# DETERMINANTS OF INTEREST RATES: THE CASE OF SRI LANKA

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**Abstract**

Many studies have looked in to the determinants of interest rate in developed countries. The objective of this paper is to examine the determinants of interest rates in Sri Lanka. The model employed in this study is based on the framework developed in Edwards and Khan (1985) and a few modifications suggested in Cavoli (2007), Cavoli and Rajan (2006), Berument, Ceylan and Olgun (2007) and Zilberfarb (1989). The model nests the interest rate parity theory, liquidity preference theory and the Fisher hypothesis augmented with inflation uncertainty. We employ Autoregressive Distributed Lag (ARDL) approach to capture long-run relationships among the variables involved. Quarterly data from 2001:1 to 2012:2 has been used. There are a few important findings. First, there is no evidence for inflation uncertainty in Sri Lanka during the sample period concerned. Second, the ARDL bound testing approach suggests that there is no long-run impact of the national income, money supply, inflation, foreign interest rates and net foreign assets on the domestic interest rate. Third, apart from the interest rate parity conditions, neither the liquidity preference theory nor Fisher effect is useful in explaining short-run interest rate changes in Sri Lanka during the period in question.

**Keywords:** Interest Rate, Liquidity Preference Theory, Fisher Hypothesis, Interest Rate Parity, ARDL Bound Testing Approach

## 1. Introduction

Interest rate can be considered the cost incurred on borrowing money or the compensation for the service and risk of lending money to defer the opportunity of spending in the present. It is also a source of information required for policy making and an operating instrument in monetary policy. In such a context, a proper understanding of the determinants of the interest rates and estimating the degree of their impact on interest rates is extremely useful in both public and private financial decision making.

Most of the previous studies on interest rate in Sri Lanka are limited to either the examination of interest rate structures or testing the validity of the Fisher

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hypothesis in Sri Lankan financial markets. Hettiarachchi (1976), for instance, examines both the level and the structure of interest rates in Sri Lanka. Cooray (2002) focuses on Fisher relationship and cites evidence that there is a weak support for the Fisher hypothesis in Sri Lanka. Contrary to Cooray (2002), Berument, Ceylan and Olgun (2007) find that the Fisher hypothesis is not significant in Sri Lankan financial markets. Udayaseelan and Jayasinghe (2010) report that there is no empirical support even for a partial Fisher effect in Sri Lanka. Hemachandra (2009) examines the recent experience of using the interest rate as a policy instrument. Hemachandra (2010) focuses on the factors that would determine the variations in interest rates across various financial assets and markets in Sri Lanka. Accordingly, factors affecting the interest rate behavior include policy rates, cost of funds, type of instruments, term structure, regulations, liquidity in the markets, competition, technology, inflationary expectations etc. However, none of these studies inquire into the general determinants of the interest rate in Sri Lanka which is the objective of this paper.

The paper is organized as follows. Section 2 provides a brief survey of literature. Theoretical framework in outlined in Section 3. Section 4 describes some important remarks related to data. Empirical analysis is carried out in Section 5. Concluding remarks are contained in Section 6.

## 2. A Brief Survey of Literature

In literature, there exist a number of theories that explain the determination of interest rate in an economy. Liquidity preference approach developed in Keynes (1936) views the interest rate determination as a result of the interaction between demand for and supply of money in the money market. Accordingly, supply of money and real income are instrumental in determining the interest rate. The relationship developed in Fisher (1930) and commonly known as the Fisher hypothesis views nominal interest rate as the sum of real interest rate and expected inflation rate. It also suggests a one-for-one relationship between the nominal interest rate and expected inflation rate implying that the real interest rate usually remains constant. Assuming identical financial assets in two economies in question, uncovered interest parity indicates that interest rate differential in two economies is equal to the expected exchange rate change between the currencies used in the two economies. This also implies that the domestic interest rate is equal to the foreign interest rate plus expected exchange rate change. According to the loanable funds theory, interest rate is determined by the demand for and supply for loanable funds.
Edwards and Khan (1985), a study that later became the initial impetus of a number of studies of that nature, combines the implications of the liquidity preference approach, Fisher relationship and uncovered interest parity and develops a reduced form model to analyze the determinants of the interest rate in semi-open economies. While interest rates in open economies are likely to be determined through the uncovered interest parity relationship, interest rates in closed economies are more likely to be influenced by domestic factors such as real income, money stock and

