

33rd

ANNUAL FOREX ASSEMBLY

PRAGUE - CZECH REPUBLIC

13TH SEPT TO 16TH SEPT 2024



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Always a Dealer

FOREX ASSOCIATION OF INDIA

(AFFILIATED TO ACI)

www.forexindia.org

FAI 33rd Annual Forex Assembly

Organising Team



Mr. Rajan Kumar



Mr. Viresh Kumar Suryawanshi



Mr. Babuli Prasad Gochhi



Mr. Amit Singh



Mr. Vikas Babu Chittiprolu



Mr. Rahul K. Shah



Mr. Aryn Mecklai



Mr. Shailesh Ashra



Mr. Vaneet Gupta

Welcome Note by Chairman



Respected Dignitaries, Guests and Delegates,

With immense pleasure and a deep sense of honour, I welcome you all to the 33rd Annual Forex Assembly of the Forex Association of India, hosted here in the magnificent and enchanting city of Prague. This city, as the capital of the Czech Republic, holds a special place in the financial world, it offers a stable and efficient regulatory environment. Its strategic position in Central and Eastern Europe, combined with its economic stability and advanced infrastructure, makes Prague a fitting backdrop for our important discussions and collaborations.

As I reflect on the journey of the Forex Association of India, I am proud of its evolution from modest beginnings in 1980 to current status as a leading voice in the forex market. Mission of FAI has consistently been to elevate the standards of professionalism and knowledge within Forex community while aligning with global standard and practices. In a rapidly evolving financial landscape, FAI is committed to guiding and supporting the Indian forex community. It has been hosting its annual Forex Assembly for years, with business sessions and panel discussions becoming central to the event, examining new trends, driving engagement, insight-sharing, and industry collaboration; all this is highlighting our joint dedication to propelling the forex industry forward.

The global economy continues to navigate a complex terrain shaped by the aftermath of the COVID-19 pandemic, geopolitical tensions, and persistent inflationary pressures.

To stabilize the economic activities affected due to pandemic induced lockdown, major central banks, including the Federal Reserve, European Central Bank and the Reserve Bank of India, initially injected substantial liquidity to stabilize the economies. However, post covid, inflationary pressures persisted and consequently, we have seen a shift towards tightening monetary policies that helped in bringing inflation rate to central Banks' targeted levels.

For instance, inflation in the United States peaked at 9.1% in June 2022 and has since decreased to around 2.9% by July 2024. Similarly, UK inflation, which was highest at 11.1% in October 2022, has dropped to approximately 2% as of July 2024.

Despite these improvements, the global supply chain remains disrupted due to geopolitical tensions, including the ongoing Russia-Ukraine war and the Israel-Palestine conflict. This has contributed to fluctuations in crude oil prices, which peaked to USD 116.72 per barrel in June 2022 and are now trading at approximately USD 76 per barrel. Further, the USD Index (DXY) peaked at 113 in October 2022, reflecting the strength of the USD against major currencies, but has since declined to 101 presently.

Amidst these global challenges, India shines as a beacon of economic resilience and growth. India's economy grew by an impressive 8.2% in FY24 with an average GDP growth of approximately 8% across all four quarters. Major institutions and rating agencies, including the IMF, World Bank, Fitch, Moody's, and S&P, have raised India's GDP growth forecast for FY25 and FY26, positioning India as the fastest-growing economy in the world. This robust performance is underpinned by high-capacity utilization, healthy balance sheets of banks and corporates, and continued government investment in infrastructure.

The flag ship scheme's such as Make in India, Cash Less/Digital economy in the form of UPI payment, continuous reform by the government of India has yielded positive results for the Indian Economy.

Recently, India capital market, Sensex & Nifty50 has witnessed historic highs and attracted significant foreign direct investment (FDI) and foreign portfolio investment (FPI) inflows, underscoring the confidence of global investors in India's growth prospects. This influx of foreign investment has not only enhanced the depth of our financial markets but also contributed to the stability and robustness of the Indian rupee.

Robust foreign exchange reserve, effective Monetary policy and trade balance adjustments have contributed to the INR's notable stability amidst global economic fluctuations. Further, the RBI's efforts in maintaining financial stability and promoting investor confidence have been instrumental in the INR's resilience.

Moreover, our central bank, the Reserve Bank of India, has taken significant steps to enhance transparency and strengthen regulatory frameworks. Noteworthy achievements include,

- The inclusion of Indian government bonds in global indices (Bloomberg and JP Morgan's GBI-EM Global Index) that will enhance liquidity and price discovery,
- The promotion of INR internationalization (e.g. special Rupee Vostro account), and
- Advancements in digital payment systems such as UPI and RuPay.
- Revised Hedging directions for foreign exchange derivatives for ease and interchangeability
- Recognition of INR as designated foreign currency by Central Bank of Sri Lanka,
- MoU to establish a framework to promote use of Local Currency Settlement (LCS) with the Central Bank of UAE and Bank of Indonesia for cross-border transactions.

Our foreign exchange reserves have also reached a record USD 681 billion, reflecting strong foreign investment and economic confidence.

Moreover, India's remarkable economic growth, rising from the 13th to the 5th largest economy globally, has set ambitious goals for sustainable development. The country has targeted for net-zero emissions by 2070 and introduced initiatives such as Sovereign Green Bonds (SGrBs), which are now accessible to eligible foreign investors. The introduction of the Network for Green Financial System (NGFS) and sustainability guidelines by the RBI further underscores our commitment to a greener future. Further, Government's decision to permit eligible foreign investors in the International Financial Services Centre (IFSC) to also invest in such bonds is showing our commitment towards greener Bharat.

I would like to take this opportunity to extend my deepest gratitude to the Reserve Bank of India. Their steadfast support and encouragement have been crucial in allowing us to continually organize conferences and events that greatly benefit and advance our Forex Community.

As we embark on this assembly, I extend my deepest gratitude to all who have contributed to making this assembly a success. To our distinguished delegates, regulatory authorities, and officials from FIMMDA and FEDAI, your advice and support has been invaluable. I would also like to thank and compliment to all the members of the Forex Association of India, your dedication and enthusiasm are the driving forces behind our achievements and meeting the objective.

I once again welcome all of you in this insightful event and hope that you get most out of this gathering. I would like to extend my gratitude to our sponsors for their unwavering support and dedication and their contribution in to fostering a platform where industry leaders, experts, and stakeholders can come together to share knowledge and collaborate on shaping the future of the forex market.

Last but not the least, I also thank to our event partner Maximus, for the wonderful arrangement.

Let us take this opportunity to forge new paths, build stronger partnerships, and shape the future of our industry with vision and determination. Together, we can transform challenges into opportunities and chart a path toward a prosperous, inclusive and sustainable future.

As we conclude this assembly, let us draw inspiration from Dr. A.P.J. Abdul Kalam's words that reflects the spirit of our gathering and the journey we are embarking on together,

"The best way to predict the future is to create it."

May we continue to push boundaries and innovate as we navigate the ever-evolving landscape of the forex industry.

Thank you once again for your presence and participation. Welcome to Prague, and here's to a successful and inspiring assembly!

Warm Regards,

Rajan Kumar

Chairman, FAI

Deputy General Manager

(Treasury-Front Office)

Bank of Baroda

Message from Secretary FAI



Respected Dignitaries, Guests and Delegates,

A very warm welcome on 33rd Annual Assembly of Forex Association of India (FAI).

It has been an eventful year since our last Conference held in Macau. Yields in most economies were on an upswing last year, but the tide has changed now. Central banks, such as the ECB, BOE, BOC, RBNZ, Switzerland and several other Asia, EMEA and LATAM countries, have started cutting rates, while many others are likely to join the journey. In the US also, the door to lower rates opened after recent economic data. Japan is once again an outlier to tighten monetary conditions at a time when the rest of the world is doing the opposite. It triggered a sharp unwind of Yen funded carry trades, leading to a meltdown in USD/JPY.

Globally, inflation had eased off due to easing supply chain disruptions and weaker energy prices. But many developed economies are facing a period of sticky services sector inflation due to tight labour market conditions.

Global growth has been remarkably steady, but the expansion is skewed towards services. China's reopening momentum lasted for a much shorter period than expected, forcing the People's Bank of China to also ease monetary policy conditions, with cuts in Reserve Ratio requirement for banks, as well as lending rate cuts.

India has been a source of stability and growth through this roller coaster ride in global financial markets. Along with the US, Indian equity markets have significantly outperformed other major markets, while Indian debt and FX markets have seen exceptional stability, backed by superior economic fundamentals. We also achieved the distinction of becoming the 5th largest economy in the world last year.

Let me wrap up by emphasizing that the pandemic and subsequent global events have demonstrated the necessity of preparedness and should remain vigilant for these extraordinary events. Therefore, continuous learning is extremely important for dealers to stay updated and remain ahead of the knowledge curve. In this context, FAI remain committed to our educational initiatives and continue to support market linked educational programs such as ACI Dealing and Diploma certification examination for forex dealers.

This year conference theme is "Indian Financial Markets – Practitioners perspective." I hope that this year's conference will bring active debate, suggestions, and innovative ideas to make our Indian markets more "vibrant and resilient." For the conference, I call upon the participants to actively participate in all the activities we have arranged for you and make this 33rd Annual Forex Assembly a remarkable success.

Finally, Prague is one of the most beautiful, historic cities of Europe. I urge you all to make the most of the excursions arranged by FAI as well as the free time available to soak in the sights of this city.

I wish you a memorable trip.

