

After the Terrorist Attacks: How Can Sri Lanka Accelerate its Economic Recovery?

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Abstract: Non-traditional security factors have increasingly become an essential threat to the economic development of modern countries. For those countries where terrorism is rampant, how to make full use of fiscal and monetary policies, alleviate the negative impact of terrorism, and strengthen the national economy's ability to resist terrorism is a severe challenge for policymakers. The Easter terrorist attacks in 2019 have dealt a heavy blow to Sri Lanka's tourism industry. How to use monetary policy to accelerate economic recovery has become the primary issue that the Central Bank of Sri Lanka needs to deal with. This paper innovatively uses the IS-MP model used by the Federal Reserve for decision-making analysis to analyze the economic situation of Sri Lanka since the terrorist attacks. It provides suggestions for the decision-making of the central bank and the government of Sri Lanka. This study has positive significance in promoting the economic recovery and development of Sri Lanka. Furthermore, it has reference value for other countries threatened by terrorism in South Asia, such as India, Pakistan, and Afghanistan, to explore how to alleviate the negative impact of terrorism and has positive significance for regional economic development.

1. Introduction

Jenkins describes terrorism as unlawful power use of violence against property, entities to harass or force governments or their people to chase specific societal or political goals [1]. Terrorism has also being defined by Saint-Pierre as political violence I which the terrorists cannot surmount their opponents, and they use terrorism to cause more damage than they can tolerate [2]. Terrorism has caused extensive damaging events in Sri Lanka since the Sri Lankan civil war (1983-2009). The liberations tigers of Tamil Elam were accused of causing demolitions in the country. The actions of Tamil Elam's liberations tigers led to a three decades civil war in Sri Lanka. The Easter Sunday attack is the most recent terror attack in Sri Lanka, and it took place on April 21, 2019. This attack was a shock to the Sri Lankan tourism sector. This study analyses the 2019 terror attack's economic impact using the Federal Reserve IS-MP model and predicts the country's recovery period.

Peace and economic growth have a vital link because an economy cannot grow in chaos. Peace, security, and stability are positive variable s to economic growth. The growth of an economy can be hindered by the direct and indirect effects caused by terrorism. The main determinants for economic growth are physical and human capital. Terrorist attacks, violence, and conflict destroy both human and physical capital and destabilize socio-political settings that positively impact an economy's growth. High levels of violence in a country result in the loss of local and international investors, resulting in a decrease in foreign and domestic investments. Additionally, terrorism causes physical and human capital to shift abroad, which affects economic growth adversely. Countries allocate many resources to fighting terrorism, which could have been used for developmental plans such as improving infrastructure.

The suicide bombings that took place on Easter Sunday in churches and hotels have tarnished the attraction and image that Sri Lanka had developed internationally since 2009. The Easter attacks caused 320 deaths, and 40 of the deceased were tourists [3]. The terrorist attacks target tourist hotels, which has made tourists hesitant and fearful of visiting the country. These had an enormous impact

on the industry and the country's economy since tourism generates considerable revenue for the government and its citizens. The attacks also affected the country's external liquidity position.

Tourism is a significant financial contributor in both developing and developed countries. Lonely Planet published that Sri Lanka, one of the world's best tourist destinations, and the government has unique scenic beauty [4]. The government has countless natural sights, including a beautiful combination of steamy valleys, waterfalls, rivers, and mountains, which provide a wonderful atmosphere. The Sri Lankan tourism development authority in 2019 identified the tourism sector as lucrative and has a possibility of yielding positive outcomes to the economy.

For the past decade, tourism has been the primary driver of the rising GDP growth figures in Sri Lanka. According to the Sri Lankan Tourism Development Authority, the number of tourists visiting the country has grown from 500,000 in 2009 to almost 2.5 million in 2019. The tourism sector is the third largest sector in the economy, and it generates revenues of nearly 4.4 billion dollars each year. Tourism accounts for almost 5 per cent of the annual GDP of Sri Lanka and has created more than 800,000 employment opportunities both directly and indirectly.

Following the attacks, countries such as the United States of America and the United Kingdom issued red notices to their Sri Lanka passengers. These red notices caused tourists to refrain from visiting Sri Lanka, which contributed to a reduction of 70% hotel checking in 2019 compared to the 20% reduction in the previous year. The drastic decrease of tourists led to reduced revenues, closure of hotels, massive layoffs, and slowed down the economy. There is an expected 30% drop in tourism volumes yearly as a result of the attacks. These translate to \$1.5 billion in lost revenues in the tourism sector.

