# Domestic Macroeconomic Conditions and Foreign Portfolio Investment in Sri Lanka: Dynamic Evidence from a Frontier Market

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**Abstract**

Foreign portfolio investment (FPI) can broaden the investor base and deepen capital markets in emerging and frontier economies, but its reversibility also exposes recipient markets to changes in risk, returns, and macroeconomic credibility. This study focuses on the dynamic evolution of FPI and the domestic macroeconomic conditions of Sri Lanka for quarterly data between 2016Q1 and 2024Q4, which includes the COVID-19 shock, the 2022 macroeconomic crisis and the initial stabilization phase. The empirical specification includes real GDP growth, inflation, domestic interest rate, LKR/USD exchange rate, and stock-market capitalization as factors affecting FPI. An autoregressive distributed lag (ARDL) framework accommodates the mixture of I(0) and I(1) variables and separates long-run equilibrium relationships from short-run dynamics. The bounds test is strong evidence for a long-run level relationship ($F$ = 12.0217). GDP growth (0.1599, $p$ = 0.0361) and the interest rate (0.2072, $p$ = 0.0019) are positive and statistically significant, while inflation, the exchange rate, and market capitalization are not statistically significant on their own. The error-correction coefficient indicates a rapid adjustment of FPI toward the long-run equilibrium, with overshooting following short-run deviations. Diagnostic evidence suggests no evidence for serious serial correlation and recursive parameters, but there is evidence of heteroskedasticity and mild non-normality, which warrant HAC/Newey-West inference and careful use of small-sample methods. In a domestic pull-factor specification, the results indicate that the participation of foreign investors is most positively related to growth and return conditions. The policy implication is not to target high nominal yields, but to sustain credible growth, predictable monetary conditions, external resilience, and market investability while recognizing the influence of global financial conditions on portfolio flows.

***Keywords*:** foreign portfolio investment; international capital flows; frontier markets; domestic pull factors; ARDL; Sri Lanka

## 1. Introduction

Cross-border portfolio investment has become an increasingly important component of external financing in emerging and frontier economies. Foreign portfolio participation can enhance market liquidity, price discovery and access to capital by broadening the investor base

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(Forbes & Warnock, 2012). Yet the same mobility that makes portfolio capital attractive also makes it reversible. International investors are able to switch positions rapidly when returns, global risk appetite, currency and country fundamentals shift (Fratzscher, 2012). This dual character has made the determinants and stability of portfolio flows a central issue in international finance and macroeconomic policy (Koepke, 2019; Kacperczyk et al., 2021).

The modern literature generally explains capital flows through a combination of global "push" factors and recipient-country "pull" factors. The role of low interest rates abroad and sluggish growth in the advanced economies in attracting capital to the developing world was stressed in early research (Calvo et al., 1993). Subsequent evidence showed that domestic fundamentals are at least as important in determining where those flows are allocated. Chuhan et al. (1998) argue that global influences, like U.S. interest rates, can be significant for equity and bond flow to Latin America and Asia, but that country-specific factors are also important and particularly relevant for Asian markets. Taylor and Sarno (1997) also demonstrated that global and domestic factors influence the long-run determination of portfolio flows to developing economics.

Later studies shifted attention from average inflows to the instability of international capital. Forbes and Warnock (2012) documented episodes of surges, stops, flight, and retrenchment and showed that global risk is strongly associated with extreme flow episodes. Common shocks, such as those associated with global liquidity and risk, were found to have a significant effect during the global financial crisis, but the size of the effect was systematically linked to domestic institutions, country risk, and macroeconomic fundamentals (Fratzscher, 2012). Ahmed and Zlate (2014) further showed that growth differentials, interest-rate differentials, and global risk appetite are important determinants of capital flows to emerging markets and that portfolio flows became more sensitive to interest-rate differentials after the global financial crisis. These findings support a conditional view where global financial conditions set the external environment, while domestic fundamentals influence relative attractiveness and resilience.

This argument has been reinforced by the literature on the global financial cycle. Miranda-Agrippino and Rey (2020) demonstrate that U.S. monetary-policy shocks generate broad international comovement in risky asset prices, intermediary leverage, credit, and gross capital flows. More specific transmission mechanisms have been identified in recent peer-reviewed studies. Pagliari and Ahmed Hannan (2024) find that U.S. interest rates, global risk aversion, and domestic real GDP are among the main drivers of capital-flow volatility across emerging and developing economies. Based on security-level global bond-fund holdings, Bush and Cañón (2025) demonstrate that response to push and pull factors differs across investor subscriptions and portfolio-manager reallocations. Faia et al. (2025) also report that short-horizon investors, such as active investment managers, react more strongly to advanced-economy monetary tightening by reallocating out of emerging-market securities than do long-horizon investors. Recently, Lee and Engel (2026) pinpoint a liquidity channel by which the Federal Reserve's quantitative easing and tightening policies affect the flow of capital to emerging markets. These studies enhance, not replace, the push-pull framework: the external

cycle is determined by global monetary and intermediary conditions and the destination choice and resilience is determined by domestic fundamentals.

These are particularly relevant to frontier markets, where capital-market depth, liquidity, information transparency, and institutional capacity may vary significantly from larger emerging markets. A modest change in foreign participation can have a disproportionate effect on turnover, valuations, and market confidence, while macroeconomic shocks may be transmitted rapidly through the exchange rate and domestic financing conditions. Conventional pull factors thus are useful for frontier economies to evaluate their explanatory power in a context of macroeconomic volatility that is abnormally high.

Recent research also indicates that the risks that are not traditionally reflected in macroeconomic variables may impact international portfolio allocation. Agoraki et al. (2024) find that geopolitical risk and policy uncertainty affect equity and bond fund flows differently and that global uncertainty can dominate country-specific uncertainty. Beyond the well-known push and pull factors, Beckmann et al. (2024) demonstrate that expectations of professionals and media sentiment also provide information regarding capital flows in emerging markets. Choi and Havel (2025) further demonstrate that U.S. foreign bond and equity purchases are negatively affected by geopolitical risk in emerging markets, with a smaller response being observed under low institutional quality. Eguren-Martin et al. (2024) demonstrate at the distributional level, push and pull factors influence not only the average levels of capital flows but also downside flow-at-risk, and macroprudential policies can mitigate portfolio-flow sensitivity to global shocks. The results highlight the importance of this for frontier economies since macro-economic fundamentals, institutions, expectations and global risk are likely to interact and not work through separate channels.

Sri Lanka offers such an environment. The 2016Q1-2024Q4 period covers relatively normal conditions, the COVID-19 shock, the closure of international markets, a balance-of-payments crisis, and a sovereign-debt crisis, as well as the first round of macroeconomic stabilization. Sri Lanka experienced a reserve depletion of critically low levels and worsening foreign-exchanges shortages in 2020, leading to the loss of access to international capital markets (International Monetary Fund, 2022). In March 2023, a US$3 billion Extended Fund Facility (EFF) arrangement was approved for a 48-month period to assist with macroeconomic stabilisation, debt sustainability, financial stability, governance and structural reform (International Monetary Fund, 2023). Inflation was significantly reduced, reserves were rebuilt and real activity started to recover with material vulnerabilities still present by 2024 (International Monetary Fund, 2024; Central Bank of Sri Lanka, 2025). The resulting ordering provides a challenging empirical setting to test the linkage between domestic macroeconomic conditions and foreign portfolio allocation.