Best Regards

Viresh Kumar Suryawanshi

Hon. Secretary - FAI

Dy. General Manager (Forex, FE & NP)

State Bank of India

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Delegate List

FAI Managing Committee



Mr. Rajan Kumar
(Bank of Baroda)
Chairman



Mr. Viresh Kumar Suryawanshi
(State Bank of India)
Hon. Secretary



Mr. Amit Singh
(ICICI Bank)
Vice Chairman



Mr. Babuli Prasad Gochhi
(Punjab National Bank)
Treasurer



Mr. Debajyoti Mohapatra
(Bank of India)
Joint Secretary



Mr. Tejendra Singh
(Indian Bank)
Joint Secretary



Mr. Rahul K. Shah
(Sunidhi Securities & Fin. Ltd.)
Joint Treasurer



Mr. V. R. C. Reddy
(Karur Vysya Bank)
President (Chennai Chapter)



Mr. Rajesh Lakhotia
(Raychand Lakhotia & Sons)
President (Kolkata Chapter)



Mr. Arvind Khusape
(Axis Bank Limited)
Member



Mr. Vivek Sharma
(HDFC Bank)
Member



Mr. Vishal Kaushal
(ANZ Bank)
Member

33rd ANNUAL FOREX ASSEMBLY



Mr. Vikas Babu Chittiprolu
(Union Bank of India)
Member



Mr. Farhad Doctor
(IDBI Bank)
Member



Mr. Sreekanth I. V.
(Federal Bank)
Member



Mr. Shivam Shukla
(UCO Bank)
Member



Mr. Avadh Kishor Yadav
(Central Bank of India)
Member



Mr. Ashish Anand
(Canara Bank)
Member



Mr. Nikhil Sharma
(Bank of Maharashtra)
Member



Mr. Aryn Mecklai
(Mecklai & Mecklai)
Member



Ms. Amisha Mehta
(Vrajilal Thakker & Co.)
Member



Mr. Shailesh Ashra
(SAK Forex)
Member



Mr. Vaneet Gupta
(Standard Chartered Bank)
Member

Programme

Welcoming Dignatories

Welcome address by Chairman, FAI

Address to Assembly by Secretary, FAI

Keynote address by Chief Guest

Mr. Radha Shyam Ratho – Executive Director – RBI

Panel Discussion :

Leveraging Technological Innovations to enhance transparency and efficiency in the Indian FX markets

Distinguished Panel Members :

Ms. Dimple Bhandia – Chief General Manager FMRD – Reserve Bank of India

Mr. H. K. Jena – Managing Director – CCIL

Mr. Vivek Wahi – Executive Director – Central Bank of India

Mr. Subrat Kumar – Executive Director – Bank of India

Mr. Samir Sawhney – Chief General Manager Global Markets – State Bank of India

Moderator :

Mr. Vishal Kaushal – Head of Investor Sales ANZ – India

Short speech by sponsor / partners

Vote of Thanks

Disperse for Networking Dinner

Chief Guest

Name		Bank / Institution
Mr. Radha Shyam Ratho	Chief Guest	Executive Director Reserve Bank of India

Panel Members

Ms. Dimple Bhandia	Panelist	Chief General Manager FMRD – Reserve Bank of India
Mr. H. K. Jena	Panelist	Managing Director CCIL
Mr. Vivek Wahi	Panelist	Executive Director Central Bank of India
Mr. Subrat Kumar	Panelist	Executive Director Bank of India
Mr. Samir Sawhney	Panelist	Chief General Manager Global Markets – State Bank of India & Chairman, FEDAI

Moderator

Mr. Vishal Kaushal	Moderator	Head of Investor Sales ANZ – India
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Esteemed Dignitaries

Mr. Rajiv Ranjan	Executive Director Reserve Bank of India
Mr. Nand Kishore	Deputy Managing Director State Bank of India & Chairman, FIMMDA
Mr. Lalit Tyagi	Executive Director Bank of Baroda

THEME OF THE
33rd ANNUAL FOREX ASSEMBLY
OF THE
FOREX ASSOCIATION OF INDIA

**Indian Financial Markets –
Practitioners Perspective**



Chief Guest



Mr. Radha Shyam Ratho

Executive Director

Reserve Bank of India

Mr. Ratho has worked with the Reserve Bank of India (RBI) for over 32 years and is currently Executive Director in charge of Financial Markets Operations Department, Financial Markets Regulation Department, and Secretary's Department. His responsibilities include overseeing RBI's financial market operations and regulation in the forex, money, and bond markets. He is also overseeing the Secretary's department, which provides assistance to the Central Board of Directors. Until recently, he was also overseeing all matters related to foreign exchange and management of RBI's foreign exchange reserves. He is also a member of the Adjudication Committee to decide on enforcement actions on regulated entities. Mr. Ratho represents RBI on the Markets Committee of the Bank for International Settlement (BIS), Basel (Switzerland). He has earlier represented RBI on the Global Foreign Exchange Committee (GFEC) apart from serving on some international committees of the BIS. He also chaired the Inter- Departmental Group constituted by RBI on "Internationalisation of INR".

A NTSE scholar, Mr Ratho holds a Master's degree in Analytical & Applied Economics. He has also completed CAIIB and MBA, and M. S. from the University of Leicester (UK).

Mr Ratho has a number of publications in the areas of Global and Euro-zone crises, major currencies, forex reserves, central banking, etc.

Distinguished Panel Member



Ms. Dimple Bhandia

Chief General Manager FMRD
Reserve Bank of India

Ms. Dimple Bhandia is a career central banker with over 25 years of central banking experience covering the areas of financial market development and regulation, reserves management, financial stability, payment systems and banking supervision.

She has also worked as Member of the Secretariat of the Financial Stability Board between 2015 and 2017.

Currently, she is heading the Financial Markets Regulation Department in the Reserve Bank of India.

Distinguished Panel Member



Mr. H. K. Jena

Managing Director

The Clearing Corporation of India Ltd.

Mr. Hare Krishna Jena is Managing Director of The Clearing Corporation of India Limited (CCIL), Mumbai. CCIL provides an institutional framework for the clearing and settlement of transactions in government securities, money market operations, foreign exchange transactions, derivatives and other related products. CCIL is a Qualified Central Counterparty (QCCP) serving the OTC markets in India. CCIL also functions as a Trade Repository for OTC Derivatives in India. CCIL's wholly owned subsidiary, Clearcorp Dealing Systems (India) Ltd. (Clearcorp) operates / manages electronic trading platforms for trading in government securities, forex (spot and forward), money market and derivative instruments. It has also started its services to retail participants by offering retail trading platform for Forex and Government Securities. In addition, LEIL, another wholly owned subsidiary of CCIL has been authorized to issue Legal Entity Identifiers (LEIs) in India.

Prior to joining CCIL, Mr. Hare Krishna Jena has served State Bank of India for about 35 years and his last assignment at SBI was the Deputy Managing Director (DMD) in-charge of the 'Global Markets'. As DMD, Global Markets, he handled treasury portfolio of India's largest bank with significant exposure to various market segments such as foreign exchange, money market, equity, debt securities and derivatives etc.

He has all-round experience covering different aspects of banking.

Mr. Jena, joined the Bank as a Probationary Officer in 1985 and held various critical assignments both in India and abroad. Some of the assignments held by him:-

- Chief General manager, Global Markets
- General Manager, Network, Hyderabad, leading a network of over 450 branches, engaged in Retail Operations, Credit and Cross Selling.
- Dy. General Manager (Treasury Management Group), International Banking, overseeing Treasury operations of overseas branches.
- Dy. General Manager (Market Risk), Risk Management Department heading the bank's market risk portfolio.
- Vice President (Treasury) in the bank's Sydney office overseeing forex business, money markets and ALM.

Mr. Jena has been nominated to various boards like SBI Macquarie Infrastructure Management Private Limited, Oman India Joint Investment Fund Management Company Pvt. Ltd., SBI-SG Global Securities Services Private Ltd., Foreign Exchange Dealers Association of India (FEDAI), Gujarat State Energy Generation Ltd., SBI DFHI Ltd., Macquarie SBI Infrastructure Management PTE Ltd.

He has been Chairman of FEDAI, SBI SG and OIJJF during his nomination to these Boards.

Distinguished Panel Member



Mr. Vivek Wahi

Executive Director
Central Bank of India

Mr. Vivek Wahi is a B.Tech. from NIT, Kurukshetra. He possesses a rich experience of 34 years in Banking and Financial Markets. He is presently working as Executive Director, Central Bank of India since March 2021. Prior to this assignment, he was working as Field General Manager. He also headed Treasury in Bank of India. He has also headed one of the biggest zones, in terms of business mix, that is Mumbai South Zone. In addition to the above, he has worked in many vital verticals of banking viz Branch Banking, Corporate Credit, Foreign Exchange, Dealing Room, Planning, IT, etc. He has over 15 years of experience in Treasury which includes not only serving General Manager in-charge of a Bank's Treasury, but also having worked as active Dealer for 10 years having trading capabilities across all asset classes viz Fixed Income, Equities, Currencies and Derivative Markets. This also comprises of a stint of 3 years as Forex Dealer in charge of BOI Paris, France where apart from managing forex and Money market requirements, was also responsible for ALCO management and pricing of assets and liabilities of the Centre. Besides, he has also worked for a long time in credit of which major part was Large Corporate Credit for 5 years including heading one of the Large Corporate Branches. He has also represented BOI in FEDAI Managing Committee, IxFC (Indian Counterpart of Global Fx Code), FIMMDA and has also participated in various seminars in India and abroad.