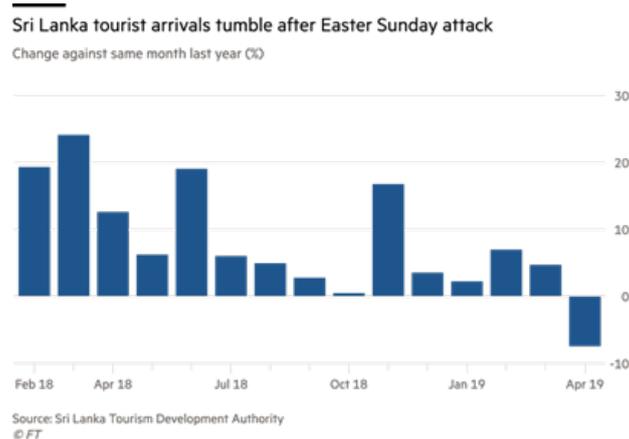


Figure 1. Sri Lanka tourist arrivals tumble after Easter Sunday attack

As of June 2019, Sri Lanka had already felt the impacts of the Easter attacks, and the central bank of Sri Lanka reduced its interest rates to boost the recovery of the economy. The central bank reduced the deposit facility rate and the lending rates by 50%. In 2019, the country's economy grew by 3 per cent, below the 6 per cent average growth rate of the past years. Government adviser Anush Wijesinha said that the foreign direct investors are cautious and watching to see how fast the situation will normalize.

A study conducted in India by Gupta on the effects of terrorism on the tourism industry's financial performance suggested that safety concerns contributed to the reduced numbers of tourists arriving in the country [5]. Another study conducted by Arana and Leon explained that tourist arrivals numbers were likely to drop after a terrorist attack because tourists want to ensure their safety [6]. According to Memdani and Shenoy, terrorizing does not affect the property and human life and stakeholders' decisions [7].

For Sri Lanka to boost its economy and avert the adverse effects of 2019 terrorism, the central bank of Sri Lanka and its government will have to put new measures in place. The central bank can reduce interest rates as a measure for boosting economic growth. Lower interest rates tend to increase economic growth. Low-interest rates reduce the cost of borrowing and increase disposable income, thus increasing consumer spending. However, central banks need to implement this policy

and moderate it effectively because lower interest rates can increase inflationary pressures and cause a depreciation in the exchange rate.

Policymakers are faced with the difficult task of increasing economic growth without leading to inflation rates above their inflation target. Economic growth without high inflation rates is possible when change is caused by increased productivity and investment. Positive economic growth and low inflation rates are likely long as sustainable, and exchange demand rises at a similar rate as the productive capacity.

2. Theoretical framework

2.1 Keynes liquidity preference theory of interest rate

According to Keynes, investors are likely to prefer short-term securities to long-term securities because of the underlying risks. The liquidity preference theory is defined as the interest rate explained by the idea of money, employment, and interest. The interest rate depends on the current money supply and the demand for present money claims regarding the deferred shares. The rate of interest, according to Keynes, is dependent on the demand and supply of money. In this theory, interest rates can only affect economic growth through the effects of planned investment spending.

At equilibrium, where the money supply is equal to money demand, interest rates are determined. If interest rates are higher than in the equilibrium, the money supply will exceed money demand, and individuals will react by buying more securities. Increased demand for securities will increase the prices, and interest rates will fall back to the equilibrium. If interest rates are lower than the equilibrium, money demand will exceed money supply, and individuals will prefer to sell their securities. Interest rates will rise to a point where the money supply is equal to money demand.

2.2 The is-mp model

An IS-MP model is a macroeconomics tool that shows the short-run changes in output, interest rates, and inflation. IS-MP curve is a macroeconomic model that consists of an I.S. curve, M.P. curve, and the Phillips curve.

The I.S. curve represents the equilibrium in the goods market. The MP curve shows the monetary policy. The Phillips curve represents the short-run relationship between the inflation rate and the output gap, the percentage difference between the actual and potential real GDP, and the unemployment rate.