expected inflation. According to Edwards and Khan (1985), interest rates in semi-open economies can be thought of as the weighted average of the interest rates in open and closed economies. Whether the internal factors dominate or the external factors dominate is dependent on the degree of openness. More importantly, if the trade account is fully open though the capital account is completely closed, the external factors could still affect the domestic interest rate indirectly. For instance, terms of trade shock can result in changes in real income and prices, which will affect the domestic demand for credit, and thus equilibrium interest rates. Empirical evidence from Colombia (a small semi-open economy) and Singapore (a small open economy) has been cited in support of the proposed model. The model has been highly successful in explaining the behavior of the interest rate in these two economies.

Several authors have extended the Edwards and Khan (1985) model (EK model) to analyze the behavior of interest rates in semi-open developing economies. Gochoco (1991), for instance, develops a model to find the determinants of interest rate in Philippines. The study introduces a few changes related to the macroeconomic factors to the EK model. The liquidity and Fisher effects are allowed to occur concurrently due to different components of monetary growth. The expected inflation is measured as the difference between anticipated monetary growth and the growth of output whereas the liquidity effect is represented by the money supply that is measured by the unanticipated monetary growth.

Bar-Efrat (1993) applies the EK model to Israel for a period during which a program of liberalization gradually eases controls over capital movements to and from the country. The period under study is divided into sub-periods with various policy regimes in order to test the effect of changing policies on the degree of financial integration.

Subhaswadikul (1995) inquires into the determinants of interest rate in Thailand based on EK model with few changes. In 1989, Thailand authorities started the formal comprehensive financial reform programs with the abolishment of the interest rate ceilings. Here the financial openness was modeled as a linear function of time with dummy variables to represent the different periods. Determination of interest rate is viewed as a function of macroeconomic factors such as anticipated inflation, unanticipated money growth and exogenous demand shocks.

EK model has also been used by Jankee (2003) to find the determinants of interest rate in Mauritius. The study cites evidence for low degree of linkages with external financial markets and the importance of internal factors in domestic interest rate determination and concludes that uncovered interest parity and Fisher relationship do not hold for the selected sample period in Mauritius.

Ahmad (2007) employs a modified version of EK model to examine financial liberalization and interest rate determination in Malaysia. By accommodating foreign reserves through its link with the money supply, the study provides a provision to check whether sterilization affects the interest rate determination. The study concludes that external factors are more important in domestic interest rate determination before the Asian Financial crisis whereas internal factors are dominant in it after the crisis period. It also records that the domestic market is less opened with limited speed of foreign adjustment after the crisis.

## 3. Theoretical Framework

The proposed model is based on Edwards and Khan (1985) and a few more modifications to it suggested in Cavoli (2007), Cavoli and Rajan (2006), Berument, Ceylan and Olgun (2007) and Zilberfarb (1989). As Sri Lanka is an economy with a partially liberalized capital account, it can be treated as a semi-open economy where, according to Edwards and Khan (1985), interest rate can be modeled as the weighted average of interest rates in a fully open economy and a closed economy.