The Sri Lankan literature on direct foreign portfolio investment is limited relative to the broader literature on stock returns and market performance. Using monthly data for the period 2004-2013 and an ARDL model, Kumara and Dayaratne (2015) found that equity foreign portfolio investment (FPI) is significantly related with LIBOR, foreign reserve, USD/LKR exchange rate and domestic stock-market performance but not with Treasury-bill rate and consumer prices. In a south Asian context, including Sri Lanka, Waqas et al. (2015) related the

volatility of FPI with a broader macroeconomic setting. Wijesinghe and De Silva (2021) identified significant links between foreign portfolio activity and a number of firm, market and macro-economic factors such as GDP growth and interest rates. While these studies contribute to the understanding of the relevance of domestic fundamentals, it remains to be seen if the same relationships hold during the extraordinary era of crisis and stabilization in the late 2010s and early 2020s. This paper attempts to answer this question by employing a parsimonious domestic pull factor specification, which links foreign portfolio investment with GDP growth, inflation, the domestic interest rate, the exchange rate and market capitalization.

The empirical design utilizes an autoregressive distributed lag framework and quarterly data ranging from 2016Q1 to 2024Q4. The ARDL approach is suitable for the level-stationary and the first-difference-stationary variables observed and is suitable to estimate both long-run equilibrium relationships and the dynamics of adjustment to equilibrium (Pesaran et al., 2001). Residual diagnostics indicate heteroskedasticity and HAC/Newey-West covariance estimation is retained (Newey & West, 1987). The specification is deliberately conceived as a model of domestic associations instead of a full structural model of portfolio flows due to the lack of separate identification of the global push factors.

The results provide four main findings. The bounds-test statistic is 12.0217, which is far from the null of no long run level relationship. Second, the long-run coefficient of GDP growth is positive and statistically significant, while the coefficient of inflation, exchange rate and market capitalization are not statistically significant on their own. Third, its error-correction coefficient is negative and of high order of significance, and below -1, which suggests that the adjustment is fast and with overshooting rather than smooth monotonic convergence. Fourth, short-run market capitalization change is negatively and significantly associated with FPI even if market-capitalization coefficient in the long-run is positive and insignificant. This contrast highlights the need of distinguishing between the short-run portfolio adjustment and the long-run macroeconomic relationships.

The study contributes to the literature in three ways. First, it delivers new evidence based on a small frontier market that has not been the subject of the international portfolio-flow literature in recent studies, which have focused on multi-country capital-flow volatility, investor heterogeneity, and resilience to sudden stops (Pagliari & Ahmed Hannan, 2024; Bush & Cañón, 2025; Cavallo et al., 2026). Second, it checks domestic pull factors over a timeframe that encompasses pandemic, sovereign, and external-financing crises and stabilization, and not just a period of comparatively normal macroeconomic conditions. Third, it distinguishes between statistical and macroeconomic importance: inflation and the exchange rate can be important for stabilization even if their partial long-run coefficients are not statistically different from zero in a multivariate ARDL model. This disciplined interpretation also does not imply a positive interest rate coefficient translates to a policy of keeping nominal interest rates high to attract foreign capital.

## 2. Literature Review

### 2.1 International portfolio choice and push-pull framework

International portfolio allocation begins from the proposition that investors distribute wealth across domestic and foreign assets to improve expected risk-adjusted returns and diversification. According to frictionless theory, cross-border jobs react to anticipated returns, covariance with the current portfolio, and risk preferences. In practice, information asymmetries, currency risk, transaction costs, institutional differences, market-access constraints, and home bias mean that foreign allocations can deviate substantially from simple mean-variance predictions. The push-pull framework attempts to convert these portfolio considerations into observable empirical determinants of the scale of migration at the global and country levels.

Push factors come from outside the target economy, and affect the global supply of capital or investors' preference for foreign riskier assets. They include advanced-economy interest rates, global liquidity, U.S. monetary policy, global risk aversion, and broad dollar conditions. Pull factors are recipient-country characteristics that influence expected returns and perceived risk, such as interest rates, inflation, the exchange rate, institutional quality, reserves, financial development, and country risk. In terms of equity, debt, banking and other capital flows, push and pull conditions vary in importance over time, and the distinction is analytically useful but by no means absolute (Ahmed Hannan, 2018; Koepke, 2019).

Calvo et al. (1993) popularized the role of external conditions in the revival of capital inflows to developing economies, showing how lower U.S. interest rates and weak advanced-economy activity could redirect capital toward Latin America. Fernández-Arias and Montiel (1996) later stressed the importance of both flow and host economy factors in determining the sustainability/policy implications of inflows. Both global and country-specific factors are important for portfolio flows, as suggested by the direct empirical analysis of Taylor and Sarno, (1997) and Chuhan et al. (1998). The implication is that domestic fundamentals do not operate in isolation; they determine the relative attractiveness of a country within a global opportunity set.

This theoretical approach is better than the one-to-one theory and variable approach for each macroeconomic variable. GDP expansion, inflation, domestic interest rates, the exchange rate and market capitalisation, however, are now understood as domestic pull factors, which impact on expected profitability, real returns, currency risk, macroeconomic credibility and investability in the market. Their estimated coefficients are then conditional relationships, in a larger international portfolio-allocation process.

### 2.2 Global financial conditions and the volatility of portfolio flows

Portfolio flows are particularly sensitive to changes in global financial conditions because they can be reallocated more rapidly than foreign direct investment. According to Forbes and Warnock, (2012), extreme capital-flow episodes are strongly related to global risk, whereas (Fratzscher, 2012) reports that common crisis, liquidity, and risk shocks played a large part in the global financial crisis. More important, Fratzscher also discovers that common shocks affect the recipient countries to varying degrees depending on institutions, country risk and macroeconomic fundamentals. Therefore, global shocks may be quite frequent, but outcomes are country-specific.

The same logic underlies the global financial cycle literature, but recent studies increasingly identify the mechanisms through which it reaches emerging markets. Miranda-Agrippino and Rey (2020) demonstrate that shocks to U.S. monetary policy have resulted in cross-country comovement in risky-asset prices, leverage, credit, and gross flows. Drawing on quarterly data for 33 emerging and developing economies, Pagliari and Ahmed Hannan (2024) suggest that interest rates in the United States, global risk aversion, and domestic real GDP growth are important factors in determining capital-flow volatility. Goswami et al. (2023) document that the effective USD is a net push-pull of shocks to emerging-market debt and equity flows and that interconnectedness is heightened during stress. Agoraki et al. (2024) also demonstrate that geopolitical risk and economic-policy uncertainty are negative factors for significant portfolio flows, and sometimes, global uncertainty is more effective than country-specific uncertainty. At the intermediary level, Bush and Cañón (2025) demonstrate that push and pull conditions affect the behavior of investors and fund managers differently, and Faia et al. (2025) report that even though some investors do not rebalance from emerging-market securities after an advanced-economy monetary tightening, active investment funds do so more strongly. Most recently, Lee and Engel (2026) detect a liquidity channel from Federal Reserve balance-sheet operations to the capital flows of emerging markets.