The Philips curve. The Philips curve shows the indirect relationship between inflation and unemployment in an economy: when unemployment increases, inflation decreases. The Philips curve position tends to change in response to changes in inflation rate expectations and supply shocks. The Philips curve shows the short-run relations but not the long run. Monetarists argue that in the long run, there is no trade-off because the aggregate supply is inelastic. The Philips curve depicts the price-setting behaviour of firms. Expected inflation, price shocks and current demand conditions are the factors that current inflation depends on. According to the new Philips curve version, inflation is a function of inflation expectations, the output gap and temporary inflationary shocks.

The MP curve. The monetary policy curve explains how the central bank sets the nominal interest rates exploiting the fact that the nominal and real interest rates move closely together in the short run intending to meet an inflation target. Central banks adjust nominal interest rates upwards when inflation is high and adjusts nominal interest rates downwards when inflation is low. When the inflation rates are equal to the central bank's target inflation, nominal interest rates will be equal to the inflation rate, and real interest rates will be at their natural level. The federal funds rate is the interest rate that one bank pays to another for overnight loans. The central bank's real interest rates at a particular value are set such that the M.P. curve is horizontal.

The I.S. curve. It explains the inverse relationship between total output and real interest rates. The higher the real interest theory, the lower the output. Real interest rates are interest rates that are adjusted to remove inflation effects and reflect the actual cost of funds to the lender and the borrower. Actions by consumers and the government can cause shifts in the I.S. curve. The I.S. curve is a

function of the real interest rates and aggregate demand shocks.

The IS-MP curve. The IS-MP curve depends on the reactions of central banks to inflation, and the slope of the curve is negative.

3. Methodology

This chapter discusses in detail the methodological choice and the research design of the study. The dependent variable and the explanatory variables are explained and show the econometric model to analyse them. In this chapter, the method of achieving the study's objectives is explained, and Stata has been used for data analyses. Economic growth is the variable, and the growth rate of GDP measures it.

3.1 Data collection

The data used in this research is time-series data collected quarterly from the year 2014 to 2019. Data was sourced from the Sri Lanka census of population and housing, the ministry of finance and bureau of statistics in Sri Lanka, and the international monetary fund (IMF) data website.

3.2 Method of data analysis

The method of data analysis used is STATA. STATA is statistical software that is used for data analysis, data management, and it produces graphical visualizations of data.

3.3 Econometric Model specification

The econometric model used is Regression Ordinary Least Squares (OLS). The dependent variable is economic growth represented by the GDP of Sri Lanka, and the explanatory variables to be used are interest rates and inflation. These variables have been proven to boost countries' economic growth, as found in studies by Lechman and Kauer [8].

OLS general model;

$GDP = F(\text{Interest rates and inflation})$

$GDP = F(I.R., IF)$

OLS specific model;

$GDP = \alpha + \beta IR + \delta IF + \varepsilon$

As illustrated by the general and specific equations above, economic growth is a function of interest rates and inflation.

α is the constant term represents the predicted probability of GDP growth when interest rates and inflation are evaluated at zero.

I.R. is a vector of variables about interest rates.

I.F. is a vector of variables about inflation.

β and δ are the coefficient vectors measuring the effects of I.R. and I.F. on GDP.

ε is the residual term representing the difference between the estimated GDP and the observed GDP and should not be correlated with all other independent variables included in the model.

3.4 The IS-MP model specification

The IS-MP model is made up of three equations, which are:

Phillips curve:

$$\pi_t = \pi_t^e + \gamma (y_t - y_t^*) + \varepsilon_t^\pi$$

The I.S. curve:

$$y_t = y_t^* - \alpha (i_t - \pi_t - r^*) + \varepsilon_{yt}$$

The monetary policy rule (M.P. curve):

$$i_t = r^* + \pi^* + \beta \pi (\pi_t - \pi^*)$$

The Philips curve equation, the I.S. curve equation, and the M.P. curve equation are combined to

give the IS-MP model equation as follows:

$$Y_t = y_t^* - \alpha (\beta \pi - 1) (\pi_t - \pi^*) + \varepsilon_t^y$$

π_t^e represents inflation expectations by the public at time t

π_t represents inflation

π^* represents the inflation target that is chosen by the central bank

y_t represents the output gap (the gap between GDP) at time t

y_t^* represents the 'natural' level of output. It is the output level at period t that will be consistent with unemployment at its natural rate.

γ It is a coefficient that shows the magnitude by which inflation will change when the gap between output and its natural rate changes by 1 per cent.

