# EXPLORING THE NEXUS: MACROECONOMIC FACTORS AND REPORTED MONEY LAUNDERING CASES – A CROSS-SECTIONAL ANALYSIS IN SRI LANKA

K.K.Tilakasiri<sup>1</sup> and Dinesh Sivaguru<sup>2</sup>

#### **Abstract**

In today's global landscape, money laundering and terrorist financing present formidable challenges. This study investigates potential correlations between Sri Lanka's macroeconomic factors—specifically GDP, Foreign Direct Investment (FDI)—and reported money laundering cases. Leveraging qualitative data from the Central Bank of Sri Lanka (CBSL) and employing linear regression analysis, the research adopts a qualitative approach to unravel the nuanced connections between economic conditions and financial crimes. The primary purpose of this research is to identify and understand the relationships between Macroeconomic Factors and Reported Money Laundering Cases. The findings hold the potential to provide valuable insights for policymakers, financial institutions, and law enforcement, contributing to the development of more effective anti-money laundering strategies and policies tailored to Sri Lanka's unique context. The anticipated findings aim to shed light on the intricate interplay between GDP, FDI, and money laundering instances, offering a deeper understanding of the challenges faced by Sri Lanka. Such insights could pave the way for more informed decision-making in combating financial crimes. The implications of this study extend beyond academia, with practical applications for shaping policies and strategies that address the specific dynamics of money laundering in Sri Lanka.

**Keywords:** Money Laundering, Terrorist Financing, Macroeconomic Factors, GDP and Financial Institutions

Email: ktilakasiri@kln.ac.lk https://orcid.org/0000-0002-2963-4416

Email: dmsivaguru111@gmail.com https://orcid.org/0000-0002-2836-1436



Accepted the revised version: 01 December 2023. This work is licensed under C BY-SA 4.0. To view a copy of this license, visit <a href="http://creativecommons.org/licenses/by-sa/4.0/">http://creativecommons.org/licenses/by-sa/4.0/</a>

<sup>&</sup>lt;sup>1</sup> Professor, Department of Accountancy, University of Kelaniya

<sup>&</sup>lt;sup>2</sup> Postgraduate Student, Department of Accountancy, University of Kelaniya

#### Introduction

In recent years, Anti-Money Laundering (AML) and Counter Financing of Terrorism (CFT) compliance initiatives have emerged as critical requirements in global financial markets. The persistent challenges posed by Money Laundering (ML) and Terrorist Financing (TF) have prompted increased vigilance from regulatory authorities worldwide. Despite extensive efforts to combat AML and CFT, many countries grapple with the far-reaching consequences of these financial crimes. The forces of globalisation and technological advancement have facilitated criminals in converting illegal proceeds into legitimate funds (William, 2001).

Money laundering is not confined to major financial markets; it also extends its impact to underdeveloped markets. As countries integrate into the international financial system, they become susceptible to money laundering due to less stringent AML regulations, weaker financial systems, and limited assistance from international and regional organisations (McDowell & Novis, 2001). The inherently cross-border nature of money laundering schemes further exacerbates the challenge.

Terrorist financing, a formidable form of crime involving the provision of funds or engagement in unlawful transactions with individual terrorists or terrorist groups, gained global attention following the September 11, 2001 terrorist attacks on the World Trade Centre in New York City. Sri Lanka, having faced three decades of war against terrorism and, more recently, the tragic ISIS attack, underscores the persistent threat.

#### **Problem Identification**

The issue at hand revolves around the pressing need to identify instances of reported money laundering in Sri Lanka and establish their correlation with the country's GDP and foreign direct investment (FDI). A comprehensive study in this regard is notably absent, creating a gap in understanding the critical importance of such investigations. Positioned within the Asian landscape, Sri Lanka grapples with significant challenges stemming from pervasive money laundering (ML) and terrorist financing (TF) issues. Despite not serving as a major regional financial centre, the United States Annual Country Reports on Terrorism for 2017 underscore Sri Lanka's vulnerability to ML and TF, emphasising the necessity for heightened vigilance. This vulnerability is further underscored by Sri Lanka's placement on the Financial Action Task Force (FATF) grey list in 2017, prompting a concerted effort to address identified deficiencies through a collaborative action plan with FATF and AGP (FATF-GAFI, 2017). As per the Basel Index ML/TF Risk, Sri Lanka's overall score is 5.42, underscoring the need for a targeted and informed approach to mitigate the risks associated with money laundering and terrorist financing. The European Union (EU) Commission's blacklisting of Sri Lanka in 2018 due to strategic deficiencies in its anti-money laundering and counter-terrorist financing framework raises significant concerns.