As to the pull factors, Koepke (2019) finds that global risk aversion and external interest rates play a significant role for portfolio debt and equity flows, whereas domestic output growth, asset returns, and country risk are still important. More recent evidence supports this conditional interpretation. Push and pull factors have a differentiated impact on the distribution of capital flows and macroprudential policy can dampen the sensitivity of portfolio flows to global shocks, according to Eguren-Martin et al. (2024). Wang and Duan (2024) show that macroeconomic and institutional conditions and policies mitigate the negative impact of foreign-flow retrenchment during low-flow periods. Choi and Havel (2025) document that the influence of geopolitical risk on emerging-market portfolio investment is stronger when institutional quality is weak. Cavallo et al. (2026) show that the strength of growth prospects, low inflation, financial development and institutional quality positively affect the resilience to sudden stops. This suggests that it is global shocks that are determining the timing and magnitude of the portfolio pressure, while domestic fundamentals provide a measure of the extent to which the pressure is being passed on to a given economy.

### 2.3 Domestic macroeconomic pull factors

Economic growth is a natural pull factor as it can increase expected corporate earnings, fiscal capacity and indicate a more favorable investment environment. This growth can thus enhance the anticipated return to owning domestic securities. Recurring determinants of capital flows to emerging markets include domestic output growth, as identified by Koepke (2019) and growth differentials with advanced economies, as identified by Ahmed and Zlate (2014). The effect is nevertheless conditional on sustainability. Durable inflows are not likely to come from rapid growth with high external imbalances, fiscal stress, or inflation. International investors are likely to respond to the information contained in growth about future profitability and macroeconomic resilience rather than to growth mechanically. In the context of Sri Lanka this qualification is core, spanning both the time of severe contraction and recovery.

*$H_1$: There is a positive relationship between GDP growth and foreign portfolio investment in Sri Lanka*

The effects of interest rates on international portfolios can be channelled via expected return, opportunity-cost and risk. With a given level of risk, an increase in the domestic yields increases the relative attractiveness of domestic assets. The classical push-pull literature thus considers interest-rate differentials as significant factors affecting the allocation of portfolios (Taylor & Sarno, 1997; Ahmed & Zlate, 2014; Koepke, 2019). The evidence to support this channel has been strengthened recently both quantitatively and institutionally. Villamizar-Villegas et al. (2024) in a meta-analysis covering 52 studies, find that emerging-market monetary tightening is on average associated with stronger capital inflows, but that the effect depends on output growth, reserves, exchange-rate flexibility, and local and global risk. The reaction also differs materially by investor type, as Faia et al. (2025) reveal, with active funds reacting more aggressively to shocks from advanced-economy monetary policy in terms of changes in emerging-market exposures. So, the interest-rate channel can be thought of as a mechanism of risk-adjusted return given a heterogeneous investor base rather than a mechanical reaction to nominal interest rates.

The sign does not have to be consistently positive. High rates can be an indicator of monetary tightening, inflation, sovereign risk, currency pressure or a liquidity stress. The nominal yield is attractive only if it is in line with the inflation, depreciation, default, and liquidity risk that investors anticipate. Hence, a positive estimated coefficient should be interpreted as a conditional return-related association rather than evidence that policymakers can sustainably attract foreign investment by raising rates.

*$H_2$: There is a statistically significant relationship between domestic interest rate and foreign portfolio investment in Sri Lanka*

Inflation can affect FPI through real returns, monetary-policy expectations, currency risk, and macroeconomic credibility. Persistently high or volatile inflation erodes the purchasing power of nominal returns and can increase uncertainty about future rates and exchange-rate adjustment. Waqas et al. (2015) establish a relationship between macroeconomic indicators such as inflation, interest rates, growth and currency fluctuations and the volatility of foreign portfolio investment in south Asian economies. More recent evidence also provides a link between macroeconomic stability and the resilience of capital flows. Cavallo et al. (2026) find that lower and more stable inflation and more robust growth prospects increase the likelihood that a sudden stop of foreign investment will not lead to a more expensive sudden stop of net investment.

A multivariate model, however, may not retain the independent significance of inflation as some of the information may be captured from interest rates and exchange rates. This tendency is particularly strong during a crisis where inflation acceleration, monetary tightening, and currency depreciation coincide. Statistical insignificance therefore does not imply that price stability is economically unimportant; it means that the partial coefficient is not estimated precisely conditional on the other included variables.

*$H_3$: There is a negative relationship between inflation and the FPI in Sri Lanka*

Foreign investors consider returns on the portfolio in a reference currency, which means that exchange-rate fluctuations could exacerbate or compensate for gains in the local currency. Depreciation of the recipient-country currency can reduce realized home-currency returns and may trigger reallocation before the depreciation is fully realized. An exchange-rate risk can thus impact both the expected return and variance of foreign investment.

The international literature also identifies bilateral currency fluctuations from the general dollar cycle. The exchange-rate impact of capital flows is not simply a result of the size of the flow, but also the composition and flow direction, as larger effects are observed for portfolio flows compared to FDI on exchange rates in the emerging and developing economies, as documented by Nguyen et al. (2024). Goswami et al. (2023) find that shocks to the broad emerging-market U.S. dollar exchange rate pass through to both debt and equity portfolio flows, especially in times of uncertainty. These findings complement evidence that dollar strength affects global risk appetite and emerging-market portfolio allocation. As such, the LKR/USD coefficient reflects merely the bilateral currency channel domestically and should not be regarded as a definitive test for the global dollar mechanism.

*$H_4$: Rupee depreciation, represented by a higher LKR/USD exchange rate, is negatively associated with foreign portfolio investment in Sri Lanka*

A larger equity market may provide a wider opportunity set and more diversification, and may have improved liquidity. Market capitalization is thus frequently used as a general measure of market size and financial development. However, the size of the market does not imply that it is investable. Foreign institutions are also interested in factors such as free float, transaction costs, turnover, settlement, disclosure, governance, market depth, and the ability to enter and exit positions without impacting prices.

Wang and Duan (2024) demonstrate that financial markets that are more open and developed, allow for greater inflows when they are good, but also greater outflows when they are bad. Financial development is thus having a mixed effect, for facilitating inflows but also allowing for quick retrenchment. Eguren-Martin et al. (2024) also find that policy regimes can shape portfolio flow sensitivity to global shocks, thereby underscoring the role of investability and resilience, with these attributes determined by the size of the market and its institutional and policy structure. Market capitalisation alone may thus not fully reflect the mechanism in a frontier market.

A recent development in the literature is the understanding that realized macroeconomic variables might not be complete in the information set that international investors use. The study by Beckmann et al. (2024) reveals that the incremental information in professional expectations and news sentiment extends beyond standard push and pull factors for portfolio capital inflows to emerging economies, with news sentiment pertaining to exchange rates having a strong impact. Agoraki et al. (2024) and Choi and Havel (2025) also show that global uncertainty and geopolitical risk affect the reallocation of portfolios. This evidence is relevant to the present study because it clarifies the interpretation of omitted-variable risk where a domestic macroeconomic model can identify important long-run associations without exhausting the expectations, institutional, and global-risk channels that shape portfolio decisions.