ε_t^π it is an inflationary 'shock' term. It is used to capture all other factors, apart from inflation expectations and the output gap, that may influence inflation at time t. such factors may include supply shocks.

I_t represents the nominal interest rates at time t

R^* denotes the real interest rates. It can also be written as $i_t - \pi_t$

α represents the magnitude by which output will change when real interest rates change by 1 per cent.

ε_t^y it represents other factors other than real interest rates that influence aggregate spending decisions of consumers. Factors such as fiscal policies, asset prices, consumer and business sentiment can be aggregate demand shocks.

β_π is a parameter that represents how the central bank reacts to inflation

the IS-MP curve will slope downward as long as the central bank reaction to inflation is such that $\beta_\pi > 1$. if inflation increases by z, then the nominal interest rates will also increase by the same magnitude z ($\beta_\pi z$), and the real interest rates will change by $(\beta_\pi - 1)$. Therefore, when inflation increases, the real interest rates will increase, but by a higher magnitude, and output will decrease. However, if the central bank decision is such that $\beta_\pi < 1$, an increase in inflation will result to lower real interest rates, and output will increase, and the IS-MP curve will slope upwards. The assumptions for the two situations is that there are no aggregate demand shocks, $\varepsilon_t^y = 0$. However, if there is a positive shock to aggregate demand, there will be a positive value of ε_t^y , and the IS-MP will shift to the right. Economic shocks cause the IS-MP curve to shift to the right or the left, depending on whether it is a positive or a negative shock.

The IS-MP-PC model is shown in the graph below. When the public expected inflation equals the central bank's target inflation.

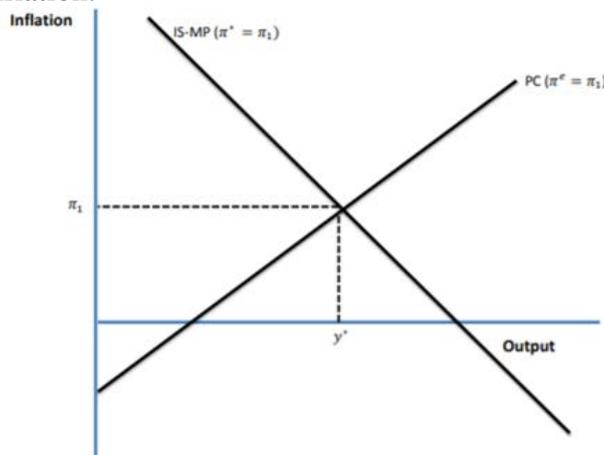


Figure 2. The IS-MP-PC model

The Phillips curve slopes upwards while the IS-MP curve slopes downwards, assuming that $\beta_\pi > 1$. The case represented above is shown in a period where both temporary shocks, ε_t^y , and ε_t^π are equal to zero. The central bank inflation target and the people's expectations of inflation are both similar.

4. Data analysis and interpretation

The sample ranges used are 2014 Q1 to 2019 Q4 (24 observations). The GDP index number uses the year 2013 as the base year. The weighted fraction rate average of the past four quarters will act as the expected inflation rates.

Table 1. Table Type Styles

Variable	Obs	Mean	Std. Dev	Min	Max
GDP	24 ^a	1.012875	.0234152	.97	1.054
IR	24	9.942083	2.074925	6.43	12.19
IF	24	.4291667	.7805066	-1	1.8

a. Sample of a Table footnote. (Table footnote)

Number of obs = 24

F (2, 21) > 99999.00

Prob > F = 0.0000

R-squared = 1.0000

Adj R-squared = 1.0000

Root MSE = 2.8e-08

The F value shows the degree of freedom and the statistical significance of the model.

Table 2. Table Type Styles

Source	S	number	.S. df M.S.
Model	.012610239	2	.00630512
Residual	1.6725e-14	21	7.9641e-16
Total	.012610239	23	.000548271

The R2 measures the proportion of variance of the dependent variable explained jointly by the independent variables. R2 is given as a percentage. 100% of the real growth rate variations are explained jointly by interest rates and inflation. The adjusted R2 is the adjusted R2 values that correct the optimistic biased estimates to provide a value that is expected from the observations.