Mr. Wahi also possesses a rich board level experience as he also represented Bank of India as a Nominee Director in STCI Finance Ltd, STCI Primary Dealer Ltd and BOI Shareholding Ltd,. Currently he is a Nominee Director in Bank's Overseas Joint Venture in Zambia named as Indo Zambia Bank, which is also the 5th largest Bank of Zambia, apart from being a Whole Time Director in Central Bank of India, appointed by Government of India.

Distinguished Panel Member



Mr. Subrat Kumar

Executive Director
Bank of India

Mr. Subrat Kumar has been appointed as Executive Director of Bank of India and assumed charge on 21.11.2022. Mr. Kumar is a B.Sc., MBA & CAIIB qualified Banker. He has over 27 years of experience in Commercial Banks / Asset Management Co.

During his long stint in the Banking Industry, he gained varied exposures in all important spheres of operational and strategic Banking with special expertise in Treasury & Investment Banking, Risk Management, Credit Monitoring & Corporate Banking. He successfully handled the responsibilities such as Regional Head, Patna, Head of Treasury Management, Audit & Inspection, Credit Monitoring & Corporate Credit. He held the position of Chief Risk Officer (eVB) and Chief Financial Officer (CFO) of the Bank as well.

He was also on the Boards of FIMMDA and BoB Capital Markets Ltd.

Distinguished Panel Member



Mr. Samir Sawhney

Chief General Manager
Global Markets, State Bank of India
& Chairman, FEDAI

Mr. Samir Sawhney is currently Chief General Manager (Global Markets) at State Bank of India, Corporate Centre, Mumbai. At present, he oversees the Treasury operations of the Bank consisting of Investment portfolio, Money market, Equity & Private Equity of the Bank and Forex market with a combined portfolio of nearly INR 15 lac crore.

Prior to the current assignment, Mr. Sawhney was General Manager (Rupee Market) of Treasury operations.

Mr. Sawhney, a post-graduate in management, joined State Bank of India as Probationary Officer in 1991 and has worked extensively in major banking verticals like Treasury, International Banking and Retail Banking, including overseas assignments at SBI New York.

Moderator



Mr. Vishal Kaushal

Head of Investor Sales, India
ANZ Banking Group Limited

Mr. Vishal Kaushal is currently working with ANZ Banking Group Limited, Mumbai branch as Head of Investor Sales, India and has more than 15 years of experience in Financial Markets. Prior to his current role, he had a long stint at Standard Chartered Bank, and across the two organisations has covered multiple asset classes such as Foreign Exchange, Interest Rate Derivatives, Bonds, High Yield Credit and Syndicated Loans looking after a portfolio of Global and Indian Institutional clients.

Mr. Kaushal is a graduate from Indian Institute of Technology, Roorkee and holds a PGDM from Indian Institute of Management, Indore.

He has also been a member of the Forex Association of India's Managing Committee since 2019.

Esteemed Dignitaries



Mr. Rajiv Ranjan

Executive Director
Reserve Bank of India

Presently, Dr Rajiv Ranjan is serving as Executive Director of Monetary Policy Department. He is also Member of Monetary Policy Committee which decides monetary policy.

He holds Master's degree in economics from Delhi School of Economics and a Ph.D. degree in Macroeconomic Modelling from Mumbai University.

He has more than 34 years of experience of working in several departments of RBI including Monetary Policy Department, Department of Economic Policy and Research, Department of External Investments and Operations and International Department. Besides, he served as Economic Policy Expert in Central Bank of Oman for 3 years.

He has wide experience in the area of macroeconomic policy and research including monetary policy, fiscal policy, real sector, external sector and international relations with several policy oriented and research articles to his credit published in domestic and international journals.

He has co-authored several books on contemporary economic issues. He has been associated with several high-level committees constituted by the RBI and international organisations from time to time.

Esteemed Dignitaries



Mr. Nand Kishore

*DMD Global Markets – SBI and
Chairman of FIMMDA*

Mr. Nand Kishore is currently posted as Deputy Managing Director (Global Markets) at State Bank of India, Corporate Centre, Mumbai. Global Market looks after entire treasury operations of SBI.

Prior to the current assignment, Mr. Nand Kishore was heading the SBI operations in the state of Karnataka as Circle Chief General Manager.

Mr. Nand Kishore joined in State Bank of India as Direct Recruit (Probationary Officer) in 1990 and has worked extensively for the past 34 years in major banking verticals like Branch Banking, International Operations, Treasury Operations, Corporate Banking and Retail Operations of the Bank.

Mr. Nand Kishore has worked as Chief Dealer, SBI New York, DGM & Chief Operating Officer at Corporate Accounts Group Delhi, DGM (Interest Rate Markets) at Global Markets, General Manager at Corporate Accounts Group BKC Mumbai and Chief General Manager, Bengaluru Circle.

Esteemed Dignitaries



Mr. Lalit Tyagi

Executive Director

Bank of Baroda

Mr. Lalit Tyagi, has an extensive experience of over 28 years in commercial banking. He began his career as a Probationary Officer at Bank of Baroda in 1996. His expertise spans Corporate Finance, Risk Management, International Banking, and key administrative roles. He has served Bank in various capacities across India and internationally, including notable stints in Brussels, Belgium, and New York, USA.

Prior to his appointment as Executive Director of Bank of Baroda on 21st November 2022, he successfully led several important units of the Bank, including serving as the Head of Bank's largest Corporate Financial Services Branch, Mumbai and Chief Executive of the US Operations in New York.

He has held Directorial positions in Canbank Computer Services Ltd. and Non-Executive Chairman of Bank of Baroda (Guyana) Inc. Currently, he serves as Nominee Director in BOB Capital Markets Ltd., India Infradebt Ltd., IndiaFirst Life Insurance Company Ltd., Indo Zambia Bank Ltd., Bank of Baroda (Uganda) Ltd., and Bank of Baroda (UK) Ltd.

As Executive Director, he looks after Corporate & Institutional Banking, Treasury & Global Markets, Mid-Corporate Business, International Banking, and Domestic Subsidiaries/Joint Ventures Divisions. Previously, he was responsible for managing key areas including Compliance, Risk Management, Audit & Inspection, Credit Monitoring, Collections, Legal, and HRM.

Mr. Tyagi has a Post Graduate Diploma in Banking & Finance (PGDBF) from National Institute of Bank Management (NIBM), Pune. He has been identified by the Bank's Board Bureau (now the Financial Services Institutions Bureau) as a future leader in Public Sector Banking.

Monetary & Fiscal Policy coordination: Why It Matters Most Now



By Dr. Soumya Kanti Ghosh
Group Chief Economic Adviser
State Bank of India

With economic shocks proliferating in recent times, building upon the twin Black Swan events of pandemic and geopolitical aggressions across latitudes, clouding the visibility on growth trajectories chalked by jurisdictions in quest of sustainable growth that aims to ensure equity and equitable rights for different cohorts, the talks on nuanced, and finer coordination between fiscal and monetary policy management, beyond the mere financing of budget deficits at right terms of trade, has been gathering steam. The talks are also acquiring new ramifications, in particular the funding gap acquiring significant ramifications due to meeting net zero commitments frontloading colossal investments in clean / green energy and new age mobility across nations, with hazy patterns showing near abysmal commitment on actual fundings to meet the ambitious goals while credit saturation of masses through formal mechanisms is high in priority order after bringing masses in financial circle through ensuring bank accounts (or, through mobile money service providers across many jurisdictions as per World Bank data) for nearly 80% of adult populace.

The volatility spanning across markets of late, bolstered by the incremental probability of US economy slipping into a recession as weak jobs markets trigger Sahm Rule, and Japan showing the return of manic swings of asset classes, has further exacerbated the need to have a synchronised fiscal-monetary policy with stretched indebtedness of countries, and fragmented supply chains impacting trade outlook further warranting a calming effect for public at large/investors/savers from policy makers and regulators together lest another vicious cycle is fanned, weakening the pillars of fragile growth drivers.

There has always been a debate on the fiscal and monetary policy coordination in a country given that the two are managed independently by the Government and the central bank respectively, inter alia implying the tangible, as also intangible coordination problems between the fiscal and the monetary authorities. In a recent paper co-authored (Ghosh and Kheterpal' 2023), the application of game theory framework in finding the optimal solution under different models (Cournot and Stackelberg model) in case of India was explored wherein the results show that the Government and the Regulator's optimal solution depends on a number of factors, including target rate of inflation, target fiscal deficit, liquidity situation in the economy. Furthermore, the Stackelberg model presented a better solution with the Government as the leader, with the model estimates near accurately capturing the interlinkage between fiscal deficit and key policy rate, the upsurge in times of duress as also the downswing settlement as and when the situation normalises. The paper aimed at formalising the objective of the two authorities given their constraints and

show how the two interact in game theoretic framework even in uncoordinated framework, leading to different outcomes depending on the model used to describe their behaviour.