*$H_5$: There is positive relationship between market capitalization and foreign portfolio investment in Sri Lanka*

### 2.4 Evidence from Sri Lanka and Research gap

There is still limited direct evidence on the macroeconomic determinants of foreign portfolio investment in Sri Lanka. Kumara and Dayaratne (2015) examine equity foreign portfolio investment in the period 2004 - 2013 on a monthly basis through ARDL model. Their long-run results point out that LIBOR, foreign reserves, USD/LKR exchange rate and domestic market performance are significant while three-month Treasury-bill rate and consumer prices are insignificant. Based on quarterly firm and market data during the period 2011 to 2016, Wijesinghe and De Silva (2021) show that there are significant relationships between foreign portfolio activity and various market and macroeconomic variables such as GDP growth and interest rates. Waqas et al. (2015) demonstrate more generally that in South Asia, macroeconomic conditions affect FPI volatility.

The current study differs primarily in timing and focus. The 2016Q1-2024Q4 window has an exceptional sequence of pandemic, external-financing stress, sovereign-debt crisis, high inflation, sharp monetary tightening, exchange-rate adjustment and stabilization. Relationships that are estimated in previous periods do not necessarily have to be the same under this sequence. Thus, the paper returns to the question of whether the existing domestic pull factors can still explain the long-term trends.

Overall, the existing evidence highlights an empirical gap as the traditional domestic pull factors have not been reviewed together for Sri Lanka during the pandemic, the sovereign-debt crisis, and the initial stabilization period. The five hypotheses developed above thus pose the questions whether growth, interest-rate, inflation, currency, and market-size channels have explanatory value in this highly volatile environment.

The current research contributes to this literature by offering a country-specific assessment of the domestic pull factors in a small frontier market at an unusually turbulent time. Rather than proposing a new theory of international capital flows, it examines whether the conventional channels of growth, interest rates, inflation, exchange-rate risk, and market development retain long-run explanatory power for Sri Lankan FPI across the pandemic, sovereign and external-financing crisis, and subsequent stabilization. The focus adds to evidence that has emerged from multiple countries and provides insights into how existing pull-factor processes function in an environment where market depth is limited, macroeconomic fluctuations are pronounced, and there is significant pro-cyclical exposure to investor confidence. The contribution is therefore one of context, timing, and disciplined interpretation rather than causal identification or exhaustive modeling of the global financial cycle.

## 3. Methods

Sri Lanka provides a unique context for the study of portfolio allocation given the relative smallness of the domestic capital market, and its significant vulnerability to external financing conditions. Colombo Stock Exchange (CSE) is the main organized equity exchange, and the institutional platform for foreign investors to be involved in listed shares. Even modest foreign

flows by global standards can have significant impacts on turnover, liquidity, prices, and investor confidence in a market of this size.

The sample period is economically diverse. Sri Lanka was already highly vulnerable on the fiscal and external fronts when it was hit by the pandemic. According to the International Monetary Fund (2022), the country was cut off from international sovereign bond markets in 2020 and the reserves then dropped to dangerously low levels. During the pandemic, capital outflows and external financing constraints worsened, and the economy went on to experience a balance-of-payments and sovereign-debt crisis. The IMF-supported program (2023) aimed to restore macroeconomic stability and debt sustainability while also safeguarding financial stability, rebuilding external buffers and improving governance (International Monetary Fund, 2023). Real activity had started to rebound, while inflation had significantly decreased, and reserves had improved by 2024, though the economy was still fragile (International Monetary Fund, 2024). The Annual Economic Review 2024 of CBSL is also a testament to a post-crisis turnaround in the reserves, financial-account dynamics, and exchange-rate adjustment (Central Bank of Sri Lanka, 2025). This institutional context has an impact on interpretation. The estimated coefficients are measures of average dynamic relationships during very different macroeconomic regimes, not parameters for a uniformly stable period. In line with this, the empirical analysis does not look for structural causal identification, but rather for conditional dynamic relationships.

To accommodate lags, quarterly time-series data is used from 2016Q1 to 2024Q4, which provides 36 observations. A quarterly frequency allows for the smooth aggregation of portfolio-investment and macroeconomic series without interpolating lower-frequency national-account data. Foreign portfolio investment in Sri Lankan stock market is dependent variable. The explanatory variables are the real GDP growth, inflation, domestic interest rate, LKR/USD exchange rate and market capitalization. The main sources of data are the official publications and statistical data bases of Colombo Stock Exchange (CSE), Central Bank of Sri Lanka (CBSL) and Department of Census and Statistics (DCS). The data for FPI, interest-rate, exchange-rate and market-capitalization series come from the official CBSL/CSE statistical publications and the GDP growth and inflation are compiled from CBSL/DCS sources.

Logarithms are used for FPI, Exchange rate and Market Capitalisation, while GDP growth, inflation, and interest rate are used in rate form. This combination of functional forms has a significant interpretation. Coefficients on GDP, inflation and interest rate are semi-elasticities because the dependent variable is logged, while these regressors are not. LEXR, LMC elasticities are conventional log-log elasticities. The empirical vector can be written as,

$$Z_t = \mathrm{LFPI}_t, \mathrm{GDP}_t, \mathrm{INF}_t, \mathrm{IR}_t, \mathrm{LEXR}_t, \mathrm{LMC}_t \quad (1)$$

The sample is necessarily small. There are 36 quarters and the lag structure is dynamic, which is restrictive due to degrees of freedom. This feature encourages parsimonious lag selection, careful use of diagnostics, and conservative interpretation of coefficient precision. It also makes the use of ARDL framework attractive since it has been widely used for relatively

small samples of regressors integrated at I(0) and I(1), with no regressor integrated at I(2) (Pesaran et al., 2001; Narayan, 2005).

**Table 1: Operationalization of Variables**

| Variable | Measurement | Expected relationship | Official data source | Supporting literature |
|---|---|---|---|---|
| Foreign portfolio investment (LFPI) | Natural logarithm of the quarterly FPI series used in the empirical dataset | Dependent variable capturing foreign portfolio participation | CBSL annual reports/statistical appendices and quarterly publications | Chuhan et al. (1998); Koepke (2019) |
| GDP growth (GDP) | Quarterly real GDP growth rate (%) | Positive, stronger activity may improve expected earnings and macroeconomic resilience | DCS; CBSL Economic Data Library/annual publications | Fratzscher (2012); Pagliari & Hannan (2024); Cavallo et al. (2026) |
| Inflation (INF) | Quarterly inflation rate based on CCPI (%) | Generally negative, higher/volatile inflation can reduce real returns and macroeconomic credibility | DCS; CBSL | Waqas et al. (2015); Cavallo et al. (2026) |
| Interest rate (IR) | Quarterly average Treasury-bill rate (%) | Ambiguous ex ante, higher yield may attract capital, but may also signal inflation or risk | CBSL statistical publications | Ahmed & Zlate (2014); Villamizar-Villegas et al. (2024); Faia et al. (2025) |
| Exchange rate (LEXR) | Natural logarithm of quarterly average LKR per USD | Generally negative for FPI when depreciation reduces foreign-currency returns; state dependent | CBSL statistical publications | Calvo et al. (1993); Goswami et al. (2023); Nguyen et al. (2024) |
| Market capitalization (LMC) | Natural logarithm of total quarterly market capitalization | Generally positive through market size/investability, but reversals may be stronger in more open markets | CSE; CBSL statistical publications | Wang & Duan (2024); Eguren-Martin et al. (2024) |