Table 3. Table Type Styles

GDP	Coef.	Std. Err	t	P>t	[95% Conf.]	Interal]
IR	-8.72	2.84e-09	0.56	0.579	-4.30e-09	7.50e-09
IF	.03	7.54e-09	4.0e+06	0.000	.03	.03
_cons	1	2.89e-08	3.5e+07	0.000	.9999999	1

The econometric regression model can be written as:

$$GDP = 1 - 8.72IR + 0.03IF + \varepsilon$$

Interpretation: GDP will grow by one percent quarterly regardless of whether the interest rates and the inflation rates are adjusted. There is a direct relationship between inflation rates and GDP growth. Interest rates have an inverse relationship with GDP growth. The independent variables' coefficients show the magnitude of change of GDP when either interest rates or inflation rates change. If interest rates increase by one percent, GDP growth will decrease by 8.72 percent, while a one percent increase in inflation will increase the GDP by 0.03 percent. The error term ε represents all other factors that affect GDP growth that is not represented by interest rates and inflation rates.

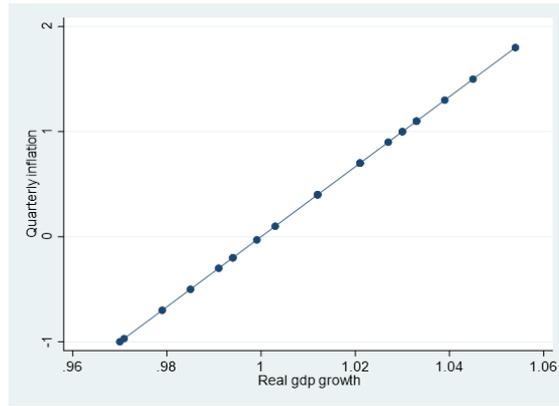


Figure 3. The quarterly inflation and real GDP growth in Sri Lanka

The inflation in Sri Lanka has a direct relationship with real GDP growth. It is evident that as the economy continues to grow, inflation also increases.

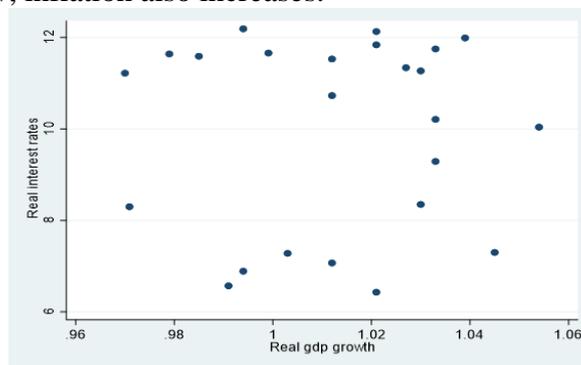


Figure 4. The real interest rates and real GDP growth in Sri Lanka

The relationship between the real interest rates and real GDP growth in Sri Lanka is not straight forward. The interest rates used here are lending rates.

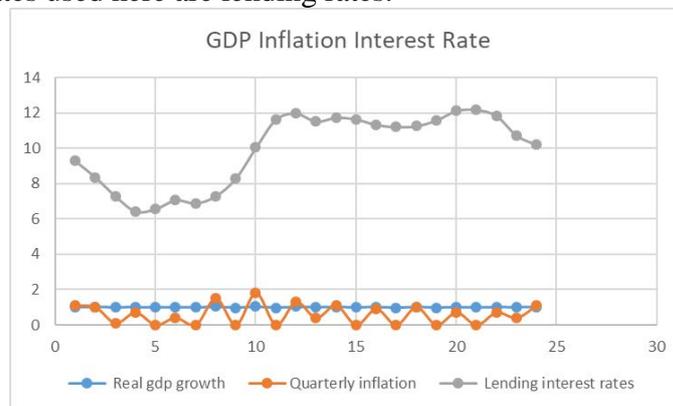


Figure 5. GDP inflation interest rate

The lending rates in Sri Lanka have been ranging from 6 to 12 per cent. The real GDP growth has been approximately 1 per cent yearly.

4.1 Robustness analysis

Cervellati & Sunde have shown that internal and external conflicts can affect economic growth [9]. For robust analysis, we use inflation and interest rates as proxy variables for terrorism to estimate its economic growth effects. As an alternative to the ordinary least squares method of regression, robust regression can be used. Robust testing is done when the user data is contaminated with influential observation, and it can be used to detected biased observations. When using least squares, it is possible to find outliers or high-level data points which are not data entry errors, and thus we can't eliminate them. In such a case, robust regression is the best strategy since it is a

comparison between the data and points treating them equally. In robust testing, leverage vs squared residual graph is plotted to determine whether the initial analysis was correct.

