4^{th} CBSL-ADBI-APAEA Joint Workshop

Theme "Monetary Policy and Central Banking Issues in Asia and the Pacific"

John Exter International Conference Hall, Central Bank of Sri Lanka
Colombo, October 27, 2023

Schedule (Colombo TIME)	Agenda
8.30am - 9.00am	Registration at the John Exter International Conference Hall, CBSL, Colombo
9.00am - 9.10am	Arrival of Delegates
9.10am - 9.15am	Welcome Remarks by **Dr. P.K.G. Harischandra**, Director-Economic Research, CBSL
9:15am - 9:30am	Inauguration by **Dr. P. Nandalal Weerasinghe,** Governor, CBSL Opening Remarks by **Prof. Tetsushi Sonobe,** Dean, ADBI
9.30am - 10.00am	Group Photograph and Refreshments
10:00am - 12:00noon	Workshop Session 1 (4 Papers)
12:00noon - 1:20pm	Workshop Break: Lunch
1:20pm - 2:20pm	Workshop Session 2 (2 Papers)
2:20pm - 2:40pm	Workshop Break: Tea
2:40pm - 4:00pm	Workshop Session 3 (4 Papers - CBSL *Staff Studies* Session)
4:00pm - 4:15pm	*Closing remarks and publication details* **Prof. Paresh Narayan**, President, APAEA **Dr. S. Jegajeevan**, Additional Director-Economic Research, CBSL

WORKSHOP DETAILS

WORKSHOP SESSION 1 ***Chair: Dr. John Beirne (Vice-Chair of Research, ADBI)*** 20 minutes for presentation, 7 minutes for discussion, and 3 minutes for Q&A.	
10:00am - 10:30am	**Title: Exploring Spatial Spill-overs in Monetary Transmission through the Banking Lending Channel: Evidence from India** ***Authors:*** *A.C.V. Subrahmanyam (UoH) and S Raja Sethu Durai (UoH)* ***Presenter:*** *S Raja Sethu Durai (UoH)* ***Discussant:*** *K.P. Prabheesh (IITH)*
10:30am - 11:00am	**Title: Global Shocks and Monetary Policy Transmission in Emerging Markets** ***Authors:*** *Nuobu Renzhi (CUEB) and John Beirne (ADBI)* ***Presenter:*** *Nuobu Renzhi (CUEB)* ***Discussant:*** *Navin Perera (CBSL)*
11:00am - 11:30am	**Title: Managing Inflation and Currency Volatility: An Empirical Analysis of Policy Options for Emerging Economies in Asia** ***Author:*** *Vighneswara Swamy (IBS)* ***Presenter:*** *Vighneswara Swamy (IBS)* ***Discussant:*** *Vishuddhi Jayawickrema (CBSL)*
11:30am - 12:00noon	**Title: Monetary Policy Impact on Stock Returns of Selected South Asian Countries** ***Authors:*** *Neluka Devpura (University of Sri Jayewardenepura), Susan Sharma (Deakin University), Navin Perera (CBSL)* ***Presenter:*** *Susan Sharma* ***Discussant:*** *Raja Sethu Durai (UoH)*
WORKSHOP SESSION 2 ***Chair: Mrs. T. M. J. Y. P. Fernando (Senior Deputy Governor, CBSL)*** 20 minutes for presentation, 7 minutes for discussion, and 3 minutes for Q&A.	
1:20pm - 1:50pm	**Title: Early Warning Models for Anticipating Crisis: Insights from Sri Lanka** ***Authors:*** *K.P. Prabheesh (IIT Hyderabad) and Vishuddhi Jayawickrema (CBSL)* ***Presenter:*** *K.P. Prabheesh* ***Discussant:*** *Vighneswara Swamy (IBS)*
1:50pm - 2:20pm	**Title: The Inflation Impact of Monetary Financing: Empirical Evidence from South Asian Countries** ***Authors:*** *Xin-Xin Zhao (Xi'an Jiaotong University), Chun-Ping Chang (Shih Chien University), Bhavesh Garg (IIT Ropar), and P.K.G. Harischandra (CBSL)* ***Presenter:*** *Bhavesh Garg* ***Discussant:*** *Nuobu Renzhi (CUEB)*
WORKSHOP SESSION 3: CBSL *Staff Studies* Session ***Chair: Mrs. K. M. A. N. Daulagala (Deputy Governor, CBSL)*** 15 minutes for presentation, 5 minutes for Q&A.	
2:40pm - 3:00pm	**Title: Inflation Target for Sri Lanka** ***Authors:*** *P.K.G. Harischandra (CBSL), S. Jegajeevan (CBSL), L.R.C. Pathberiya (CBSL), M.M.J.D. Maheepala (CBSL), Kasun D. Pathirage (CBSL) and H.K.D.S.M. Perera (CBSL)* ***Presenter:*** *M.M.J.D. Maheepala (CBSL)*
3:00pm - 3:20pm	**Title: TFP Losses Resulting from Capital and Labour Misallocation in Sri Lanka** ***Author:*** *R.D. Thilini Sumudu Kumari (CBSL)* ***Presenter:*** *R.D. Thilini Sumudu Kumari (CBSL)*
3:20pm - 3:40pm	**Title: Construction of Residential Property Price Indices Using Hedonic Approach: An Application to the Residential Real Estate Market in Sri Lanka** ***Author:*** *Chamili Gunawardhana (CBSL)* ***Presenter:*** *Chamili Gunawardhana (CBSL)*
3:40pm - 4:00pm	**Title: An Index to Assess Risk of Money Laundering in Designated Non-Financial Institutions, Challenges faced by Emerging Market Economies and a Case Study for Sri Lanka** ***Author:*** *Theja Pathberiya (CBSL)* ***Presenter:*** *Theja Pathberiya (CBSL)*
4:00pm – 4:15pm	**CLOSING REMARKS** **Prof. Paresh Narayan** & **Dr. S. Jegajeevan**