### 3.1 Empirical Specification and estimation sequence

The empirical goal is to separate long-run equilibrium relationships from short-run adjustment and to maintain a parsimonious specification that is suitable for the small quarterly sample. Analysis is undertaken in five phases namely unit root test, lag selection, ARDL estimation, bounds test for a level relationship and long-run and error correction coefficients. Then, residual and parameter-stability diagnostics are used to assess the model adequacy. These diagnostics are used more as specification checks than as alternatives to other model robustness checks. The general ARDL model is,

$$LFPI_t = \alpha_0 + \Sigma\, \varphi_i\, LFPI_{t-i} + \Sigma\, \beta_{1j}\, GDP_{t-j} + \Sigma\, \beta_{2j}\, INF_{t-j} + \Sigma\, \beta_{3j}\, IR_{t-j} + \Sigma\, \beta_{4j}\, LEXR_{t-j} + \Sigma\, \beta_{5j}\, LMC_{t-j} + \varepsilon_t \quad \text{----------(2)}$$

Here p is the lag order for LFPI and q1, q2, ..., q5 are the distributed lag order of the explanatory variables. The final model consists of one lag of LFPI, one lag of GDP growth, the inflation variable, two lags of the domestic interest rate, a contemporaneous exchange-rate

variable and two lags of the market capitalization variable. The long-run coefficients are obtained from the estimated ARDL system and the individual coefficients of the distributed lags are not interpreted as long-run coefficients.

The Augmented Dickey-Fuller (ADF) test is employed in order to determine the stationarity in levels or after first differencing of each series (Dickey & Fuller, 1979, 1981). This pre-testing is not applied to impose a unified integration order of all variables. Instead it confirms that, as per the ARDL requirement, none of the variables is integrated of order two. The test is based on an augmented regression in which lagged first differences absorb higher-order serial dependence. The selection of lags is done by using the Akaike information criterion (AIC), Schwarz criterion (SC), Hannan-Quinn criterion (HQ), final prediction error (FPE), and sequential likelihood-ratio statistic. The limited size of the sample means that the maximum lag chosen is short to maintain degrees of freedom.

Using the bounds-testing procedure of Pesaran et al. (2001), the existence of a long-run level relationship is examined. The method is suitable for regressors that are a mixture of I(0) and I(1). The null hypothesis is that all the coefficients of the lagged level variables are simultaneously zero. Lower I(0) and upper I(1) critical bounds are given for comparison with the calculated F-statistic. If the F-statistic is above the top number, the null hypothesis of no long-run relationship is rejected; if it is below the bottom number, the null hypothesis is not rejected (inconclusive); if between the numbers, it is inconclusive. The critical values of Pesaran et al. (2001) are popular but the small sample dimensions are of particular concern here. Asymptotic values of finite-sample bounds may differ, as demonstrated by Narayan (2005). Given cointegration, short-run dynamics are captured in an error-correction model,

$$\Delta LFPI_t = \propto_0 + \Sigma\, \delta_i \Delta LFPI_{t-i} + \Sigma_k \Sigma_j \theta_{kj} \Delta X_{k,t-j} + \rho\, ECT_{t-1} + \varepsilon_t \qquad (3)$$

In equation 3, X stands for GDP, INF, IR, LEXR, LMC and ECT(t-1) denotes the lagged deviation from the estimated LR equilibrium. If the adjustment coefficient, ρ, is negative and statistically significant, deviations from equilibrium lead to subsequent adjustments. Monotonic convergence is then represented by coefficients between -1 and 0, and overshooting and oscillatory convergence by coefficients less than -1, not necessarily by mechanical adjustment percentages greater than 100%.

The Newey - West (1987) covariance estimator is used for heteroskedasticity- and autocorrelation-consistent standard errors. HAC estimation does not eliminate the heteroskedasticity from the data, it merely scales the estimated covariance matrix to produce inference that is more robust to heteroskedastic and serially correlated disturbances. This distinction is important as the residual diagnostics later reject homoskedasticity.

The Breusch-Godfrey LM test for serial correlation, Breusch-Pagan-Godfrey test for heteroskedasticity, Jarque-Bera test for normality and CUSUM/CUSUMSQ stability tests are used to evaluate the adequacy of the model. The recursive-residual logic of the CUSUM procedures was developed by Brown et al. (1975). Given the crisis-rich sample, the stability

tests are interpreted as general diagnostics rather than formal proof that no structural break occurred.

## 4. Findings and Discussion

Results of the ADF test suggest a mixture of I(0) and I(1) variables. LFPI, GDP growth, and inflation reject the unit-root null in levels, while the interest rate, exchange rate, and market capitalization become stationary after first differencing. The absence of any reported I(2) series supports use of the ARDL bounds framework. All of the stated reasons support a maximum lag of two quarters. All the reported criteria use a maximum of a lag of two quarters. This finding gives a common starting point for the dynamic specification and does not add an increased lag which would be hard to justify with only 36 observations.

**Table 2: Augmented Dickey-Fuller unit-root results**

| Variable | Level t-stat. | *p*-value | First-difference t-stat. | *p*-value | Order |
|---|---|---|---|---|---|
| LFPI | -4.7261 | 0.0005 | - | - | I(0) |
| GDP | -3.0852 | 0.0370 | - | - | I(0) |
| INF | -3.5921 | 0.0112 | - | - | I(0) |
| IR | -2.6666 | 0.0903 | -3.1345 | 0.0333 | I(1) |
| LEXR | -0.5739 | 0.8629 | -5.8406 | <0.001 | I(1) |
| LMC | -1.0770 | 0.7138 | -5.8920 | <0.001 | I(1) |

**Table 3: Lag-length selection criteria**

| Lag | LogL | LR | FPE | AIC | SC | HQ |
|---|---|---|---|---|---|---|
| 0 | -379.6367 | NA | 286.3893 | 22.6845 | 22.9538 | 22.7763 |
| 1 | -275.2370 | 165.8113 | 5.3098 | 18.6610 | 20.5465 | 19.3040 |
| 2 | -196.5677 | 97.1796* | 0.5322* | 16.1510* | 19.6526* | 17.3452* |

*Note: The asterisk refers to the lag that is chosen by the criterion used*

**Table 4: Estimated ARDL model of FPI**

| Variable | Coefficient | Std. error | *t*-statistic | *p*-value |
|---|---|---|---|---|
| LFPI(-1) | -0.3810 | 0.1789 | -2.1295 | 0.0446 |
| GDP | 0.0495 | 0.0625 | 0.7927 | 0.4364 |
| GDP(-1) | 0.1713 | 0.1341 | 1.2765 | 0.2151 |
| INF | -0.0407 | 0.0495 | -0.8236 | 0.4190 |
| IR | 0.0126 | 0.1447 | 0.0874 | 0.9311 |
| IR(-1) | 0.5025 | 0.1914 | 2.6249 | 0.0155 |
| IR(-2) | -0.2289 | 0.1221 | -1.8750 | 0.0741 |
| LEXR | -2.4649 | 2.3983 | -1.0277 | 0.3152 |
| LMC | -4.1739 | 1.4104 | -2.9593 | 0.0072 |
| LMC(-1) | 1.7006 | 1.6561 | 1.0268 | 0.3156 |
| LMC(-2) | 6.4341 | 3.7697 | 1.7067 | 0.1019 |
| Constant | -36.3247 | 49.1044 | -0.7397 | 0.4673 |