Table 4. Robustness analysis

GDP	Coef.	Std. Err	t	P>t	[95% Conf.	Interal]
IR	-8.72	2.85e-09	0.56	0.581	-4.33e-09	7.53e-09
IF	.03	6.92e-09	4.3e+06	0.000	.03	.03
_cons	1	2.79e-08	3.6e+07	0.000	.9999999	1

A one per cent increase in inflation will result in a 0.03 increase in economic growth. After comparing the two effects increase in interest rates will result in the economy growing faster than inflation rates. The standard errors from the default least squares regression are almost similar to the robust standard errors. This result shows that they are no evidence of the violation of the constant variance assumption or homoscedasticity.

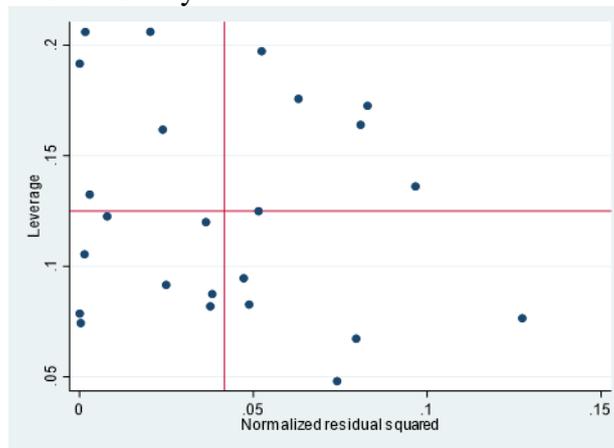


Figure 6. The relationship between the leverage and the normalized residual squared

4.2 Empirical analysis

For Sri Lanka to overcome the direct and indirect effects of the 2019 terrorism attacks, monetary policies need to be made. In this paper, two variables have been used, inflation and interest rates, to determine the rate at which the economy will grow once the variables are changed. The ordinary least squares regression and the robust regression has both show the positive effects of interest rates and inflation on economic growth. The results of the output equation almost resemble the findings in the existing works of literature of Barro and Sala-i-Martin [10]. Variables such as domestic investment, foreign direct investment, and government spending have positive impacts on economic growth. An increase in economic growth in Sri Lanka will result in increases in human capital. Human capital has the highest coefficient implying that a one per cent change in human capital will increase economic growth by a magnitude of 17.6%.

Foreign direct investments are adversely affected by terrorism. Foreign direct investments decrease by 0.08 per cent when terrorism increases by one per cent. Statistically, when domestic income increase, foreign direct investments also increase. One per cent increase in the output (GDP) will result in a 0.9 per cent increase in foreign investments.

Foreign direct investment has been proven to be a complement to trade openness rather than a substitute. These findings are supported by Ahmed and Zakaria, who showed that foreign direct investment is more in open economies than autarky economies [11]. When the Sri Lankan rupee depreciates, foreign investment increases because foreign investors will have increased returns; statistically, foreign investment will increase by a magnitude of 0.6 per cent when the Sri Lankan rupee depreciates by 1 per cent. The effects of domestic investments on foreign investments are also positive, implying that domestic investing helps in attracting more foreign investors.

5. Predictions and analysis

In the case where the Sri Lanka central bank does not change anything: the Hodrick-Prescott (H.P.) filter is used to calculate the potential GDP of Sri Lanka. Using the calculated potential GDP, the output gap is calculated to get the size of the shock using the quarterly real GDP series for 2014-2019, as shown below. The restriction parameter (λ) is set at 1600 as per the literature for quarterly time series. The results showed a positive output gap for 2014 and 2016 when GDP growth accelerated strongly. The negative output gap in 2018 narrows considerably in 2019. Without changing the interest rates, the Sri Lankan government can recover the economy in 20 quarters.