The role of both the policies, monetary and fiscal, in an economy cannot be overemphasised. Both need to complement each other to achieve higher growth, with price stability. The monetary policy aims to stabilise the economy while keeping the inflation low / moderate (in case of emerging economies). On the flip side, the fiscal policy has the objective of higher growth but at the same time keeping a tab on the budgetary deficit. The focus on policy coordination increases in particular during the times of calamities and crises. Importantly, how a country deals with a crisis majorly depends on the policy action taken by its authorities. During the global financial crisis of 2008, countries across the world adopted loose fiscal policy viz. Economic Stimulus Act of 2008 / American Recovery and Reinvestment Act of 2009 as also Troubled Asset Relief Program (TARP) for the beleaguered debt laden financial institutions in the US for example, or European Economic Recovery Plan as also expansionary monetary policies (QEs) by Central Banks to bring their countries out of the economic quagmire. Similarly, the 2012-13 EU debt crisis led to renewed importance of fiscal policy and monetary policy coordination, in particular for the PIIGS nations. The tragic shocks of covid ensured the fiscal and monetary authorities launching one of a kind unprecedented response to protect lives and livelihoods across jurisdictions.

Given the independence of the central banks in most major economies, there is always a debate on the fiscal and monetary policy coordination in a country. The Central bank is generally independent of the Government's interference. Both have their separate goals and use different instruments to achieve the same. For instance, any Government would prefer to achieve high level of GDP growth but at the same time a lower fiscal deficit. The central bank, on the other hand, wants inflation to remain under control. However, even if the central bank of a country is independent, the monetary policy is still integrated with the fiscal policy. The central bank's objective of managing inflation cannot be independent of growth dynamics in a country. Similarly, the Government cannot achieve higher growth without considering inflation dynamics in the country. Thus, the two policies, fiscal and monetary, are interdependent. Various prominent economists including Friedman (1948), Tinberger (1954), Mundell (1962), Tobin (1980), Wallace (1981) among others have talked about the interaction of the fiscal and monetary policies. The recent paper by Leeper (2021), presented at the Jackson Hole Economic Symposium in September 2021, also talks about how the success of one policy depends on the other policy behaviour, with the author also emphasising that operational independence of policy makers does not mean economic independence of the two. Furthermore, fiscal behaviour is integral to the transmission of monetary policy.

The nature of policy coordination also depends on the level of development of an economy. As the country makes progress and moves towards economic development, its institutions become more independent. The experience of India also indicates the change in fiscal and monetary policy framework. The country used to run higher fiscal deficit in the 1990's which impacted the economy through higher inflation and increased market borrowings which in turn crowded out private investment. It was only after the passing of the Fiscal Responsibility and Budget Management Act in 2003 (FRBM Act, 2003), that a conscious efforts were made to rein in the fiscal deficit. The abolition of the automatic monetisation of fiscal deficit through creation of ad

hoc treasury bills in 1997 completely separated the monetary policy from the fiscal policy. Furthermore, when the RBI was prohibited from buying the Government securities in the primary market from April 2006, the interaction between the Government and the RBI was modified.

The pandemic, followed in quick succession by geo-political aggressions, first in Europe and then Middle East, also witnessed near unprecedented adoption of expansionary policies by the Governments and the monetary authorities. The devastating spell of the pandemic saw both the Government and the RBI coming together and undertaking a number of measures to provide relief to the vulnerable sections of the society. The Government announced the Pradhan Mantra Garib Kalyan Yojana which provided free foodgrain, cooking gas and cash directly to farmers, women, elderly and the poor in the wake of imposition of limited mobility. Later, the Government announced massive financial package under AatmaNirbhar Bharat Abhiyan, equivalent to ~10% of the GDP. The series of steps included emergency working capital facility for businesses, including MSME, subordinate debt for stressed MSME, fund of funds for MSME, free ration for poor, EPF support for businesses and workers, liquidity injection for NBFCs/MFIs, HFCs, DISCOMS, interest subvention scheme for MUDRA Shishu loans, additional allocation under Mahatma Gandhi National Rural Employment Guarantee Scheme among others, totalling Rs 20 lakh crore. Additionally, the Government tried to increase demand in the economy by announcing LTC cash voucher and festival advance for the Government employees and enhanced capital expenditure with overall outlay estimated at Rs 73,000 crore. Also, the Government had announced extra borrowings by the States by 2% of GSDP in FY21 and 0.5% of GSDP in FY22 contingent upon certain reforms, (including power sector reform) done by the States. Higher capital expenditure by the Government not only helped in pump priming the economy battered by the pandemic but also ensured increase in the potential future growth.

Simultaneously, the RBI also took plenty of monetary and liquidity measures owing to which the system was flushed with liquidity. In sync with many jurisdictions, the RBI too adopted easy monetary policy, eventually lowering the key rate by 115 bps since March 2020 (before inflationary concerns forced it to take a pivot in mid-2022). Furthermore, a number of other measures including reduction in Cash Reserve Ratio (CRR) and Marginal Standing Facility (MSF), targeted TLTROs, TLTRO for NBFC and MFI, special refinance facilities to NABARD, SIDBI and NHB, special liquidity facility for mutual funds, extension of line of credit to EXIM bank, restructuring and change in NPA norms, deferment of Interest on Working Capital Facilities, broadening of the scope of priority sector lending among others were taken to ease credit conditions, while also maintaining the accommodative stance then. All these efforts of the Central Bank ensured that the system liquidity remained in surplus during the unprecedented times of the COVID-19 pandemic. Furthermore, the monetary policy committee re-iterated to continue with the stance as long as it was necessary to revive growth on a durable basis amidst the pandemic, while at the same time working hard to keep inflation within its target of 4+/-2% going forward (the supply chain disruptions globally hitting the energy and food prices spiralled the inflationary concerns upwards with a pass through impact on us as both core and headline shocks, the deviations from core viz. high-frequency movements arising from large price changes in particular sectors of the economy ran away with sanctions debilitating all maths).

There has been plenty of literature examining tenets of coordination issue between monetary and fiscal authorities. The issue regarding the efficacy of independent fiscal and monetary policies is

discussed by many authors (Nordhaus (1994), Koptis (2011), Orphanides (2017)). Furthermore, some have used game theory framework to study the policy coordination problem, most notably celebrated economist Alan Blinder (1982) who in his paper titled, 'Issues in the Coordination of Monetary and Fiscal Policy' raised the possibility that greater coordination might actually lead to inefficient outcome. Using the game theory framework, Blinder concluded that uncoordinated behaviour often results in tight monetary and loose fiscal policy even when both parties would prefer easy monetary and tight fiscal policy. In other words, the Nash equilibrium under the Cournot model leads to inefficient outcome. Binder then talked about the Stakelberg model of leaderfollower arrangement, where the leader puts certain constraints on the follower but if the follower has enough instruments at his disposal, these constraints may not be binding and the system is equivalent to having a single stabilization authority (the follower). But if the follower does not have enough instruments, then the constraints imposed by the leader are binding and may prevent the follower to attain his first-best optimum. Furthermore, in the dynamic framework the loss due to lack of coordination is discussed at large. Interestingly, Alan Blinder unequivocally re-emphasised on the need of policy coordination especially at the time of crisis like the pandemic during his address at the Jackson Hole Economics Symposium in September 2021.

Libich, Hallett and Stehlík (2007) talked about interaction in asynchronous timing of moves. The authors studied dynamic Stakelberg model by allowing policies to be rigid or committed for different periods of time. The paper concluded that active and independent monetary policy authorities with appropriate institutional design which will stick to a numerical inflation target may induce the Government to achieve lower budget deficit which results in better monetary and fiscal policy outcomes.

Stawska et al (2019) used the Nash equilibrium in a non-cooperative game between the Government and the Central Bank for determining the equilibrium setting for a country. The authors incorporated the institutional restrictions in their non-cooperative game model. The study concluded that the budget deficit and the interest rate of EU countries depend on the exogenous data (external to the model), such as inflation target, base inflation and the Maastricht deficit limit. Furthermore, the paper also analysed the Government's and the central bank's sensitivity to various economic variables.

Blueschke and Neck (2018) have gone a step ahead and used a three-country macroeconomic model of a monetary union to study the interactions between fiscal and monetary authorities, looking at several cooperative and non-cooperative games using algorithm.

Another literature on the policy coordination in the last decade is the paper by Saulo, Rego and Divino (2013). The authors have analysed the coordination problem between the Government and the central bank using 3 game theory models.

Lambertini and Rovelli (2003) also adopted game theoretic approach for studying the fiscal and monetary policy coordination, concluding that the solution from Stackelberg model is superior to the one obtained from non-cooperative Nash equilibrium. Furthermore, owing to the institutional arrangements where fiscal policy decision is taken before and less frequently compared to the monetary policy decision, the fiscal authorities should naturally act as a leader and adopt a rule which maximises their utility and also internalises the objective of price stability of the central bank.

The policy coordination under the different models of game theory was studied in detail in Indian context at our end incorporating exogenous variables inflation target and fiscal deficit target (like Stawska et al, 2019) in a model and taking into account other variables as well which are important in case of Indian policy making. The research concluded that the variables considered in the model by the authorities change depending on whether they follow the Cournot model or the Stackelberg model. Furthermore, in case of India it makes perfect sense for the Government to be the leader in the Stackelberg model and RBI to act as a follower. Since a majority of the studies have traditionally focussed on the developed markets' framework of fiscal and monetary policy coordination, the cited research provides a unique way of studying policy coordination, also offering a bedrock for future policy making by the authorities.

In the cited work, the non-cooperative Nash equilibrium for fiscal and monetary policy coordination of the Government and the central bank respectively in case of India was studied, where both the Government and the RBI are independent in their decision making. However, the two consider the policy variables set by each other while formulating their own policy. The reaction functions are formulated after considering the objective function of both the authorities which have been expressed in square form, given their constraints. The model constructed showed that the fiscal deficit and the key interest rate set by the two authorities depend on a number of variables, including the inflation target, fiscal deficit target, differential between the 10 year G-sec yield and the lower bound of the policy rate.