Motivated by the need to mitigate ML and TF risks to the EU financial system, this action adds to the multifaceted challenges faced by Sri Lanka in this realm. The country's geographical and strategic importance, coupled with its proximity to the Indian subcontinent, exposes it to money laundering threats from neighbouring countries. The 2014 National Money Laundering and Terrorist Financing Risk Assessment of Sri Lanka highlighted its evolution into a hub and transit destination for drug traffickers and human smugglers. Despite substantial efforts by the Financial Intelligence Unit (FIU) at the Central Bank of Sri Lanka (CBSL), critical shortcomings persist within the Anti-Money Laundering (AML) and Counter-Terrorist Financing (CFT) framework. The issuance of penalties and warning letters to financial institutions by the FIU in 2018 reveals areas of non-compliance and

inefficiencies demanding immediate attention and remediation. The overarching problem identified in this context is the inadequacy of existing AML and CFT measures in Sri Lanka. This inadequacy is manifested in the country's susceptibility to financial crimes, international blacklisting, and evident lapses in the implementation and enforcement of AML and CFT regulations. Addressing these challenges is imperative to safeguard Sri Lanka's financial integrity, regional reputation, and international standing in the ongoing global efforts to combat money laundering and terrorist financing.

# **Statement of Objective**

The primary objective of this study is to comprehensively examine the correlations between macroeconomic factors and reported instances of money laundering in the context of Sri Lanka. Against the backdrop of Sri Lanka's vulnerability to money laundering and terrorist financing, as evidenced by international assessments and blacklisting, this research seeks to shed light on the intricate relationship between macroeconomic variables and the prevalence of financial crimes.

# Other Objectives are to:

- 1. **Evaluate the Impact of Macroeconomic Factors:** Analyse and assess the influence of macroeconomic indicators, such as income distribution, employment rates, small business activity, and financial inclusion, on reported cases of money laundering in Sri Lanka.
- 2. **Understand the Regional Dynamics:** Investigate the regional dynamics of money laundering threats, considering Sri Lanka's strategic geographical location and its susceptibility to financial crimes from neighbouring countries.
- 3. **Assess Compliance Gaps:** Identify and analyse existing gaps in the implementation of antimoney laundering and counter-terrorist financing measures in the Sri Lankan financial sector, as indicated by penalties and warning letters issued by the Financial Intelligence Unit (FIU) at the Central Bank of Sri Lanka (CBSL).
- 4. **Inform Policy Recommendations:** Provide valuable insights and data-driven recommendations to policymakers, regulatory authorities, and financial institutions in Sri Lanka for strengthening the AML & CFT framework, thereby mitigating the risks associated with money laundering and terrorist financing.

By addressing these objectives, the study aims to contribute to the enhancement of Sri Lanka's resilience against financial crimes, fostering a more robust and effective regulatory environment in the ongoing global fight against money laundering and terrorist financing.

### Significant of the Study

#### Academic Contribution:

This research significantly advances theoretical perspectives within criminology, economics, and financial regulation by intricately examining the correlations between macroeconomic factors and reported money laundering cases in the context of Sri Lanka. The study strives to contribute novel insights that extend beyond existing theories, offering a nuanced understanding of the intricate dynamics at play. By delving into a specific geographic and economic context, the research provides contextual insights that enrich the academic literature, allowing scholars to draw upon this case study for comparative analyses and theoretical development. The methodological approach, involving a cross-sectional analysis of macroeconomic indicators and reported money laundering cases, adds depth to the methodological toolkit in the field of financial crime research. This methodology establishes a precedent

for future studies seeking to explore the complex relationships between economic variables and illicit financial activities, thereby furthering academic inquiry in the broader discipline.

