank of Trinidad and Tobago, Bank of Jamaica, Central Bank of Barbados,

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