The game theoretic framework was considered under two settings - the Cournot model and the Stackelberg model. Under the Cournot model, the two authorities set their policies independently in non-coordinated way. This is arrived at by simultaneously solving the reaction functions. Meanwhile, in the Stackelberg model, the Government is considered as the leader and the RBI as the follower. This makes perfect sense since the Government sets their fiscal deficit target once a year while monetary policy committee meets more frequently. The results showed that Stackelberg model is superior to the Cournot model as the Government can achieve their goal of GDP maximisation given its constraint with lower fiscal deficit, and the key rate set by the RBI being almost the same under both models. This also establishes the benefit that the leader gets in the setting.

Furthermore, under the current scenario where the structural shift due to the reverberations of twin events continue to hit economic activities across the world (the deepening concerns on US economy slipping into a recession as the higher interest rates for households and businesses take a toll and a cooling job market slips ahead of Fed's predictions vouch for the lingering effects), the fiscal deficit target of the Government should be a little flexible to smoothen the achievement of neutral interest rate by the RBI which may align and move in tandem with a mellowed fiscal deficit level going forward. As the world embraces new highs of BANI (brittle, anxious, non-linear, and incomprehensible) landscape, the fiscal and monetary policy coordination must dynamically chase the evolving realms of such events, keeping ahead of the curve to deliver the mandate effectively and judiciously to people. Such insights and interpretations assume greater significance as the Indian economy continues to pose a resilient growth, sans much volatility, towards the ambitious yet achievable agenda of Viksit Bharat.

This time will be different



By Madan Sabnavis
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The forex market would be going through a very different phase in the coming months after fairly wild swings in the last two years. This is so because the global space has become more uncertain on the political front even while economic recovery remains on the anvil. In 2022-23, the forex markets went in a tizzy after the outbreak of the Ukraine war. The Fed began raising interest rates and the dollar started to strengthen to reach parity with the euro by the end of the calendar year. This also meant that the other currencies weakened and the rupee was not spared with a decline from Rs 74.52/\$ in Fy22 to Rs 80.38/\$ in FY23. This fall of around 7.2% was driven by both weakening balance of payments as well as external factor of the dollar. Yet, due to judicious intervention by the RBI, the pace of decline was checked and the rupee continued to be one of the better performing currencies in the world.

In a world where the dollar has become the benchmark or anchor currency, any strengthening or weakening of the same will have the opposite effect on other currencies. In fact this was a double whammy where the fundamentals weakened as well as the external factor affecting the rupee turned adverse. This was the time when the forex reserves fell by \$ 39 bn to \$ 578 bn. A substantial part of this decline was attributable to the stronger dollar.

FY24 turned out to be different. The Fed had reached the peak rate in July 2023 at 5.5% and while the dollar was volatile, it played in a band of less than 1.10/euro and ranged between 1.05-1.10/euro. This meant that there was, relatively speaking, currency stability cross the world, and the rupee declined by just 2.9% to \$ 82.79/\$. This was a time when forex reserves increased by \$ 67 bn and it was believed that there was intervention by the RBI to buy dollars to ensure that the rupee did not strengthen too much, which would have had a repercussion on the exports. In fact, growth in exports turned positive. This was a period when inflation was still high in India while it tended to meander downwards in the USA. The Hamas war had little impact as oil prices remained steady. It does look like that the world has buffered in political turmoil even when involving the oil producing nations.

Fast forward to the present and there have been several interesting developments in the last couple of months. The Fed is now assumed to be contemplating a rate cut which could happen in September if things remain normal. In fact the last policy in July is a little less ambiguous in

directing the same. The fact that employment looks weaker strengthens the case for a rate cut. The dollar remains fairly stable and range bound between 1.07-09/euro. Statements made by the Fed officials do have their announcement effects on the currency but the volatility has become lower as a rate cut is now given and it is only the timing and quantum which can be an issue of debate. The new subject which is playing out now is the 'Trump factor'. Ever since the Presidential debate took place where it appeared that the Democrats would not make it to power and that Donald Trump would get elected, the markets have been left guessing.

Donald Trump's perceived view is one of contradictions. It is believed that he is all for a strong dollar. But he is also for expanding fiscal deficits to finance tax cuts. He has indicated that he would like interest rates to remain unchanged. It is known that he does not like the economics of China and would increase customs duties once in power. This means a possible trade war. But for sure there would be a 'big' inflation impact for the country. At the same time he wants the dollar to be right to spur exports, which cannot happen along with the resolve to keep the dollar strong. An unchanged dollar value and one which provides a push to exports is not feasible at the same time. Hence, these moods will drive sentiment and the market will first wait and watch to see if the Fed acts on its own or prefers to wait for the November outcome.

The Fed has indicated that it is agnostic to political outcomes which is a pragmatic stance to be taken. This should ensure that markets do not get into a speculative mode until the first rate cut is announced before the Elections.

In this setting the rupee will largely be driven by internal factors. This will mean the balance of payments will play a role here. The trade deficit will widen for sure this year as commodity prices increase and imports become dearer. Exports are rising and need to sustain the growth rate to keep the trade balance under control. The recent turmoil in Bangladesh can help to push up exports of competing commodities at the margin. Faster GDP and industrial growth in India relative to the world will tilt the scale in favour of imports which can widen the deficit. There is comfort on the export of services side and may be expected to be buoyant this year with the world economy recovering. This should keep the current account deficit at a higher level, though not bothersome at 1-1.5% of GDP.

The critical factors this year will be the capital account where there is an advantage for the rupee. The FPIs have been pouring in dollars since November 2023 after the announcement of the inclusion of Indian bonds in global debt indices. This is good news is that as Bloomberg too will be including Indian bonds in its indices starting January 2025, the inflows should increase. The stock markets however, will always be unpredictable. But they have been behaving in a contrarian manner across several markets including USA and Japan. FDI should be maintained at the level of \$ 70-75 bn. Hence it may be expected that there would be an accretion of \$ 30-40 bn in forex reserves. All this points to a stable rupee.

However, two factors will play out regularly. The first is the volatility during these months are all markets are driven also by sentiment. The US Elections and its course will have a bearing on how the dollar goes and hence the rupee. This is something over which no one has any control. The

interim period will be volatile as the Trump factor, Fed action, disturbances in West Asia etc. have potential to drive FPI flows in and out of any market. In a way it can be said that the degree of volatility will increase though currencies will mean revert ultimately.

The second is the intervention by RBI at different points of time. In the past it has been felt that the central bank has been buying up dollars to ensure that the rupee does not strengthen. The argument given is exports though the central bank has maintained that it only looks at orderly markets and has no number in mind which is targeted.

At the periphery the movement of funds which will include FPI and FDI will play a secondary role. There is already quantitative tightening in place in the USA. Further there are policies being pursued by the developed countries to attract more investment as they try and break free from the low growth syndrome that has plagued them since the pandemic. Therefore such affirmative action can be an incentive for private players. This has the potential to cause 'noise' in the next few months.

At the theoretical level, the REER seems to be evenly balanced. In FY24 there was marginal appreciation along with nominal depreciation. While this is an ex post factor which explains currency movements, it does say nonetheless that the valuation has been fair.

In this situation, it does look like that the rupee will be stable in the range of Rs 83-84/\$ for the coming months based on the fundamentals remaining robust. Intermittently it could slide below the Rs 84 mark towards Rs 84.25 level depending on the noise emanating from global disturbances. This can be the psychological level for the market where RBI intervention will be conjectured. The external factor can hence create volatility and even some depreciation. This is what one should be prepared for.

Climate shocks, K-shaped inflation, and rate cuts



By Pranjul Bhandari
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While the K-shaped growth recovery debate has been raging for a while, many have missed the similar dynamics playing out in inflation.

In fact, the same shocks that are driving up the variance in growth, like the pandemic and climate change, and hurting some groups more than others, are also likely driving the variance in prices.

This is best shown with an example, like the recent heat waves, which engulfed large parts of the country for a few months this year. It can be argued that the resulting crop damage and livestock mortality led to K-shaped inflation. And this is visible, across all the different slices of the price data.

One, even as core inflation (which is the cost of all goods and services that households buy, except food and fuel) is falling, food inflation is on the rise.

Let's dig into core inflation more. Some new drivers seem to be keeping core inflation low. During the last bout of core disinflation in 2012, the main driver was the weakness in growth. This time the dominant driver seems to be imported disinflation from China.

Furthermore, previously, past inflation was a driver of future inflation. If inflation was high, it would remain high for a long time. Now, the belief that the RBI's efforts will bring inflation down to the 4% target has played a role in driving down core prices. In other words, inflation targeting seems to have had some of the desired results.

Food inflation, however, remains a big worry. It has, in our view, been stoked by the changing nature of weather events. In the past, El Niño came with low rainfall. But now, it is not just about rains, but also high temperatures. This has not just increased the price of vegetables, wheat, and pulses, but is also hurting the production of eggs, meat and milk.

Two, food inflation is elevated, but not as widespread as in previous shocks. Where imports of food, like oilseeds, were possible, prices did not go up much. Our diffusion index which picks up the proportion of items where food inflation is elevated, has been lower than past trends.

On the margin this is good news. Rapid inflation across many more food items would have been harder to solve.

Three, urban inflation is falling, but rural inflation remains high and sticky. Much of this is driven by the wide difference between food and fuel prices.