*Note: Model statistics: $R^2 = 0.6720$; adjusted $R^2 = 0.5081$; $F = 4.0989$ ($p = 0.0023$); Durbin-Watson = 1.7732; AIC = 3.6239; SC = 4.1626; HQ = 3.8076.*

The unrestricted ARDL model accounts for 67.2% of the sample variation in LFPI and an adjusted $R^2$ of 50.8%. The model is statistically significant. Individual dynamic coefficients, however, should not be interpreted as long run effects. For instance, the interest-rate coefficients differ over lags while market capitalization is negative at the current time period but positive at later lags. Thus, the correct LR interpretation is from the normalized LR form

and not from any individual distributed-lag coefficient. The results show that the coefficient of the variable of lagged LFPI is significant, which means that there is persistence and portfolio investment adjustment. The Durbin-Watson statistic is approximately two, but formal inference about residual serial dependence is based on the Breusch-Godfrey test below.

The calculated *F*-statistic is 12.0217 which is greater than the upper bound critical values at all conventional significance levels such as (5%) upper bound is 3.38 and (1%) upper bound is 4.15. Thus, the null hypothesis of no long run level relationship is rejected, which supports the presence of cointegration between FPI and the macroeconomic variables selected.

**Table 5: ARDL test of a long-run level relationship**

| Significance level | I(0) lower bound | I(1) upper bound | Calculated *F* |
|---|---|---|---|
| 10% | 2.08 | 3.00 | 12.0217 |
| 5% | 2.39 | 3.38 | 12.0217 |
| 2.5% | 2.70 | 3.73 | 12.0217 |
| 1% | 3.06 | 4.15 | 12.0217 |

*Note: The number of regressors k = 5. The F-statistic is above the upper limit for each significance level listed.*

**Table 6: Long-run ARDL coefficients**

| Variable | Coefficient | Std. error | *t*-statistic | *p*-value | Inference |
|---|---|---|---|---|---|
| GDP | 0.1599 | 0.0716 | 2.2321 | 0.0361 | Significant |
| INF | -0.0295 | 0.0344 | -0.8563 | 0.4010 | Not significant |
| IR | 0.2072 | 0.0589 | 3.5165 | 0.0019 | Significant |
| LEXR | -1.7848 | 1.5900 | -1.1224 | 0.2738 | Not significant |
| LMC | 2.8680 | 2.7664 | 1.0367 | 0.3111 | Not significant |
| Constant | -26.3027 | 33.1116 | -0.7943 | 0.4355 | Not significant |

*Note: GDP, INF, and IR coefficients are semi-elasticities because LFPI is logged while these regressors are in rate form. LEXR and LMC coefficients are elasticities, expressed in log-log form*

Two long-run coefficients are statistically significant (at 95% confidence level). The GDP-growth coefficient is 0.1599 ($p$ = 0.0361), while the interest-rate coefficient is 0.2072 ($p$ = 0.0019). These are semi-elasticities as both variables are expressed in percentage points and LFPI is a log function. The first order approximation implies percentage changes by about 16.0% and 20.7% respectively for a 1-percentage-point change. The corresponding log-linear changes are about 17.3% for the growth of GDP and 23.0% for the interest rate. These magnitudes should be interpreted as conditional long-run associations rather than causal policy multipliers.

Inflation has a negative coefficient, but is not significant ($p$ = 0.4010). Also, the exchange-rate elasticity is negative (-1.7848) but poorly estimated ($p$ = 0.2738). Market capitalization is positive and statistically insignificant ($p$ = 0.3111) in its long run coefficient (2.8680). These findings do not mean that countries can ignore issues such as inflation, currency stability, and market development. Once the rest of the variables and dynamics are included in the model, they suggest that their independent long-run parameters are not statistically different from zero.

The adjustment coefficient is -1.3810 and highly significant. The negative sign verifies the negative relationship between the deviations from long run relation and the corrective moves in FPI. Because the absolute magnitude exceeds one, adjustment is better described as rapid

convergence with overshooting rather than as a mechanical statement that 138.1% of disequilibrium is permanently removed in a single quarter. Portfolio flows can cross the equilibrium path and subsequently reverse, a pattern that is economically plausible for a highly liquid and reversible form of international capital.

**Table 7: Conditional error-correction representation**

| Variable | Coefficient | Std. error | *t*-statistic | *p*-value |
|---|---|---|---|---|
| Constant | -36.3247 | 34.6119 | -1.0494 | 0.3053 |
| LFPI(-1)* | -1.3810 | 0.1555 | -8.8776 | <0.001 |
| GDP(-1) | 0.2208 | 0.0765 | 2.8841 | 0.0086 |
| INF** | -0.0407 | 0.0585 | -0.6962 | 0.4936 |
| IR(-1) | 0.2861 | 0.1194 | 2.3963 | 0.0255 |
| LEXR** | -2.4649 | 1.8986 | -1.2982 | 0.2077 |
| LMC(-1) | 3.9608 | 2.9261 | 1.3536 | 0.1896 |
| ΔGDP | 0.0495 | 0.0556 | 0.8905 | 0.3828 |
| ΔIR | 0.0126 | 0.1951 | 0.0648 | 0.9489 |
| ΔIR(-1) | 0.2289 | 0.1384 | 1.6538 | 0.1123 |
| ΔLMC | -4.1739 | 1.8681 | -2.2342 | 0.0359 |
| ΔLMC(-1) | -6.4341 | 3.4523 | -1.8636 | 0.0758 |

*Note: Δ is first difference. The negative, and very significant, coefficient on the lagged equilibrium term. The EViews conditional form displays INF and LEXR in the level/difference form.*

Among the explicitly differenced explanatory variables, the contemporaneous change in market capitalization is statistically significant and negative ($p$ = 0.0359). The market capitalisation also has a negative lagged change, which is marginally significant at the 10% level. The differenced component does not show significant short-run interest rate or GDP changes. This difference between the short and long run market-capitalisation coefficients is useful in understanding the usefulness of the ARDL decomposition: The short run changes in valuation/market-size may not be the same as the long run relationship between market-size and foreign participation.