According to the standard Fisher relationship, the nominal interest rate in an economy wherein capital account is not liberalized can be expressed as:

$$i_t = rr_t + \pi_t^e \tag{1}$$

where, $i$ is nominal interest rate, $rr$is real (ex-ante) interest rate and $\pi^e$is the expected rate of inflation. Following Edwards and Khan (1985), the real interest rate can be specified as:

$$rr_t = \rho + \gamma(\ln m_t^d - \ln m_t) \tag{2}$$

where, $m^d$ is the desired equilibrium stock of money or the demand for money and $m$ is the actual money stock. Thus, $(\ln m^d - \ln m)$ represents excess demand for money. $\gamma$ is a parameter and $\gamma > 0$. $\rho$ is a constant that represents the long-run equilibrium of the real interest rate. The real interest rate would deviate from its long-run value if there is monetary disequilibrium. For instance, an excess demand for money may result in a tentatively high real interest rate. In literature, this relationship is identified as "liquidity effect" (Mundell, 1963). The advantage of introducing the liquidity effect here is that it allows the real interest rate to vary in the short-run relaxing the restrictive assumption that real interest rate is always a constant. Substituting equation (2) into (1),

$$i_t = \rho + \gamma\left(\ln m_t^d - \ln m_t\right) + \pi_t^e \tag{3}$$

Equation (3) of the model allows for the possibility that real interest rate may adjust slowly, even though the Fisher relationship holds continuously. Viewed in this manner, it is allowed that the nominal interest rate may show a delayed response to monetary changes and the delay depends on the magnitude of the parameter $\gamma$.

The equilibrium demand for money can be specified as follows:

$$\ln m_t^d = a_0 + a_1 \ln y_t - a_2(\rho + \pi_t^e) + a_3\pi_t^e \tag{4}$$

Long-run equilibrium demand for money is assumed to be a function of a scale variable, real income ($y$), and two opportunity cost variables, namely the

expected inflation rate ($\pi^e$ ) and the nominal interest rate. Equilibrium nominal interest rate given by the long-run value of the real interest rate ($\rho$) plus the expected inflation rate ($\pi^e$ ) is assumed to be more appropriate in determining the long-run equilibrium demand for money than the current nominal interest rate.
Following Kwak (2001), money base of the central bank ($m$) is assumed to depend on net domestic assets ($D$) and net foreign assets ($F$).

$$m_t = D_t + F_t$$

Following Cavoli (2007) and Cavoli and Rajan (2006), we assume that the rate of change of money supply ($(m_t - m_{t-1})/m_{t-1} = \Delta m_t/m_{t-1}$) can be approximated as:

$$\Delta \ln m_t = \Delta d_t + \Delta f_t \tag{5}$$

where, $\Delta d_t = \Delta D_t/m_{t-1}$ and $\Delta f_t = \Delta F_t/m_{t-1}$. If complete sterilization occurs, then there will be no change in money supply or $\Delta m = 0$ so that equation (5) will reduce to $\Delta d_t = \Delta f_t$ (6)

For the case of incomplete sterilization, equation (6) can be modified as:

$$\Delta d_t = \lambda \Delta f_t \tag{7}$$

where, $\lambda$ is the degree of sterilization which is equal to -1 in the case of complete sterilization. Or, the case of complete sterilization indicates that a change in foreign reserves is completely offset by an opposite change in domestic assets leaving no effect on the money supply which in turn will have no effect on the interest rate.
Substitution of equation (7) into (5) will yield

$$\Delta \ln m_t = (1 + \lambda)\Delta f_t \tag{8}$$

Then the money stock in time period *t* can be written as follows:

$$\ln m_t = (1 + \lambda)\Delta f_t + \ln m_{t-1} \tag{9}$$

Substituting equations (4) and (9) into equation (3),

$$i_t = \eta_0 + \eta_1 \ln y_t + \eta_2 \pi_t^e + \eta_3 \Delta f_t + \eta_4 \ln m_{t-1} \tag{10}$$

where,

$$\eta_0 = \rho + \gamma a_0 - \gamma a_2 \rho$$

$$\eta_1 = \gamma a_1$$

$$\eta_2 = (1 - \gamma a_2 + \gamma a_3)$$

$$\eta_3 = -\gamma(1 + \lambda)$$

$$\eta_4 = -\gamma$$

Equation (10) describes the determinants of the interest rate in a closed economy. Interest rate in a fully opened economy where capital account is fully liberalized is given by the uncovered interest rate parity relationship.

$$i_t = i_t^f + \dot{e}_t \tag{11}$$

where, $i^f$ is the world interest rate for a financial asset of the same characteristics and $\dot{e}$ is the expected exchange rate change.