In fact, food inflation dynamics seem mysterious. One would think rural food inflation should be lower than urban food inflation given rural India grows the food.

There are two hypotheses as to why rural food prices remain much higher. One, with incomes hurt, farmers are making more of an effort to sell food to urban procurers where returns are higher, leaving less supply for rural areas. Two, a higher proportion of food was imported this time around, with port-to-fork infrastructure likely to be more efficient in urban India.

Diverging fuel inflation dynamics are more straightforward. The government cut the price of petrol, diesel and LPG. With all three consumed more in urban India, urban energy inflation fell more quickly than rural inflation.

Four, goods inflation is rising, while services inflation is falling, looking like a perfect K. It is worth noting that India is amongst the few large economies where services inflation did not take off post-pandemic.

Again, it all seems to be interlinked. Supply shocks like the heatwave that kept incomes weak likely led to a situation where incomes across certain groups were just about enough to afford the 'necessary' goods. Demand for services, which tend to rise mostly when incomes do, remained weak, keeping a lid on prices.

Five, input prices are rising faster than output prices. Rising food, oil and industrial metal prices have stoked input price inflation this year. But corporates facing weak demand from some groups, such as rural Indians, are not raising prices. Instead, they are taking a hit on their margins.

All of these recent K-shaped inflation dynamics have, in one way or the other, been triggered by climate events. But other supply side shocks, like the pandemic and global commodity price shocks, can have similar K-shaped growth and inflation consequences.

Such supply-side shocks that impact incomes and inflation variously for different groups are becoming more frequent. And this will likely complicate policy making.

For instance, should the RBI, ruminating its next move, worry about the 5ppt wedge between food and core inflation, or should it take solace that headline inflation is the closest to target in several months?

There are no simple answers. Eventually the RBI may have to focus on the expected direction of change in the short run. June was brutal, with rains 11% below normal levels. But July rains are forecast to be above average as El Niño abates and the contrasting weather phenomenon, La Niña, associated with stronger rains and lower temperatures, picks up. If this progresses well, reservoirs fill back up, and sowing rises, eventually food inflation will soften.

The RBI may find a little bit of room to ease later in the year, even if medium-term pressures from “recurring and overlapping” climate-related events, as the RBI governor called them recently, remain.

Meanwhile the government, too, may need to be more sensitive about the impact of policy changes across different groups already reeling from supply-side shocks. Reforms may need careful explaining and planning.

Welcome to a world of unexpected shocks with K-shaped consequences.

Dollar's Dominance - Here to stay



By V. Thiagrajan
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Nobel laureate Robert Mundell once said : “Great powers have Great currencies” – It can very well be restated as : Great Currencies make a Great Power., going by the contemporary Dynamics.

US Dollar's dominance has continued to prevail over the last eighty year and it retains its supremacy in the International financial system by being the most reliable currency anchor. The US Dollar-based order has been supported not only because of its inherent strengths but also by the instability elsewhere. The Dollar and Dollar payment system have been overwhelmingly dominant over the years and this position of strength gives an unique advantage for US . Hence It is obvious that If the global currency system were to become multipolar, U.S. monetary perks would recede in proportionate measure , as would its global economic influence .

In the last eighty years, there have been frequent predictions about the vanishing importance of the US in the international financial system and how its hegemony in the international political economy had peaked. Robert Triffin in 1960 warned off of an “imminent threat to the once-mighty US Dollar” (his argument came to be known as “the Triffin Dilemma”). Economic historian Charles Kindleberger declared in 1976 that “the Dollar is finished as international money”. Then French president Nicolas Sarkozy chaired the G20 in 2010 he took the opportunity to find fault with the model that left part of the world dependent on US monetary policy.

All these prophesies have proved incorrect.,primarily because of the fact that the demise of Bretton-Woods had resulted in a structural shift or transformation of US hegemony from forms of direct power articulated through intergovernmental channels to forms of indirect or structural power exerted through private markets. The US Dollar has evolved as the inevitable link on account of the intensity of globalisation and increased financialisation of the system.

Of late, there have been calls for exploring other alternatives and opinions about an imminent end of International Financial Supremacy of the Dollar and the likely onset of De -Dollarisation wave. The current conversations on de-dollarization is predominantly from the countries reacting against the US and the US Dollar, rather than any intention of moving specifically toward an alternative anchor.

These calls have been made on account of various extraneous reasons but the following factors stand out in mostly in common :

- Concerns about America's ginormous debt mountain and how it could spell trouble ahead for the US, especially in the context of rising interest rates

- Emergence of a more decentralized era in global finance as consumers flock to cryptocurrencies and Central banks adopting Digital currencies.
- Unease at the US government's overt “weaponization” of the Dollar, as U.S. continues to leverage its financial power to punish adversaries.

We shall critically examine these three factors and find out whether they will make any perceptible impact on the Centrality of US Dollar in the global financial system .

1. Whether the growing Public debt would Challenge USD Dominance ?

The debate on the US debt seems to be a choice between hyperbolic claims of imminent collapse and a Panglossian view that no matter the amount, the debt is not a concern.

Years of elevated budget deficits, exacerbated by massive federal spending during the pandemic, have taken the debt to the historically high levels. The debt just blew past \$35 trillion for the first time ever- A minor relief is that around 21.8 % of the public debt, or \$6.87 trillion, is owned by another arm of the federal government itself. In hundred-Dollar bills, \$35 trillion would weigh over 385,000 tons. That's more than the weight of Empire State Building in Manhattan.

Debt's unsustainable trajectory is as alarming as spending is projected to continue outpacing revenues. The debt could be potentially reaching \$50 trillion within the next 10 years, according to a projection from the Congressional Budget Office (CBO) . It projects the average interest rate on outstanding federal debt to remain at around 3.5% for the next 10 years, which is below current Treasury yields closer to 4% and the Federal Reserve's policy rate, currently 5.25%-5.5%. In hypothetical scenarios with average interest rates of 4%, 5%, and 6% over the next 10 years, debt-to-GDP could spike to 126%, 136% and 147%, respectively, by 2034.

As economist James Buchanan put it, spending that is funded by debt is “in effect chopping up the apple trees for firewood, thereby reducing the yield of the orchard forever.” Robust economic growth can make debt more sustainable, but the debt is growing way faster than the economy — the national debt balance rose 86% over the last decade, while GDP grew by 63%. Since 1980, the US has had a permanent savings deficit, meaning that in absolute terms it is now by far the world's largest debtor country.

But because the Dollar is the core of the global financial system, the US has the fortunate side-effect that almost all this debt is priced in US Dollars. More over, U.S. government debt is perhaps the most widely held class of security in the world. A key safeguard for the US is the of both reserve currency status and the world's deepest capital markets. Pre-eminent role of the U.S. Dollar in the global economy has been supported by the size and strength of the U.S. economy, its stability and openness to trade and capital flows, and strong property rights and the rule of law. As a result, the depth and liquidity of U.S. financial markets is unmatched, and there is a large supply of extremely safe Dollar-denominated assets.

No doubt the world continues to run on the U.S. Dollar. The Fed estimates that foreign investors held nearly \$1 trillion in cash at the end of the first quarter of 2024, roughly half of all U.S. notes in circulation. Central banks around the world hold about 59 percent of their foreign currency reserves in Dollars. Much of these reserves are held as Dollar-denominated debt — that is, U.S. Treasuries —

rather than currency. About a third of all U.S. debt was held abroad as of 2023, and a little over 60 percent of debt issued by non-U.S. companies in a foreign currency was denominated in US Dollars. Federal Reserve estimates that between 1999 and 2019, the Dollar accounted for fully 96% of international trade transactions in the Americas, 74% in Asia and 79% around the rest of the globe. Globally, banks used Dollars for approximately 60% of their non-domestic deposits and loans. Adding to this, in the foreign exchange market today, the U.S. Dollar is on one side of almost 90% of all transactions.

Having such a dominant global currency provides ample demand for the debt instruments, which benefits U.S. companies and consumers through liquidity and stability of their currency. The widespread adoption of the Dollar as a global currency has long been thought of as a source of "exorbitant privilege" for the United States, a term coined in the 1960s by France's then Finance Minister Valéry Giscard d'Estaing. Having a large share of trade invoiced in Dollars protects U.S. exporters and importers from exchange rate risk. And insatiable global demand for U.S. Treasuries is of enormous help as well. The only clear example of a national crisis brought on by high debt owed in the country's own currency is France in 1926. Otherwise, Every debt crisis involved a country which borrowed in a foreign currency, which left it vulnerable to a liquidity crunch.

According to the theory proposed by Leeper and Cochrane, monetary policy can only steer inflation as long as fiscal policy keeps the ratio of current debt and expected future surpluses constant. In other words, as long as the debt is viewed as sustainable, the Fed can use monetary policy to guide inflation toward its 2 percent target. But if fiscal policy spends beyond what markets view as sustainable in the long run, prices and interest rates may adjust in ways that the Fed cannot fully control.

By assigning the Fed independent responsibility for maintaining price stability through monetary policy, the government has in effect committed to conducting fiscal policy in a way that markets view as sustainable. This is similar to the commitment under the gold standard, where the government pledged to offset any increase in debt with an increase in gold reserves in the future. Neither commitment is fully binding, since governments can set aside both pledges.

Stronger nominal GDP growth that outpaces long-term interest rates would allow the government to more quickly meet debt obligations. At present the long-run forecasts for US nominal GDP growth and the 10-year Treasury yield are equal at 4.5%. However, there is a greater upside risks to interest rates than growth due to higher inflation volatility, reduced demand for Treasury bonds, and a smaller Fed balance sheet.