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ABSTRACTS

SESSION I

Exploring Spatial Spill-overs in Monetary Transmission through the Banking Lending Channel – Evidence from India

ACV Subrahmanyam# and S Raja Sethu Durai[1]

The spatial variability in transmission of monetary policy in the Indian context remains relatively unexplored. The present study aims to extend literature in this domain and explores the spatial variability of monetary transmission through the bank lending channel across Indian States in the post-liberalisation period. Leveraging the IMF's perspective of analysing 'transmission of monetary policy through the reaction of financial intermediaries', the study pivots the methodological framework on factors shaping the reaction of banks to monetary impulses at the regional level by using long term and granular bank credit data. Using novel spatial weight matrices to reflect the underlying causal relations and the spatial autoregressive (SAR) models, the study highlights some issues and provides new evidence on monetary transmission through bank lending channel in India. First at a methodological level, the study finds that

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spatial models offer better explanations than simple linear models, when analysing phenomena with plausible spatial interconnectedness and spill overs. Second, the SAR models find significant impact of bank specific features like branch structure and competition at the regional levels driving spatial variability in monetary transmission, underscoring the crucial role played by the banks in attuning a regions' response to monetary impulses. Overall, the study extends literature on spatial aspects of monetary transmission in India and provides policy insights on divergent business strategies adopted by the bank groups impacting monetary transmission at large.

Global Shocks and Monetary Policy Transmission in Emerging Markets

Nuobu Renzhi[1] and John Beirne[2]

This paper empirically examines the impact of global shocks on monetary policy trans- mission in 24 emerging market economies (EMEs), using panel local projections over the period 2000 to 2022. The estimated results show that the adverse global shocks, namely tighter US monetary policy stance, higher global financial market uncertainty, and global climate change, could dampen the transmission of monetary policy in EMEs. Specifically, the overall responses of industrial production and inflation rate to the monetary policy shocks are more muted compared to the case when the impacts of global factors are isolated. We also study whether economy-specific characteristics across EMEs could affect the monetary policy transmission against the impact of global shocks. The results suggest that a higher level of financial development can partially offset the dampening effects of global shocks while a higher degree of capital account openness and trade openness may further amplify the impact of global shocks.