Allowing for possible delays associated with the domestic interest rate in adjusting in response to the expected exchange rate changes that may stem from various transaction costs and information lags etc., one can use a partial adjustment framework to model the interest rate parity relationship.

$$\Delta i_t = \theta((i_t^f + \dot{e}) - i_{t-1}) \tag{12}$$

where, $\theta$ is the adjustment parameter and $0 \le \theta \le 1$. Equation 12 implies that a change in local interest rate is equal to only a fraction of the difference between previous period's interest rate and the sum of world interest rate and expected exchange rate change. By rearranging equation (12), we can obtain an expression for the interest rate in period $t$.

$$i_t = \theta\left(i_t^f + \dot{e}\right) + (1-\theta)i_{t-1} \tag{13}$$

Equation (13) describes how the interest rate in a fully open economy is determined. Interest rate in an economy where some capital controls are at work can be viewed as a weighted average of the interest rates in a closed economy and a fully open economy (Edwards and Khan, 1985).

$$i_t = \psi i_t^o + (1-\psi)i_t^c \tag{14}$$

where, $i_t^o$ represents the interest rate in an open economy and $i_t^c$represents the interest rate in a closed economy. $\psi$ is termed as the degree of openness. Assuming that $i_t^o$ and $i_t^c$ are characterized by equations (13) and (10), respectively, and substituting them into equation (14),

$$i_t = \psi\theta\left(i_t^f + \dot{e}\right) + \psi(1-\theta)i_{t-1} + (1-\psi)(\eta_0 + \eta_1 \ln y_t + \eta_2 \pi_t^e + \eta_3 \Delta f_t + \eta_4 \ln m_{t-1})$$

Rearranging,

$$i_t = \delta_0 + \delta_1(i_t^f + \dot{e}) + \delta_2 \ln y_t + \delta_3 \pi_t^e + \delta_4 \ln m_{t-1} + \delta_5 \Delta f_t + \delta_6 i_{t-1} \tag{15}$$

where,

$$\delta_0 = (1-\psi)(\rho + \gamma a_0 - \gamma a_2 \rho)$$

$$\delta_1 = \psi\theta$$

$$\delta_2 = (1-\psi)\,\gamma a_1$$

$$\delta_3 = (1-\psi)(1 - \gamma a_2 + \gamma a_3)$$

$\delta_4 = -(1-\psi)\gamma$
$\delta_5 = -(1-\psi)\gamma(1+\lambda)$
$\delta_6 = \psi(1-\theta)$

Finally, following Berument et al. (2007) and Zilberfarb (1989), we also assume that there is a possibility that the inflation uncertainty ($\sigma^{\pi}$) may also affect the interest rate. Then the model becomes;

$$i_t = \delta_0 + \delta_1(i_t^f + \dot{e}) + \delta_2 \ln y_t + \delta_3 \pi_t^e + \delta_4 \ln m_{t-1} + \delta_5 \Delta f_t + \delta_6 i_{t-1} + \delta_7 \sigma_t^{\pi} \quad (16)$$

Expected signs for the parameters $\delta_1$, $\delta_2$, $\delta_3$, $\delta_6$ and $\delta_7$ are positive whereas the signs associated with $\delta_4$ and $\delta_5$ are expected to be negative.