The most feasible path of fiscal consolidation is gradual primary deficit reduction through higher revenues and lower outlays. However, this is a challenge given the electoral cycle and political polarisation. The best way to bring down a high debt to GDP ratio is to increase the denominator by boosting production. This is a long-term approach achieved through productivity gains.

Hence It is pragmatic to expect the budget deficit as well as the Public debt to stay at elevated levels and probably grow, for the foreseeable future. The process will inevitably end on a day, when the inflationary impact of budget deficits inflict pain. Put simply, when the U.S. government spends more than it taxes, it adds to near-term demand, which is likely to be inflationary. Regardless of what sparks the shift toward fiscal balance, the resolution is likely to be painful, but manageable. It will almost certainly come from a combination of cutting government spending and benefits, increasing taxes, and

allowing higher inflation..

The rising debt and deficits are not unique only to US. Across the global economy, Governments owe an unprecedented \$91 trillion, an amount almost equal to the size of the global economy . Hence the current level of debt will not lead to a default or result in US Dollar losing its dominant role in the global economy . , but will likely impose eventual economic costs in the form of lower growth, reduced government benefits, higher taxes, and higher inflation

2. Will the Digital Disruption and widespread Adoption impact the Dominance of US Dollar?

Innovator's dilemma implies technological innovation that outpaces payment and regulatory innovation and leads to a situation where trust in technology replaces trust in sovereign nations. Recent advancements in Central Bank Digital Currencies (CBDC) and cryptocurrencies with their blockchain technology are an example. CBDCs could redefine the landscape of global finance, especially in the areas of cross-border payments. The adoption of CBDCs could streamline these, reducing the current reliance on traditional systems like SWIFT, and, as a result, the dominance of US Dollar. The decision whether or not to launch a U.S. CBDC and build the infrastructure it requires bears all the hallmarks of difficult choices facing incumbents responding to disruptive technologies. Despite their promise, countries, businesses, and consumers have not yet adopted digital currencies at scale. None of the top seven reserve currencies that represent more than 95% of global reserve currencies have yet launched a digital version.

From a specialized online concept to a globally recognized asset., decentralized nature and limited supply of Crypto currencies have catapulted it from a niche interest to a significant player on the global stage. Beyond lack of oversight, there are some fatal flaws in their monetary economics that prevent them from being adopted and widely accepted as a medium of exchange and as a store of value at a large scale. Tokenization - in this case, anonymous transactions - seems to be cryptos' main appeal, but that is not needed for large international reserve transactions. Meanwhile, the supposed benefit of substituting a central issuing authority with a fixed algorithmic rule governing its supply actually introduces wild volatility in its value. Supply can't keep up with wild swings in demand and investors' sentiment. In addition, the major central banks are starting to leverage blockchain technology to develop their own digital versions of official currencies, without the shortcoming of private cryptos. It is simply not possible for on-going digital adoption impacting US Dollar's dominance.

3. Weaponisation of Dollar through Sanctions: Will it hurt USD

There is a thought process which suggests over stretched reliance on economic sanctions to coerce other countries is gradually losing its effectiveness and slowly degrading one of Washington's most influential tools in international affairs. There is a debate on whether the overuse of sanctions 'endangers the Dollar's reign' has resurfaced. There is no easy answer, as the basic premise of whether sanctions are being overused is subjective and depends as much on politics as economics.

However It's certainly not an imminent threat to the dominance of the Dollar as Sanctions apply beyond the borders of USA , leading most firms to abandon sanctioned entities rather than risk being sanctioned themselves.

Sanctions risk is not the only geopolitical factor shaping Dollar use. We might probably expect a return to the Cold War logic in which economic relations more frequently align with security relations.

With the US at the bullseye of the largest security network in the world, the Dollar stands to benefit from this shift. As was the case during the Cold War, US security provision may induce allied Dollar support.

Despite a flood of sanctions on Russia in 2022, it is hard to see much of a dent in Dollar dominance. Many countries derive benefits from US sanctions against its adversaries because these countries share the core principles behind US sanctions. Countries supporting sanctions on Russia have strong geopolitical incentives to continue holding and using Dollars for international reserve and payment purposes. Supporting the Dollar reinforces the constraining impact of the sanctions and helps ensure their future effectiveness.

Conclusion :

The first and most likely probability of Dollar losing its dominance is what is called as the “rising tide” scenario, where, over the long run, other nations continue to deepen their capital markets, improve their institutions, and procure currency adoption. Because of the long timeframe involved in this scenario, the world would likely adjust to the change gradually, leading to minimal transition costs. It is unlikely that any Alternative International Currency Anchor can emerge in the immediate future, as creating a widely used international currency is bound to take decades. It took four to five decades from when the US surpassed Britain as a global economic power in the late nineteenth century to when it became the dominant financial power and the Dollar the dominant international currency. European efforts to create its within-Europe international currency began in 1972 with the small “snake-in-the-tunnel” agreement to limit fluctuations between currencies; and culminated in 1999, 27 years later, with a common currency. Beijing may be thinking of a similar “slow but steady” internationalisation of the RMB, crossing the river one stone at a time.

The second potential scenario is “unforced error” - it would involve mismanagement of the economic or political environment in the U.S. This could involve a fiscal crisis or an unprecedented loss of trust in the political system. It is the most negative potential shock, particularly as a transition could come quickly and a financial market penalty would be costly. Given the potential consequences, the probability of this scenario to be low.

Finally, it is pertinent to note that US Dollar embodies a symbiosis between currency, economy, and democracy... or put in academic terms, by Martijn and Panitch : a “mutually constitutive relationship between the state and financial markets”. Stability and the perception of stability are a self-reinforcing cycle, which Norloff has termed the “third face of power” Here, the Dollar's dominance transcends from the empirical to the ideational.

It is beyond any doubt that US Dollar lives in a monetary panopticon, with unrestricted transparency and accessibility. Hence the Dollar remains dominant by a wide margin and will likely retain its dominance for the foreseeable future.

Views are personal and the same does not represent that of SYFEX Treasury Foundation

Food inflation, C-D ratio and policy cycle



By Kanika Pasricha
Chief Economic Advisor
Union Bank of India

With the US Fed widely expected to join the global central bank bandwagon in terms of shift in policy cycle, back home there has been a start of debate on timing of rate cut(s) by the RBI led Monetary Policy Committee (MPC). In this regard, it's crucial to take a holistic perspective with various macro aspects apart from inflation warranting central bank's attention.

In the August monetary policy, which was slightly hawkish vis-a-vis market expectations (though broadly in line with ours), the key words in the RBI Governor's statement were "food inflation", "financial stability" among others. In contrast to the perception growing in some circles and with the Economic Survey this year also hinting at the same, the MPC believes that monetary policy should stay focused on food inflation given its impact on inflation expectations of the general public. While core inflation has slipped to 3% handle since December 2023, the RBI in its recent research has been stressing that "[Food Prices are 'True' Core of India's inflation.](#)" Interestingly, in a recent paper, RBI Deputy Governor Patra reasserts "persistence in food inflation has increased due to repeated climatic shocks of rising intensity."

On balance, the RBI remains worried about elevated food CPI spilling over into inflation expectations of general public and eventually into non-food components. We would like to link this (perception) of elevated (food) inflation with the financial stability mentioned by the RBI Governor (he spent almost 10min on the subject in August). In our view, this is the key driver of the "hunt for yield" seen in households, which are investing their hard-earned savings into risk assets. The household savings data (officially released till FY23) shows that share of physical savings (real estate and gold) spiked to c.70% (highest since taper tantrum) apart from rise in share of equity in financial savings to 6-7% from 1% during 2010-14. With all three risky assets – real estate, gold and equity – giving above average returns in the last 2-3 years, households have shifted their attention to these assets and away from traditional savings instruments like bank deposits. This has been a cause for concern for the RBI on two fronts:

- (i) a significant part of household investment into risky assets has been leveraged especially in real estate with a rising concern that in the other two i.e. gold and equity, there may be use of credit instruments to allocate large fund flow and generate high returns. This has led the RBI to undertake prudential steps to curb credit excesses in unsecured retail, NBFCs ex HFCs and now top-up loans;
- (ii) structural slowdown in low-cost CASA (current account, savings account) deposits thereby forcing banks to initiate a fight for deposits via "dhamaka" or blockbuster schemes for retail term deposits given strong credit demand. The incremental C-D ratio above 90% consistently for last two years vis-à-vis historical standard of c.75-80% is a worry for the RBI.

We acknowledge that the households' investment into risky assets does come back in the banking system in the form of deposits. However, it is not the story of “missing” deposits but more importantly a story of “higher cost of deposit”. With CASA missing, the investments getting channelised by say a mutual fund via a certificate of deposit (i.e. CDs), banks are facing rising pressure on costs. Interestingly, spike in FD rates in the fight for deposits has attracted deposit flows from households as well in FY24 as incremental deposits jumped 40% YoY to Rs 14 lakh cr. Hence, the issue is not quantity but the price of deposit, with a structural slowdown in CASA, which led the RBI Governor to ask banks for considering “innovative products and service offerings and by leveraging fully on their vast branch network”.