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Managing Inflation and Currency Volatility: An Empirical Analysis of Policy Options for Emerging Economies in Asia

Vighneswara Swamy[1]

The study examines the impact of macroeconomic policies on inflation and currency volatility in 14 Asian economies from 1992-2023, employing various econometric techniques. Three hypotheses are proposed, demonstrating that enhanced monetary policy independence leads to inflation and exchange rate stability, with efficacy differing among Asian rising nations. The study provides evidence-based implications for managing inflation and currency volatility in order to achieve economic development and financial stability, highlighting the need of specific policy initiatives. According to the study, central bank monetary policy independence has a considerable influence on inflation volatility across nations, with Bangladesh seeing a long- term fall, Cambodia experiencing a constant decrease, and China experiencing a severe negative effect. The long-term reduction in currency volatility is considerable, but the short- term impacts differ between nations, showing a complicated link. Fiscal policy measures have a substantial impact on long-term inflation dynamics and currency rate volatility, with increased tax income in Bangladesh signaling economic stability. In Cambodia, inflation has dropped significantly, whereas China and Indonesia have had less fluctuation. The findings show that central bank independence is critical for Asian countries' inflation and exchange rate stability, but fiscal intervention decreases volatility, necessitating specialized methods. The study reveals that while fiscal policy decreases volatility, a personalized strategy is required to ensure economic stability, steady inflation, and sustained growth.

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Monetary Policy Impact on Stock Returns of Selected South Asian Countries

Neluka Devpura[1], Susan S. Sharma[2] and Navin Perera[3]

In this paper, we examine the monetary policy impact on the stock market returns of four major South Asian countries namely, Bangladesh, India, Pakistan and Sri Lanka. We analyze monthly data spanning from January 2013 to December 2022. Given that the sample period includes years heavily affected by the COVID-19 pandemic and to identify, we estimate a regression model that controls for the same. We used short-term interest rates as a proxy for monetary policy, and the robustness of the estimated model is tested by using the Treasury bill rates. Additionally, we consider other variables such as, GDP, the consumer price index (CPI) to represent inflation, exchange rates against the US dollar, the US interest rate, and money supply. Our findings indicate limited evidence of the impact of short-term interest rate on stock returns. However, the Treasury bill rate shows significant results based two out of the four countries. Notably, the exchange rate remains the most prominent control variable.

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SESSION II

Early Warning Models for Anticipating Crisis: Insights from Sri Lanka

K.P. Prabheesh[1] and Vishuddhi Jayawickrema[2]

This paper aims to analyse the performance of Early Warning models (EWM) for currency crises in Sri Lanka. This study attempts to link domestic and international indicators to signal currency crises in the country. An exchange rate pressure index is calculated to identify the crisis event, and the signalling and Logit models are used to examine the crisis predictability power of the indicators. The study identifies seven crisis events using quarterly data from 1997 to 2022. Our overall empirical findings suggest that, in most instances, the credit cycle deviates from the business cycle preceding currency crises. Similarly, the deviation of credit and GDP from its trend exhibited substantial predictive power compared to their respective level forms. Finally, global variables, such as oil prices and the VIX (Volatility Index), emerged as robust indicators, demonstrating their ability to provide strong signals before currency crises.

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The Inflation Impact of Monetary Financing: Empirical Evidence from South Asian Countries

Xin-Xin Zhao[1], Chun-Ping Chang[2], Bhavesh Garg[3] and Harischandra PKG[4]

Monetary financing is widely adopted by many countries, but the causal relationship between monetary financing and inflation has not been proven. This article studies the impact of monetary financing on inflation through empirical testing of unbalanced panel data of South Asian countries from 1990 to 2020 and comparative analysis of time series data of various countries. We find that the expansion of monetary financing in South Asian countries as a whole significantly increases the level of inflation. This conclusion passes a series of robustness tests. However, this conclusion does not apply to all countries. We provide an explanation for the different results for Sri Lanka and India. The mechanism analysis of this study also shows that the expansion of monetary financing increases inflation by increasing the money supply and expanding private credit. Through the findings of this study, we can better understand the extent of the impact of monetary financing on inflation and the reasons for the differences.

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SESSION III

Inflation Target for Sri Lanka

P.K.G. Harischandra, S. Jegajeevan, L.R.C. Pathberiya, M.M.J.D. Maheepala,
K.D. Pathirage and H.K.D.S.M. Perera

Sri Lanka has formally entered into a Flexible Inflation Targeting (FIT) monetary policy framework in 2023 with the enactment of the Central Bank of Sri Lanka Act, No. 16 of 2023, building on the monetary policy framework that was operational since 2020. Revisiting of the inflation target, target setting mechanism, and other parameters was necessitated along with this transition. This study discusses several considerations when selecting a target for inflation in the context of Sri Lanka, such as the type of price index, the appropriate level of the inflation target, and its tolerance margin. The study undertakes several descriptive and empirical analyses to inform an inflation target for Sri Lanka. Quantitative techniques, mainly spline regression, threshold regression model, and threshold vector autoregression (TVAR), have been employed to identify the appropriate target level and tolerance margin for inflation. Findings suggest that the appropriate target for headline inflation, based on the year-on-year change of the Colombo Consumer Price Index (CCPI), is 5 per cent with a margin of ± 2 percentage points. These findings are time dependent, hence need to be revisited as economic conditions evolve.