Within the framework suggested by the proposed model given in equation (16), interest rate in a semi-open economy is assumed to be determined by world interest rate plus expected exchange rate change, real income, money stock during the previous time period, change in foreign assets, interest rate during the previous time period, expected inflation and inflation uncertainty.

Implications of a few interest rate theories are nested in the proposed model. The composite variable $(i_t^f + \dot{e})$ represents the interest rate parity relationship. $y_t$ and $m_{t-1}$indicate the role of liquidity preference in interest rate determination. Finally, the presence of $i_{t-1}$, $\pi_t^e$ and $\sigma_t^{\pi}$ emphasizes the importance of an extended version of the Fisher relationship in interest rate determination.

## 4. Data

The study uses quarterly data for the sample period January 2001 to June 2012. Data has been obtained from annual reports of Central Bank of Sri Lanka, various publications of Department of Census and Statistics of Sri Lanka and the official website of the Federal Reserve Bank.

Following many studies, 91 Treasury bill rate is selected to be the measure of domestic interest rate. Narrow money supply (M1) that consists of currency and demand deposits held by the public is used as the proxy for the actual money stock. The rationale for the selection is that M1 is more sensitive to the changes in money supply than broader measures of money. Inflation rate is computed using the CCPI, the official measure of inflation in Sri Lanka.Total net foreign assets given in Central Bank annual reports are used as the measure of net foreign assets which consists of the external assets (net) of the Central Bank and commercial banks including outward bills. Both nominal GDP and net foreign assets are deflated using CCPI in order to get the real values of the two variables.

There are several measures that can be used as proxies for foreign interest rate. The first candidate is the SDR (Special Drawing Rights) rate which is an international reserve asset created by the IMF where the value is based on a basket of four key international currencies and can be exchanged for freely usable currencies. The problem of SDR in the Sri Lankan context is that the relevant exchange rate for SDR which is Real Effective Exchange Rate (REER) is not in one base for the sample period studied and data is available only after 2003. Therefore, a second candidate, namely the US three-month Treasury bill rate is used as a proxy for the foreign interest rate. However, only the secondary market US Treasury bill rates are available for the sample period.

## 5. Empirical Analysis

In order to convert the proposed model in equation (16) into an estimable version, it is essential to replace the unobservable variables such as expected inflation ($\pi^e$) and expected exchange rate change ($\dot{e}$) with some observable variables. This can be done in a number of ways. Use of either adoptive or rational expectations is common in modeling expected inflation. However, to keep things simple, we use ARIMA forecasts to obtain data for the expected inflation rate. The predicted inflation rate ($\pi'$) is obtained after deducting error term obtained from an appropriate ARIMA model from the actual inflation rate. Based on AIC and SIC criteria, an ARIMA (1,1,1) model has been selected for purpose. Following literature, three-month forward premium percentages ($fp$) are used as a proxy for the expected exchange rate change.

In order to find the inflation uncertainty data represented by the conditional variance of inflation, GARCH modeling can be used. However, as the ARCH-LM test results reveal, there is no ARCH effect in inflation data in Sri Lanka. As such, the variable $\sigma^\pi$ in equation (16) is dropped and the proposed model to be estimated is represented by equation (15).

We begin the analysis with the stationarity test for all data series. Results of ADF test obtained for levels and first differences of all variables are displayed in Table 01[3]. At levels, domestic Treasury bill rate ($i$), US Treasury bill rate ($i^f$) and forward premium ($fp$) are not stationary. However, predicted inflation rate ($\pi'$), narrow money supply ($m1$), real GDP ($y$) and foreign assets ($f$) are stationary. At first difference, all the series are stationary. This suggests that domestic Treasury bill rate, US Treasury bill rate and forward premium are integrated of order one, or I(1), whereas expected inflation rate, narrow money supply, real GDP and foreign assets are integrated of order zero, or I(0).