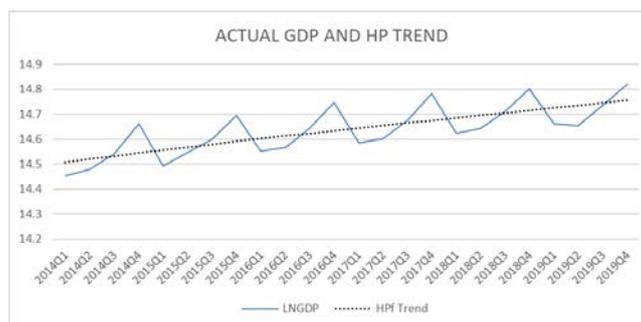


Figure 7. Actual GDP and HP trend

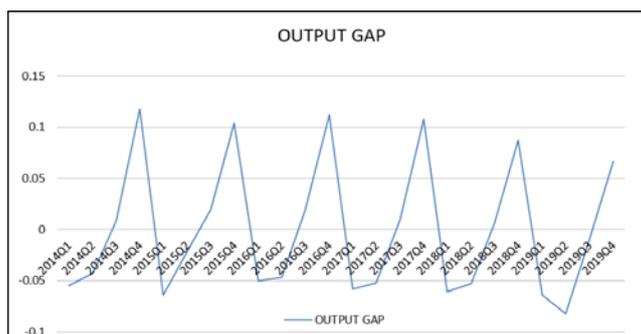


Figure 8. Output gap

The central bank of Sri Lanka has been using interest rates as an essential tool in its monetary operations. Interest rates are preferable because they influence the short-term money market interest rates allowing for proper curtailment of inflationary pressure while still providing adequate lubrication for economic growth. To fasten the recovery of the economy, interest rates depend on the speed of adjustment of market interest rates and the degree of through. In applying interest rates as a monetary policy, stickiness arises as an issue.

The central banks of Sri Lanka should keep their interest rates as low as 7.50 per cent but not lower than that to increase economic growth to its original rates in twelve quarters. These will encourage borrowing and investment and eventually growth while keeping the inflationary pressures in check (4.1%).

Therefore, if the central bank decides to change the inflation rates and the interest rates, the economy of Sri Lanka will recover in 12 periods, as shown by the graph below. The Sri Lanka central bank will have to decrease interest rates to speed up the economic growth to its original level. To get the GDP after inflation and interest rates are changed, the regression equation was used ($GDP = 1 - 8.72IR + 0.03IF + \epsilon$).

The central bank of Sri Lanka's efforts to cut interest rates is to stimulate economic growth. Low-interest rates encourage borrowing and investment. However, the central bank must ensure that the interest rates do not get too low because it can spur excessive growth and inflation. Inflation rates should be kept at a sustainable level.

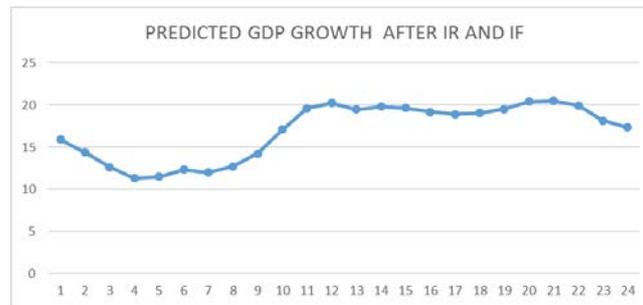


Figure 9. Predicted GDP growth after IR and IF

6. Conclusion

The paper empirically analyses the effects of terrorism on economic growth in Sri Lanka. It also focuses on measures that can be taken to overcome the after-effects of terrorism in and economy and boost economic growth.

The recent 2019 Easter attacks have impacted investment dearly. Currently, most investors are waiting for signs of stability in Sri Lanka to invest in holding back investments that could create employment, which Sri Lanka desperately needs. The government of Sri Lanka has put in policy measures to help contain the fallout of the bombing. The government offers a relief package of 10 percent from the value-added tax on all hotel owners and tour operators. Besides, the government has promised to waive taxes on imported security technology and award new loans to businesses. The Sri Lanka tourism industry sector was the most affected. Some policies that the Sri Lanka government should adopt to boost tourism may include: the government can reduce airline expenses for tourists to attract a more diverse tourist population, ensuring tourists and the locals' safety and security. Insecurity affects tourism the most because tourist's arrivals largely depend on how safe individuals feel in a particular country. Improving the tourism industry will help recover the economy faster since the tourism sector accounts for over 50 percent of the private sector's job.