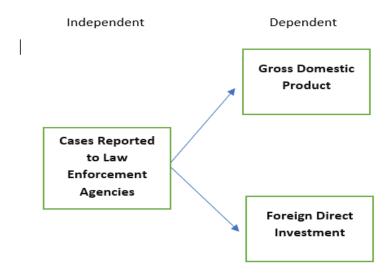
#### **Practical Contribution:**

Beyond its academic significance, this study holds practical relevance by offering actionable guidance for policymakers, regulators, and industry stakeholders involved in the fight against money laundering and terrorist financing in Sri Lanka. The identification of gaps in the AML & CFT framework serves as a practical starting point for policymakers, providing clear insights into vulnerabilities within the country's financial system. Policymakers can leverage the research findings to refine and develop policies that address these specific weaknesses, ultimately enhancing the regulatory efficacy of the nation. For financial institutions, the study provides valuable insights into risk mitigation strategies. Understanding the correlations between macroeconomic factors and money laundering cases equips industry stakeholders with practical intelligence for the development of targeted risk management protocols. These strategies can be instrumental in aligning financial institutions with international standards and regulations more effectively, enhancing their capacity to combat financial crimes.

Moreover, the analysis of penalties and warning letters issued by the FIU at CBSL serves as a practical guide for compliance enhancement within the financial sector. Industry stakeholders, particularly financial institutions, can utilise these insights to strengthen their compliance practices, ensuring alignment with global best practices. The study contributes not only to the local context but also to the broader global discourse on best practices in combating money laundering and terrorist financing. By sharing lessons learned from Sri Lanka's experiences, the research facilitates the refinement of regulatory frameworks and the strengthening of financial systems on a global scale. In essence, the practical contributions of this study lie in its potential to guide policy decisions, inform risk mitigation strategies, enhance compliance practices, and contribute to global efforts against financial crimes.

# **Conceptual Framework**

The conceptual framework for this study is designed to analyse the correlations between macroeconomic factors and reported instances of money laundering in Sri Lanka. The central premise is rooted in the belief that money laundering cases reported to law enforcement agencies exert a significant impact on various key indicators, namely Gross Domestic Product (GDP), and Foreign Direct Investment (FDI).



# **Hypothesised Relationships**

The hypothesis posits that, in a manner similar to Fejzi Kolaneci's examination of the correlation and linear regression analysis between the Annual GDP Growth Rate and Money Laundering in Albania during the period 2007-2011, a comparable relationship exists in the Sri Lankan context. The study seeks to investigate whether key macroeconomic indicators, specifically the Annual GDP Growth Rate, exhibit a discernible correlation with reported instances of money laundering in Sri Lanka over a specified timeframe, thus contributing to the broader understanding of the economic factors influencing money laundering trends in different national contexts.

- **H1.** There is a positive correlation between the number of Suspicious Transaction Reports (STRs) referred to Law Enforcement Agencies (LEAs) for money laundering and the annual Gross Domestic Product (GDP) growth rate in Sri Lanka.
- **H2.** There is a positive correlation between the number of cases referred to Law Enforcement Agencies (LEAs) for money laundering corresponds to a higher Foreign Direct Investment (FDI) in Sri Lanka.

# **Methodology Statement**

This study employs a qualitative research approach, utilising secondary data obtained from the annual reports published by the Central Bank of Sri Lanka (CBSL). The research focuses on a qualitative analysis of the data, specifically employing linear regression analysis to explore the relationships between key macroeconomic indicators and reported instances of money laundering.

# **Data Collection**

The primary data source for this research comprises pertinent sections within the annual reports of the Central Bank of Sri Lanka (CBSL). These reports offer a comprehensive overview of economic indicators, financial activities, and instances of money laundering reported to law enforcement agencies within Sri Lanka. Additionally, the secondary data collected spans the period from 2012 to 2016, facilitating a longitudinal examination of trends and correlations over the specified timeframe. This inclusive dataset enhances the depth of analysis, providing valuable insights into the evolving dynamics of economic indicators and money laundering patterns during the specified five-year period.

#### Limitations

While linear regression analysis provides valuable insights into the relationships between variables, it is essential to acknowledge the inherent limitations of this method. The study is constrained by the availability and completeness of data within the annual reports, potential data gaps, and the assumption of linear relationships, which may not fully capture the complexity of interactions among macroeconomic factors.

In conclusion, this methodology leverages secondary data from CBSL annual reports, employing a qualitative approach focusing on linear regression analysis. This methodological choice allows for a nuanced exploration of the relationships between reported instances of money laundering and key macroeconomic indicators, contributing to a comprehensive understanding of the dynamics within the Sri Lankan economic landscape.