**Table 8: Residual diagnostics, stability and hypothesis assessment**

| Test / hypothesis | Statistic / coefficient | *p*-value / outcome | Conclusion |
|---|---|---|---|
| Breusch-Godfrey serial correlation | $\chi^2$ = 3.8430 | 0.1464 | No significant serial correlation |
| Breusch-Pagan-Godfrey heteroskedasticity | $\chi^2$ = 22.4955 | 0.0208 | Heteroskedasticity present |
| Jarque-Bera normality | - | 0.0455 | Exact normality rejected at 5% |
| CUSUM | Within 5% bounds | Stable | General stability supported |
| CUSUMSQ | Within 5% bounds | Stable | General stability supported |
| GDP growth | 0.1599 | 0.0361 | Supported |
| Inflation | -0.0295 | 0.4010 | Not Supported |
| Interest rate | 0.2072 | 0.0019 | Supported |
| Exchange rate | -1.7848 | 0.2738 | Not supported |
| Market capitalization | 2.8680 | 0.3111 | Not supported |

*Note: HAC/Newey-West covariance estimation is retained because heteroskedasticity is detected. Event-specific structural breaks are allowed for CUSUM-based stability.*

The diagnostic data is mixed and informative. There is no rejection of the null of no residual serial correlation as per the Breusch-Godfrey test. The Breusch-Pagan-Godfrey test suggests

the presence of heteroskedasticity and, therefore, the presence of Newey-West/HAC covariance estimation. There is a *p*-value of 0.0455 for Jarque-Bera test of exact normality, which is marginally significant at the 0.05 level and therefore mechanical interpretations of p-value should be avoided in a small sample. CUSUM and CUSUMSQ are not out of the 5% limits, indicating general evidence of parameter stability. The hypothesis assessment is explicit: $H_1$ (GDP growth) and $H_2$ (interest rate) are supported at conventional significance levels, whereas $H_3$ (inflation), $H_4$ (exchange rate), and $H_5$ (market capitalization) are not supported. The term non-support of $H_3$-$H_5$ is not an indication that inflation, currency conditions or market development are economically irrelevant, but rather the absence of independent statistical evidence within the confines of this specification.

### 4.1 Discussion: Foreign portfolio investment and economic growth

The positive GDP-growth coefficient can be interpreted as supporting the hypothesis that foreign investors react to the future profitability and strength of the domestic economy. A better ability to sustain recovery, coupled with better earnings prospects and fiscal capacity, can make local securities more attractive relative to other securities. The finding is consistent with the overall body of literature on the pull factors, where domestic output performance is a consistent determinant of capital flows even when global conditions are taken into account (Ahmed & Zlate, 2014; Koepke, 2019).

The outcome will be particularly relevant in Sri Lanka as growth during the sample period is more than the usual business cycle fluctuation. There was severe contraction and recovery in the country, and changes in GDP growth could have contained information on the likelihood of normalization, corporate survival and the credibility of the policies. In this sense, the coefficient is not representative of a short-run association between the real economy and foreign portfolio allocation, but rather of a long-term association.

The causal relationship can also be reversed. For the United States, Motie and Zeng (2023) demonstrate how FPI shocks can impact real activity and aggregate risk and how equity FPI is sensitive to domestic conditions using a dynamic factor model and VAR. The present ARDL framework does not identify such two-way causal mechanisms, but the comparison reinforces the need to describe the GDP result as conditional association rather than one-way structural causation.

### 4.2 Discussion: Interest rates as a return compensation rather than a policy target

The interest-rate coefficient is the strongest long-run result statistically. Its positive sign is consistent with yield-seeking behavior, in that a higher domestic rate can induce a higher expected return on local financial assets relative to competitors. This is largely in line with Taylor and Sarno (1997), Ahmed and Zlate (2014), and Koepke (2019) who concentrate on the interest-rate level (or differential) in the context of portfolio allocation.

However, the interpretation of the policy needs to be disciplined. High nominal rates may be an indicator of good compensation, but they also may be an indicator of inflation, fiscal stress, currency pressure or constrictive response to crisis. In the adjustment process of Sri Lanka in 2022-2023, high rates were accompanied by a lot of macroeconomic distress. Thus,

foreign investors react to the risk-adjusted expected return, rather than the nominal rate alone. A credible monetary framework that stabilizes inflation and risk premia can be more friendly to foreign participation than persistently high nominal yields driven by instability.

This warning is reinforced by recent evidence from all over the world. In the quantitative meta-analysis, Villamizar-Villegas et al. (2024) find that on average, monetary policy tightening can attract capital in emerging markets, but the material effects of monetary policy on capital inflows depend on the growth, reserves, exchange-rate flexibility, and risk. Faia et al. (2025) show that advanced-economy monetary shocks affect active funds and passive long-horizon investors differently, and Bush and Cañón (2025) separate the effect of end-investor inflows from fund-manager reallocation. Lee and Engel (2026) point to another channel of the impact of Federal Reserve balance-sheet operations: global-liquidity channel on flows to emerging markets. Hence the positive interest-rate coefficient in Sri Lanka should be regarded as a conditional domestic return association, rather than a structural policy multiplier.

### 4.3 Discussion: Inflation, the exchange rate and market capitalization

The inflation variable has the predicted negative sign, but is not statistically significant. This finding is best understood as a lack of independent explanatory power, once the effects of growth, interest rates, exchange rate, market capitalisation, and dynamics are taken into account. During a crisis, inflation, monetary tightening, and depreciation can move together, so their effects are difficult to separate in a 36-quarter sample. Even if the partial inflation coefficient is not significant, price stability is economically in the middle of maintaining real returns and policy credibility.

The negative exchange-rate coefficient is also economically plausible as an increase in LEXR is a decrease in the value of the rupee and in turn, a fall in returns from foreign currencies. Yet the coefficient is imprecise. Nguyen et al. (2024) demonstrate that the exchange rate response varies across the nature and the direction of capital flows, and Goswami et al. (2023) document that broad dollar shocks pass through most strongly to emerging-market debt and equity portfolio flows during stress periods. The findings point towards the possibility that a bilateral LKR/USD series might be too narrow to capture the true currency channel given that global dollar moves and investor risk appetite have happened at the same time. The non-significant coefficient should therefore not be interpreted as a lack of any impact of currency risk, but as weak evidence of an independent bilateral exchange-rate effect.

The biggest short run/long run comparison is the market capitalization. The long run coefficient is not significant, while the change in market capitalization is significantly negative. One of these reasons is that capitalization is partly a result of domestic stock-price changes and hence not an exogenous measure of financial development. If domestic investors push the market value up, it is possible for foreigners to be net sellers. Furthermore, the aggregate capitalization does not reflect free float, turnover, market depth, transaction costs, disclosure or foreign-access conditions. Moreover, Wang and Duan (2024) also report that financial development can draw in inflows during booms and intensify withdrawals during slowdowns, which further suggests a nuanced view of market size.

### 4.4 Contributions to International Capital-flow

The contribution of the paper is empirical rather than theoretical. It does not propose a new theory of capital flows; instead, it evaluates established domestic pull-factor mechanisms in a small frontier market over an unusually turbulent period. This positioning is consistent with the direction of the latest high-quality literature. In recent research, portfolio-manager reallocation, investor heterogeneity, and global-liquidity transmission have been highlighted (Bush & Cañón, 2025; Faia et al., 2025; Lee & Engel, 2026). In this research, global risk, macroeconomic fundamentals, financial-market development, institutions, and policy affect the volatility, flow-at-risk, retrenchment, and sudden-stop resilience. The Sri Lankan evidence complements these studies by demonstrating which domestic variables continue to explain in the long run in the context of a frontier-market time-series from crisis to stabilization.

The results also confirm an important distinction between the macroeconomic salience and coefficient significance. Inflation and the exchange rate have been at the centre of the crisis and the stabilisation of Sri Lanka, but their partial long run-coefficients are not significant in the estimated model. The appropriate inference is not that these variables do not matter, but that GDP growth and interest-rate conditions contain more independent statistical information for FPI within this particular specification. This interpretation is consistent with Fratzscher (2012) who provided evidence that domestic fundamentals matter for the heterogeneous responses to common shocks and Fernández-Arias and Montiel (1996) who provided evidence that fundamentals matter for the quantities of flows.