TFP Losses Resulting from Capital and Labour Misallocation in Sri Lanka

Ranpati Dewage Thilini Sumudu Kumari[1]

Aggregate productivity can largely be determined by how production factors are allocated across heterogeneous firms. Although, the existing literature documents the contribution of misallocation in capital and labour to the aggregate total factor productivity (TFP), the studies on the relative roles of labour and capital misallocation affecting the productivity in a single economy are limited. Using annual firm-level survey data and a static model, this paper estimates the cross-firm misallocation of labour relative to capital and their impact on aggregate productivity loss for Sri Lanka during 1994-2017. The results suggest that relative to the counterfactual efficient allocation of capital and labour, both misallocation of capital and labour has been rising and entails sizable negative impacts on TFP. The misallocation of labour has steeply been rising and 2.4-fold of that for capital misallocation. The results further suggest that firms can hardly grow bigger due to firm size-dependent capital and labour misallocation. The results specifically suggest that labour misallocation can be a binding constraint for business expansion preventing Sri Lanka from moving to a more efficient economy.

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Construction of Residential Property Price Indices Using Hedonic Approach: An Application to the Residential Real Estate Market in Sri Lanka

Gunawardhana SRCL[1]

Monitoring real estate property prices is crucial for policy makers all over the world, particularly for Central Banks due to their interconnectedness with the monetary and financial system stability of an economy. As a result, compiling property price indices has increasingly gained attention from policy makers. However, compiling property price indices is believed to be difficult due to the highly heterogeneous nature of properties, requiring reliable data sources and a methodological approach that is different to the ones used in compiling other price indices. In this backdrop, this paper attempts to compile price indices for residential properties in Sri Lanka with a view to support policy makers to monitor the price movements in the real estate sector. Considering the relatively less heterogenous nature of condominiums and stages of buying and selling process, price indices have first been developed for advertised condominiums and new condominiums using the Hedonic Regression based Rolling Window Time Dummy method, which is identified as the most suited property price index compilation method in the Sri Lankan context. Further, internationally accepted model specification improvement techniques and index smoothing techniques were also used during the study. Upon successful compilation of price indices for condominiums, the compilation process has then been extended to cover the house and land markets of Sri Lanka.

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An Index to Assess Risk of Money Laundering in Designated Non-Financial Institutions, Challenges faced by Emerging Market Economies and a Case for Sri Lanka

Theja D. S. Pathberiya[1]

With the economic downturn amidst the spread of COVID-19 and its containment measures globally, the scale of money laundering activities has increased substantially. Under these trying conditions, money launderers exploit opportunities beyond financial institutions. Non-financial institutions represent a major share in many economies. The Financial Actions Task Force (FATF), the global policy setter on combating money laundering, has recognized the vulnerable areas and has identified several higher-risk non-financial institutions named as designated non-financial businesses and professions (DNFBPs). However, it appears that the focus of country authorities on the risk emanating from DNFBP sector is far less than financial sector, providing greater opportunities to exploit such sectors for money laundering purposes. This is confirmed by the poor worldwide evaluation results by the FATF on risk identification and implementation of controls in the DNBFP sector. This could be due to the lack of proper assessments of money laundering threats and vulnerabilities, that is the money laundering risk of the sector. One major impediment in applying regular approaches to assess risk in DNFBP sector is insufficient data availability in emerging and developing economies. Accordingly, in this study, I propose a bottom-up approach for DNFBPs considering the lack of data and informality prevail in the sector. This index will allow authorities to evaluate preliminary risk levels and further study on the sector to allocate required resources to combat illegal activities. In addition, in this study, I have identified six main challenges that affect the proper control of illegal activities in the DNFBP sector, namely, regulatory requirements and supervisory concerns, lack of awareness of corporate management of firms and lack of technology in firms, primitive state of businesses, political interventions, lack of government support and structural issues such as the sector is not well established in the country. Finally, I discuss a case for Sri Lanka to elaborate how Sri Lanka has positively faced such challenges during its period of introducing and implementing the FATF requirements to country's non-financial sector.

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