These results question the use of Johansen cointegration test which requires the precondition that all the variables involved have to be integrated of the same order. As such, this study uses ARDL bounds testing approach to analyze the long-run relationship among variables involved. More importantly, ARDL bounds testing

[3] An intercept and a trend have been included in the equation for all variables.

approach does not need all variables are to be integrated of the same order (Pesaran and Shin, 1999; Pesaran, Shin and Smith, 2001).

**TABLE 01**

**ADF Test Results**

| Variable | ADF Statistic |
|---|---|
| $i$ | -2.301691 |
| $\pi'$ | -3.982369** |
| $m1$ | -3.743125** |
| $y$ | -6.730306*** |
| $\Delta f$ | -4.482645*** |
| $i^f$ | -2.369895 |
| $fp$ | -2.385409 |
| $\Delta i$ | -4.296611*** |
| $\Delta \pi'$ | -5.460512*** |
| $\Delta m1$ | -5.329308*** |
| $\Delta y$ | -5.679476*** |
| $\Delta^2 f$ | -5.681117*** |
| $\Delta i^f$ | -4.029999** |
| $\Delta fp$ | -7.659443*** |

*Note:* ***, ** and * denote the statistical significance at 1%, 5% and 10% levels, respectively.

As the independent variables may influence the dependent variable with a lag in time series analysis, it is sensible to include lags of the independent variables in the regression. In addition, dependent variables may also be correlated with lags of itself, requiring the inclusion of the lag terms of the dependent variable in the regression as well. ARDL approach is based on this reasoning to test the long-run relationship between variables.

**TABLE 02**
**Selection of the Lag Length**

| Lag value | AIC | SIC | Adj $R^2$ |
|---|---|---|---|
| 0 | 2.916189 | 3.525725 | 0.605519 |
| 1 | 3.117245 | 3.996977 | 0.530514 |
| 2 | 2.942670 | 4.098072 | 0.544831 |

As indicated in Table 02, based on AIC, SIC and adjusted $R^2$, the optimal lag order is found to be zero. As such, the unrestricted error correction model to be used for ARDL cointegration test can be specified as in equation (17).

$$\Delta i_t = \omega_0 + \tau_1 i_{t-2} + \tau_2 \ln m1_{t-2} + \tau_3 \ln y_{t-1} + \tau_4 \pi'_{t-1} + \tau_5 \Delta f_{t-1} + \tau_6\left(i^f_{t-1} + fp_{t-1}\right) + \omega_1 \Delta i_{t-1} + \omega_2 \Delta \ln m1_{t-1} + \omega_3 \Delta \ln y_t + \omega_4 \Delta \pi'_t + \omega_5 \Delta^2 f_t + \omega_6\left(\Delta i^f_t + \Delta fp_t\right) + \varepsilon_t \quad (17)$$

Restricted version of the ARDL model is given by,

$$\Delta i_t = \omega_0 + \omega_1 \Delta i_{t-1} + \omega_2 \Delta \ln m1_{t-1} + \omega_3 \Delta \ln y_t + \omega_4 \Delta \pi'_t + \omega_5 \Delta^2 f_t + \omega_6\left(\Delta i^f_t + \Delta fp_t\right) + \varepsilon_t \quad (18)$$

The *F* statistic based on these restricted and unrestricted versions of the ARDL model turns out to be 3.47.[4] Table 03 indicates the critical *F* values obtained from Pesaran, Shin and Smith (2001) for the relevant degrees of freedom. Since the calculated *F* value lies between the lower bound and upper bound critical *F* values at even 5% significance level, it is more appropriate to conclude that there exists no cointegration relationship between the interest rate and its proposed determinants.