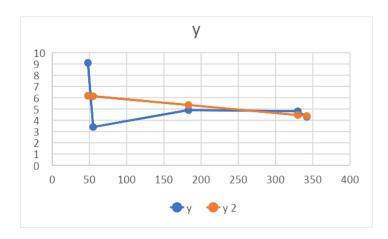
# **Data Analysis**

In alignment with the study's overarching objective, examining the relationship between money laundering and macroeconomic factors draws inspiration from established empirical studies. The approach employed in this estimation mirrors utilised an empirical estimation strategy for Albania. Specifically, a linear regression analysis was employed to quantify the impact of money laundering on economic growth. This study similarly adopts a linear regression estimation strategy to scrutinise the correlation between macroeconomic factors and Money Laundering (ML) & Terrorist Financing (TF) in the context of Sri Lanka. In this context, the macroeconomic approach focuses on understanding the impacts on the domestic economy rather than the global repercussions of money laundering.

Linear regression, a statistical methodology chosen for this analysis, seeks to model the relationship between two variables by fitting a linear equation to observed data. In the realm of statistics, linear regression constitutes a methodological approach for modelling the relationship between a dependent variable and independent variables. The study rigorously assesses the coefficient of correlation among key variables that exert influence on the Sri Lankan economy. This analytical framework aims to unravel the intricate connections between reported instances of money laundering and specific macroeconomic factors, providing valuable insights into the localised economic impacts of illicit financial activities within Sri Lanka.

# **Findings**

1. The coefficient of correlation between suspicious transaction reports (STRs) referred to law enforcement agencies (LEAs) for money laundering and annual GDP growth.

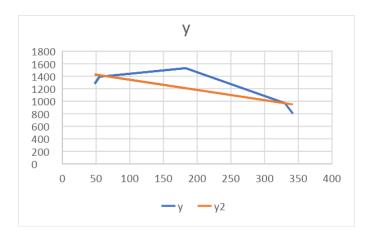


Source: Own Construction

The coefficient of correlation denoted by 'r' between Suspicious Transaction Reports (STRs) referred to law enforcement agencies (LEAs) for money laundering (X) and the annual Gross Domestic Product (GDP) growth rate (Y) is -0.41, signifying a moderate negative correlation between the two variables. The coefficient of determination, represented as'd' and calculated as the square of the correlation coefficient (r^2), is 16%. This result implies that 16% of the total variation in GDP growth rate can be elucidated by the variance in the number of STRs referred to LEAs for money laundering. However, the remaining 84% of the total variation in GDP growth rate must be ascribed to the influence of other factors not captured by this relationship.

The linear regression equation derived from the analysis is expressed as y = 6.4687 - 0.0061x, providing a quantitative representation of the relationship between the annual GDP growth rate (y) and the number of STRs referred to as LEAs for money laundering (x). This equation signifies that for every unit increase in the latter variable, the former is expected to decrease by 0.0061 units. The comprehensive statistical analysis underscores the partial explanatory power of reported instances of money laundering in accounting for variations in Sri Lanka's GDP growth rate, shedding light on the multifaceted nature of factors influencing economic performance beyond the scope of this specific correlation.

# 2. The coefficient of correlation between the cases referred to Law Enforcement Agencies (LEAs) and Foreign Direct Investment (FDI).



Source: Own Construction

The coefficient of correlation, denoted as 'r,' between the cases referred to Law Enforcement Agencies (LEAs) and Foreign Direct Investment (FDI) is -0.77, indicating a strong negative correlation between these two variables. The coefficient of determination, 'd,' calculated as the square of the correlation coefficient (r^2), is 59%. This suggests that 59% of the total variation in foreign direct investment can be elucidated by the variation in the number of cases referred to LEAs, while the remaining 41% of the total variation in foreign direct investment must be ascribed to other factors not encompassed by this specific correlation.

The linear regression equation derived from the analysis is expressed as y = 1506.2096 - 1.6298x, where 'x' denotes the number of cases referred to LEAs, and 'y' denotes the Foreign Direct Investment (USD) in Sri Lanka from 2012 to 2016. This equation signifies that, for each additional unit increase in the number of cases referred to LEAs, the Foreign Direct Investment is expected to decrease by 1.6298 units. The statistical analysis provides substantive insights into the robust negative relationship between reported cases referred to LEAs for money laundering and Foreign Direct Investment during the specified time.