The central bank of Sri Lanka plays an essential role in determining the magnitude and direction of economic growth. It determines how the economy will react to internal and external fluctuations. The central bank can control Sri Lanka's output by either increasing or decreasing the inflation and interest rate variables. The IS–MP model helps policymakers to predict the after-effects of a policy. If the central banks decide to reduce interest rates, savings will become unattractive while bank lending increases. More money will be transferred into the hands of the citizens, creating an increase in aggregate demand. The demand for products will increase, and firms will be forced to hire more workers reducing unemployment. Low-interest rates increase inflationary pressure and may cause a depreciation in the exchange rates. This form of expansionary monetary policy has side effects such as inflation if not controlled. The central bank should regulate the loans given by banks to avoid excess money supply in the economy. As seen in the case of Zambia, the adverse effects of increased money supply can cause an economy to crumble.

Although there is a rapid and almost complete pass-through from the Central Bank policy interest rates to call money market rates, the pass-through from call money market rates to commercial bank retail interest rates is sluggish and incomplete. The sluggish and incomplete pass-through poses a challenge to the Central Bank as it hinders the achievement of its monetary policy objectives as desired. The H.P. filter has shown us the potential GDP as well as the output gap, which we used to determine the shocks that the terrorist attack caused. The H.P. trend shows an increasing GDP potential through twenty-four periods, excluding the depression cycles in the economy.

If the real inflation rates go above the central bank's target inflation rates, then the central bank may increase interest rates. Higher interest rates moderates the rate of economic growth. The effects of high-interest rates on individuals increase borrowing, increased returns on saving, and higher mortgage interest payments. Increased interest rates result in the local currency's appreciations, making exports less competitive and imports cheaper, unemployment could rise as inflation falls,

and economic growth will be slower.

This research plays a significant role in the efforts of finding the best policies to help the economy to recover from the shocks caused by the 2019 attacks. In the paper, it has been determined that Sri Lanka's economy can slow recovery in five years if no policies are changed and in twelve periods if the central bank of Sri Lanka decides to enforce a policy to reduce the interest rates. The conclusions of this paper can also be applied in other countries in the region, such as India and Pakistan. South Asia has been a region with many terrorist threats. The Mumbai 2008 attacks were a reminder of how the region is in constant threat. Using Sri Lanka as an example, the countries faced with terrorist attacks in the region can also use interest rates to recover their economy. The countries in the region are gradually understanding the need for a holistic approach to addressing the terrorist threats in the region and balancing between the counter-terrorism measures.

References

- [1] Subedi, Db, and Bert Jenkins. "Preventing and Countering Violent Extremism." *Counter Terrorist Trends and Analyses*, vol. 8, no. 10, 2016, pp. 13–19. JSTOR, www.jstor.org/stable/26351459.
- [2] Filiu, Jean-Pierre. "Al-Qaida in the Islamic Maghreb and the Dilemmas of Jihadi Loyalty." *Perspectives on Terrorism*, vol. 11, no. 6, 2017, pp. 166–172. JSTOR, www.jstor.org/stable/26295965.
- [3] Ethirajan, A. (2019). Sri Lanka attacks: The family networks behind the bombings. BBC, May, 11.
- [4] Wilson, A. (2018). Sri Lanka ranked top country for travel in 2019 by Lonely Planet. *The Guardian*.
- [5] Gupta, A. (2011). Terrorism and its Impact on Financial Performance: A Case of Tourism Industry. *International Journal of Financial Management*, 1(4).
- [6] Arana, J. E., & León, C. J. (2008). The impact of terrorism on tourism demand. *Annals of tourism research*, 35(2), 299-315.
- [7] Memdani, L., & Shenoy, G. (2019). Impact of terrorism on stock markets across the world and stock returns. *Journal of Financial Crime*.
- [8] Lechman, E., & Kaur, H. (2015). Economic growth and female labor force participation—verifying the U-feminization hypothesis. *New evidence for 162 countries over the period 1990-2012*. *New evidence for*, 162, 1990-2012.
- [9] Cervellati, M., & Sunde, U. (2011). Life expectancy and economic growth: the role of the demographic transition. *Journal of economic growth*, 16(2), 99-133.
- [10] Barro, R. J., Barro, R. J., Sala-i-Martin, X., & Xavier, I. (2004). *Economic growth*. MIT press.
- [11] Zakaria, M., & Ahmed, E. (2013). Openness–growth nexus in Pakistan: A macro–econometric analysis. *Argumenta Oeconomica*, 1(30), 47-83.