**TABLE 03**
**Critical F Values of Bound Test**

| | 90% | | 95% | |
|---|---|---|---|---|
| K = 6 | I(0) | I(1) | I(0) | I(1) |
| | 2.12 | 3.23 | 2.45 | 3.61 |

[4] Computation of the *F* statistic is as follows:

$$F = \frac{(R^2_{UR} - R^2_R)/m}{(1 - R^2_{UR})/(n-k)} = \frac{(0.6944 - 0.4819)/6}{(1 - 0.6944)/(43 - 13)} = 3.47$$

Once it is confirmed that there is no cointegrating relationship between the interest rate and its determinants, the only option left is to estimate the short-run relationship using the equation (18). Results are presented in Table 04. Foreign interest rate changes adjusted for the expected exchange rate change proxied by the changes in forward premium and the lag term of the changes in domestic interest rate seem to be instrumental in determining the changes in domestic interest rate in the short-run. The changes in other variables, predicted inflation rate, real GDP, narrow money supply and foreign assets fail to show statistically significant impact on the domestic interest rate changes[5].

**TABLE 04**
**Results for the Short Run Relationship**

| Variable | Coefficient | Estimate | t-statistic |
|---|---|---|---|
| | $\varphi_0$ | 0.0554 | 0.23 |
| $\Delta\ln m1_{t-1}$ | $\varphi_1$ | -0.5521 | -0.11 |
| $\Delta\ln y_t$ | $\varphi_2$ | -2.0287 | -0.54 |
| $\Delta\pi_t'$ | $\varphi_3$ | 0.1997 | 0.19 |
| $\Delta^2 f_t$ | $\varphi_4$ | 0.5037 | 0.45 |
| $\Delta\left(i_{t-1}^f + \dot{e}_{t-1}\right)$ | $\varphi_5$ | 0.3284 | 3.89*** |
| $\Delta i_{t-1}$ | $\varphi_6$ | 0.2992 | 2.76*** |

*Note:* ***, ** and * denote the statistical significance at 1%, 5% and 10% levels, respectively.

Insignificant impact of real GDP and the money supply variable on domestic interest rate in both short- and long-run suggest that the liquidity preference framework is not helpful in explaining the behavior of the interest rate in Sri Lanka. Statistically insignificant parameter of the expected inflation rate implies that even a partial Fisher effect is not at work in determining the nominal interest rate. Significant impact of the foreign interest rate adjusted for expected exchange rate change on the domestic interest rate implies that the interest rate parity relationship comes in useful in explaining the behavior of the domestic interest rate in Sri Lanka. Furthermore, there is evidence that the interest rate changes drastically depend on its own changes in the past.

[5] The equation (18) has also been estimated using a dummy variable to capture the change in the measure of inflation rate in Sri Lanka introduced from January 2008. However, the coefficient of the dummy variable turns out to be insignificant.

## 6. Conclusion

This paper employed a slightly modified version of the reduced-form model suggested by Edwards and Khan (1985) in order to inquire into the determinants of interest rates in Sri Lanka. The model captures both external and domestic factors that are likely to influence the domestic interest rate. As the variables involved are not integrated of the same order, ARDL bounds testing approach is used to capture the long-run association of the interest rate and its determinants.

The results show that none of the proposed determinants has a cointegrating or long-run relationship with the interest rate. Even in the case of short-run, only the changes in foreign interest rate adjusted for expected exchange rate changes are instrumental in explaining the changes in the domestic interest rate. However, given the partially liberalized capital account and the limited dependence of the domestic interest rate on foreign capital transactions, this finding is not well supported by the empirical evidence associated with the interest rates in Sri Lanka. One possible interpretation would be that world interest rates may show a close linear association with the local rates though it does not necessarily suggest a causal relationship. In addition to the changes in foreign interest rates, the changes in past local rates are also important in explaining the current interest rate changes in Sri Lanka.

Contrary to the expectations, within the selected sample period, the changes in real GDP, narrow money supply and foreign assets do not exert any significant impact on interest rate changes in Sri Lanka. These findings confirm that, apart from interest rate parity conditions, no other interest rate theory such as liquidity preference theory and Fisher effect are useful in explaining the interest rate changes in Sri Lanka during the period in question.

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