# **Summary of Findings**

The research delved into examining the connections between reported instances of money laundering and key macroeconomic indicators in Sri Lanka. The results uncovered distinctive relationships between the number of cases referred to Law Enforcement Agencies (LEAs) for money laundering and various economic factors. Regarding the correlation with GDP growth, there is a moderate negative correlation (r = -0.41) between Suspicious Transaction Reports (STRs) referred to LEAs and the annual Gross Domestic Product (GDP) growth rate. The linear regression equation indicates that 16% of the

total variation in GDP growth rate can be explained by the variation in reported money laundering cases. For Foreign Direct Investment (FDI), a strong negative correlation (r = -0.77) was found between cases referred to LEAs and FDI, with the linear regression equation implying that 59% of the total variation in FDI can be explained by the variation in reported money laundering cases. These findings offer nuanced insights into the relationships between reported money laundering cases and specific economic indicators, underscoring the multifaceted impact of illicit financial activities on the Sri Lankan economy. Despite evident correlations, a substantial portion of the variations in economic indicators remain unexplained by reported instances of money laundering, highlighting the necessity for a comprehensive understanding of other contributing factors.

### **Conclusions**

In conclusion, the research sheds light on the intricate relationships between reported instances of money laundering and key macroeconomic indicators in Sri Lanka. The findings reveal varying degrees of correlation between cases referred to Law Enforcement Agencies (LEAs) for money laundering and economic factors such as GDP growth and Foreign Direct Investment (FDI). Notably, the study uncovers a moderate negative correlation between Suspicious Transaction Reports (STRs) and GDP growth and a strong negative correlation with FDI.

These nuanced insights underscore the multifaceted impact of illicit financial activities on the Sri Lankan economy. While certain correlations are evident, it is essential to acknowledge that a substantial portion of the variations in economic indicators remain unexplained by reported instances of money laundering. This highlights the necessity for a comprehensive understanding of other contributing factors influencing the economic landscape.

#### Recommendations

The research findings underscore the importance of strategic measures to address the complex interplay between reported money laundering cases and key macroeconomic indicators in Sri Lanka. To strengthen the country's anti-money laundering efforts, it is crucial for financial institutions and regulatory bodies to enhance monitoring and reporting mechanisms, fostering a proactive stance in identifying and reporting suspicious transactions. The observed relationships between money laundering cases and referrals to Law Enforcement Agencies highlight the necessity for a more collaborative approach between financial institutions and LEAs, emphasizing information exchange and joint training programs. Additionally, incorporating economic indicators such as GDP growth and Foreign Direct Investment into risk assessment models can fortify the capacity to identify potential money laundering risks associated with economic fluctuations. As a forward-looking strategy, periodic reviews and adjustments of anti-money laundering policies are recommended to ensure adaptability to evolving trends. Lastly, public awareness and education initiatives play a pivotal role in mitigating the multifaceted impact of illicit financial activities on the economy, emphasising the collective responsibility of stakeholders in preserving economic stability.

#### **References:**

Bureau of International Narcotics and Law Enforcement Affairs - United States Department of State, (2020). *Scribbr*. https://2017-2021.state.gov/bureaus-offices/under-secretary-for-civilian-security-democracy-and-human-rights/bureau-of-international-narcotics- and-law-enforcement-affairs/index.html.

- Financial Action Task Force, (2017). FATF Guidance Private Sector Information Sharing. Documents FATF. Scribbr. http://www.fatf-gafi.org/publications/fatfrecommendations/documents/guidance-information-sharing.html.
- Financial Intelligence Unit of Sri Lanka, (2018). *Scribbr*. <a href="http://fiusrilanka.gov.lk/docs/AR/FIU">http://fiusrilanka.gov.lk/docs/AR/FIU</a> AR 2018.pdf.
- McDowell, J., & Novis, G. (2001). The Consequences of Money Laundering and Financial Crime. An Electronic Journal of the U.S. Department of S, 6(2).
- William R. Schroeder. (2001). Money Laundering: A Global Threat and the International Community's Response. Scribbr: <a href="https://www.ojp.gov/ncjrs/virtual-library/abstracts/money-laundering-global-threat-and-international-communitys">https://www.ojp.gov/ncjrs/virtual-library/abstracts/money-laundering-global-threat-and-international-communitys</a>