Finally, the rapid error-correction coefficient highlights the reversibility of portfolio capital. As Forbes and Warnock (2012) reveal, international flows tend to fluctuate in booms and busts and not in a gradual manner. Thus, the frontier market that welcomes the inflows of portfolio investors must also be robust enough to withstand the sudden reallocation of investors.

### 4.5 Policy implications

The first policy implication is that sustainable growth will probably be a stronger basis for foreign participation than will be attempts to create a short-term financial incentive. Productivity, performance in tradable sectors, infrastructure, institutional efficiency and the environment for listed companies can be enhanced through policies that will contribute both to domestic growth and to the anticipated profitability of domestic assets.

Second, the positive interest-rate result should be translated into a goal of credible risk-adjusted returns rather than high nominal rates. The monetary policy should continue its emphasis on price stability and macroeconomic conditions. In 2024, IMF's assessment for Sri Lanka also highlights the importance of price stability, financial stability, reserve rebuilding and growth-oriented reform, instead of targeting portfolio flows (International Monetary Fund, 2024).

Third, the negligible inflation and exchange-rate coefficients should not undermine the macroeconomic stability commitment. Sri Lanka's post-crisis recovery itself illustrates the importance of restoring these fundamentals. The rebuilding of reserves and the financial-account dynamics are central to the recovery (Central Bank of Sri Lanka, 2025). Stable

inflation and a credible exchange-rate framework can reduce the risk premium embedded in the return foreign investors require.

Fourth, capital-market policy should get beyond market capitalization. Investability is based on liquidity, free float, governance, disclosure quality, trading and settlement infrastructure, and the ability to transact at a low price impact for foreign institutions. Further development of these aspects could be more significant than the mere expansion of the nominal market value of listed shares.

Finally, policymakers should treat FPI as reversible. Good macroeconomic policies can dampen the impact of retrenchment but they do not protect a frontier economy from the global financial cycle. Pagliari and Hannan (2024) demonstrate that U.S. interest rates and global risk appetite are key factors affecting the volatility of capital flows, and Eguren-Martin et al. (2024) demonstrate that macroprudential policy can mitigate the response of portfolio flows to global shocks. It is therefore important that external buffers, a plausible policy programme and robust domestic financial institutions still play a role despite the increasing foreign involvement.

## 5. Conclusions

This paper examines the relationship between foreign portfolio investment and domestic macroeconomic conditions in Sri Lanka using quarterly data from 2016Q1 to 2024Q4. The results support strong evidence of a long-run level relationship. The reported upper critical bound is the 1% bound, but even that is still lower than the bounds-test F-statistic of 12.0217. In that relationship GDP growth and the interest rate are both statistically significant and positive. Inflation and the exchange rate have a negative sign but are not statistically significant and market capitalisation is positive but insignificant in the long run. The short-run findings are different. There is a negative relationship between FPI and contemporaneous market capitalization changes. The error-correction coefficient is negative and strongly significant, with a value less than -1, suggesting a quick adjustment with overshooting, rather than smooth monotonic convergence.

The findings support a measured version of the push-pull framework. Although the domestic conditions are important in the allocation of portfolios, the impact is not the same for all domestic conditions and the model does not distinguish global push factors. The estimated domestic specification in Sri Lanka shows that real economic performance and return related conditions offer the best independent long-term indication. This does not make inflation, the exchange rate, or market development irrelevant. Rather, it indicates that their marginal coefficients are not well estimated, taking into account other variables and dynamics. The finding is in line with an international literature that does not rule out that common cross-country shocks can interact with, but do not supplant, the role of the differential domestic fundamentals.

This policy message is thus wider than any one coefficient. Sri Lanka is not likely to draw in long-term foreign portfolio investment through higher nominal yields or the increase of market capitalization. Credible growth, predictable monetary conditions, anchored inflation, a resilient external position and deeper market institutions, which enhance liquidity and investability, are more plausible explanations for sustainable foreign participation. However, it

is important to note that portfolio capital can turn around quickly, and external buffers and financial resilience are critical even when portfolio inflows are high.

The study also shows the importance of evidence from frontier markets. While large, emerging-market samples are often used in international capital-flow research, using smaller markets can shed light on how global financial mechanisms interact with conditions of limited liquidity, limited depth, and more volatile macroeconomic conditions. Given the limitations of the data and samples mentioned above, the evidence found in Sri Lanka indicates that the domestic macroeconomic environment is still a key determinant of foreign investor presence despite this being an era of crisis and global uncertainty.

The empirical design contains several strengths. The bounds statistic is far above the upper critical values, the model explicitly separates long-run from short-run dynamics, HAC covariance estimation is used in response to heteroskedasticity, and recursive stability tests do not indicate broad parameter instability. Although useful specification diagnostics, these are not the same as a comprehensive program of alternative-model robustness checks. In particular, the present findings do not account for the inclusion of alternative constructions of the dependent variable, alternative crisis specifications, or dependent variable models that include global push factors. The main drawback is that it is limited by the size of the sample. The 2016Q1-2024Q4 window includes 36 quarterly observations prior to lags, reducing degrees of freedom and thus raising the impact of extreme crisis observations. The sample is also very heterogeneous. The COVID-19 crisis, 2022 crisis and stabilization period might have produced structural or nonlinear changes that are not fully captured by one coefficient of a linear ARDL model. CUSUM and CUSUMSQ distinguish between event breaks and general recursive stability, however. These estimates should thus be interpreted as long-run associations, specific to the period in question, and not as a set of structure constants.

The specification focuses on domestic fundamentals, and excludes separately global risk aversion, U.S. interest rates, Fed balance-sheet conditions, broad dollar movements, geopolitical risk, and investor expectations. Recent studies suggest that these channels are important. Pagliari and Hannan (2024) study the U.S. rate and global risk aversion; Agoraki et al. (2024) study global risk and uncertainty; Beckmann et al. (2024) study expectations and news sentiment; Eguren-Martin et al. (2024) study downside capital-flow risk and policy; and Lee and Engel (2026) study the Federal Reserve liquidity channel. Their absence implies that the numbers they derive for Sri Lanka should be regarded as conditional domestic relationships rather than a full-fledged structural international portfolio allocation model. The issue of endogeneity, measurement and reproducibility.

The analysis can be expanded along a number of lines in future research. The inclusion of a longer sample would increase the power for formal structural-break analysis and allow more sophisticated dynamic specifications. To check for the asymmetric effects, a nonlinear ARDL model may be tested for the impact of currency depreciation and appreciation or rate increasing and decreasing. A potentially more explicit separation of domestic and external determinants could be accomplished by adding a parsimonious set of global push variables, such as a broad dollar measure, a U.S. money-policy rate, or a liquidity proxy. Alternative measures of market development such as turnover, free float, liquidity and foreign ownership might provide a better

measure of investability than capitalization, taken as a whole. Lastly, if it is allowed for the integration structure, a multivariate VAR/VECM framework, or an identification strategy based on exogenous shocks could investigate the feedback from macroeconomic conditions to FPI, as well as the feedback from FPI to macroeconomic conditions.

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