Hence, contrary to the misleading notion, the story is not of “missing deposits” but of the “rising cost of deposit (CoD)”. With regard to the elevated CD ratio and persistent credit-deposit growth wedge, the RBI published an interesting analysis in its June'24 Financial Stability Report. It asserts that during high growth phases, we do witness a gap between credit and deposit growth which typically lasts for 2-4 years and the current phase started since April'22. More importantly, the analysis concludes that the C-D growth gap closes via a decline in credit growth towards the deposit growth. With the current phase underway for more than 26 months, some convergence has been seen in credit and deposit growth since the start of FY25 yet the gap may persist in this fiscal.

With the RBI focused on “withdrawal of accommodation” and regularly conducting fine tuning operations to manage banking system liquidity using fine tuning operations (like VRRRs, VRRs along with OMO sales). While the liquidity has switched to surplus since end June'24, the RBI has ensured regular absorption of the same. This plays a role in ensuring low reserve money creation, thereby keeping a lid on deposit growth via low money supply growth and is an attempt to keep C-D ratios in check. In conclusion, we believe that the RBI may have a bias to retain the current liquidity and policy stance till the concerns with respect to financial stability are also addressed while staying focused on CPI inflation.

While we are not calling for start of rate cutting cycle in FY25, we do acknowledge two risks to our view: i/ possibility of a US recession vis-à-vis expectations of a soft landing currently which may drive the US Fed towards deep rate cuts in quick succession and / or ii/ sharp drop in domestic food prices if the monsoon turns out normal with good distribution (unlike frequent occurrences of climate shocks/ unseasonal rains/ floods). The latter has been a key pain point for the RBI led MPC given the significant spillover impact on inflation expectations and the non-food sub segments within CPI. Hence, the evolving global and domestic macros warrants close attention in a year with geopolitics likely to play a crucial role in driving commodity prices and overall inflation.

On balance, in a volatile world, the RBI is likely to stay focused on the domestic food inflation vulnerable to frequent shocks before considering a shift in monetary policy cycle. Financial stability is also likely to be a metric included in the monetary policy reaction function of flexible inflation targeting MPC with relatively stronger growth providing policy space to delay start of rate cuts.

Role of AI and Machine Learning in Reshaping the Foreign Exchange Market



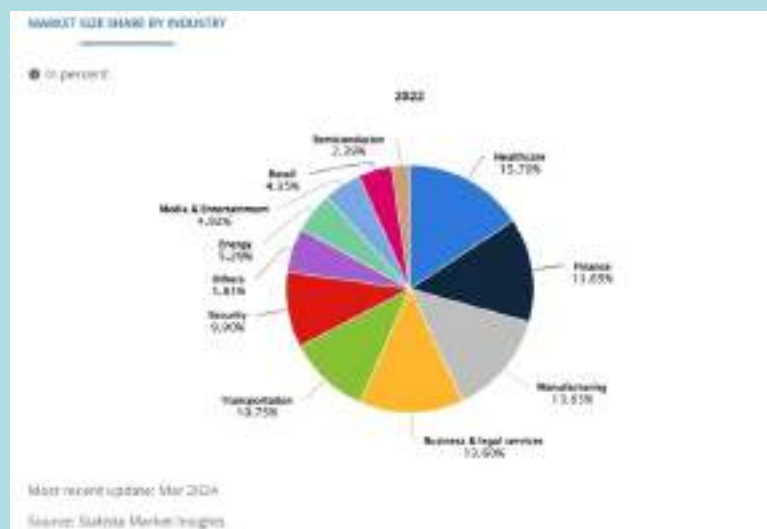
*By Kunal Sodhani
Vice President,
Global Trading Center,
Shinhan Bank*

The foreign exchange market is the largest and most liquid financial market in the world with an average daily trading volume exceeding \$7 trillion. The triennial BIS Survey highlighted the fact that FX turnover volumes are "30 times greater than daily global GDP" – which gives market participants huge leverage in shaping how the world operates!!!

For decades, Forex trading has relied on traditional methods and strategies. Traders have analysed charts, economic indicators, and geopolitical events to make informed trading decisions. While these methods have proven effective, they are often time-consuming and prone to human biases. Moreover, the Forex market's dynamic nature demands swift decision-making, which can be challenging for traders utilizing traditional methods alone. Recognizing these challenges, technology has gradually made its way into Forex trading, providing traders with tools and platforms to automate certain tasks and enhance decision-making processes. Historically, traders relied heavily on manual analysis and heuristic approaches to predict market movements. While these methods are still in use, they are often limited by human error and the sheer volume of data. In recent years, the integration of artificial intelligence (AI) has transformed the way traders operate, enabling them to make more informed decisions, analyse data with greater accuracy, and ultimately enhance their trading strategies.

Market Size Share by Industry:

The usage of AI in Finance is 13.65% which is significant and also within Finance, trading holds an important parameter.



There are two important concepts to understand before we dwell into the details:

- **Artificial intelligence** is a broader field that encompasses the development of machines or software to mimic human-like cognitive functions, including but not limited to machine learning.
- **Machine learning (ML)** which is a subset of artificial intelligence (AI) focuses on algorithms and statistical models, allowing computers to perform tasks without explicit programming based on data patterns.

AI and Machine learning isn't new. But what's changed in recent years is accessibility. With increased machine learning packages, traders and firms now have better access to advanced tools and algorithms. So let's understand the Evolution of AI in Forex Trading:

- **1980** : Algorithmic trading began gaining traction. Initially, it was only using simple mathematical models and rule-based strategies to analyse forex markets and automate trade execution.
- **1990** : Concept of Machine Learning (ML) came into existence. ML models could learn and adapt to evolving market conditions in real-time, making them more accurate.
- **2000** : The concepts of neural networks (Machine Learning algorithms that can mimic how the human brain functions) and High-Frequency Trading (HFT) started gaining traction.
- **2010** : Deep machine learning came into picture. This technology uses multi-layered neural networks, such as long short-term memory networks (LSTMs) and recurrent neural networks (RNNs), to analyse thousands or millions of datasets simultaneously. Besides the ability to process large amounts of data, they could also make more accurate predictions and identify complex patterns - ensuring that traders miss no opportunities.

There are several advantages which such a transformation holds:

- One of the leading causes of impulsive and irrational trading decisions is human emotions. Whether its revenge trading, the fear of missing out (FOMO), anxiety, or greed, emotions can be detrimental in forex trading. Unlike humans, an AI system has no emotional biases, enabling it to make more rational decisions with higher success potential.
- AI programs can collect and analyse millions of economic indicators, forex news site updates, historical price charts, and social media sentiments in a matter of seconds (Speed of Execution increases).
- Automated robot trading platforms help keep financial markets continuously liquid. These systems guarantee that there is always a market for assets by continuously providing buy and sell orders, hence boosting total liquidity.

But in life and markets, there is nothing known as perfect, thus according to me there are certain pitfalls as well which needs to be considered:

- Traders who rely solely on automated systems may become complacent, overlooking the importance of human intuition and discretion in the trading process.

- Mechanical failures and technical issues can also pose significant risks for traders using automated systems. Connectivity issues, platform crashes, and other technical problems can lead to missed trading opportunities or unintended losses.
- Models can become too tailored to historical data, reducing their effectiveness in new and ever changing market conditions. (Over reliance on historical data)
- Developing or subscribing to advanced AI trading systems can be costly.
- AI trading carries inherent risks that need to be closely watched and managed in order to prevent abuses like market manipulation or unanticipated consequences.
- The unexpected and severe market disruptions known as “flash crashes” have sparked worries about the possible perils of automated forex trading.

As technology continues to advance, traders who embrace AI and adapt their strategies accordingly are likely to have an edge over others. The key lies in striking a balance between the capabilities of AI and the experience and intuition of the human trader. This creates a harmonious partnership that maximizes the potential for success in the dynamic world of currency trading.

Understanding the RBI's FX intervention policy



By Dhiraj Nim
Economist / FX Strategist
ANZ Research

The rupee has been a puzzling theme in India's post-pandemic economic narrative. Its exceptionally low volatility belies standard FX market behaviour, also leading the IMF to reclassify India's de facto exchange rate regime as a 'stabilised arrangement' from 'floating' for the period between December 2022 and October 2023.

The Reserve Bank of India (RBI) has refuted the IMF's reclassification and maintains that its FX intervention is confined to ensuring an orderly adjustment of the exchange rate. But the rupee's refusal to strengthen even in a weak US dollar environment indicates that there is more to the RBI's FX policy than meets the eye.

There are two instances of notable shifts in the RBI's FX policy in the last decade or so.

The first one took place at the end of 2013. FX reserves as a share of net international liabilities (net international investment position excluding reserve assets) and GDP rapidly declined between 2008 and 2013, contributing to the excessive FX market volatility during the taper tantrum episode of May 2013.

By the end of the year, the RBI launched measures to stabilize the FX reserve cover, which was then maintained around 50% of net external liabilities till 2019. These measures included a special window through which oil companies could meet their US dollar needs, besides the special swap for foreign-currency non-resident deposits, allowing banks to raise US dollar deposits and swap them with the RBI at a subsidized rate. FX reserves rose by USD166bn during this five-year period (2014-19), improving the perception of India's external stability.

The second shift took place in 2020. Since then, the RBI's FX intervention has become much more aggressive, following a two-sided approach. Both FX purchases and sales have scaled higher, but FX purchases have exceeded FX sales in 33 out of the past 53 months, averaging 18.5% higher. Consequently, FX reserves have increased by USD217bn since the beginning of 2020. The RBI has maintained its FX reserves in the range of 60% to 65% of net international investment position (NIIP) excluding reserve assets since 2020, much higher than in the previous five years.

Figure 1. FX reserves as share of NIIP and GDP

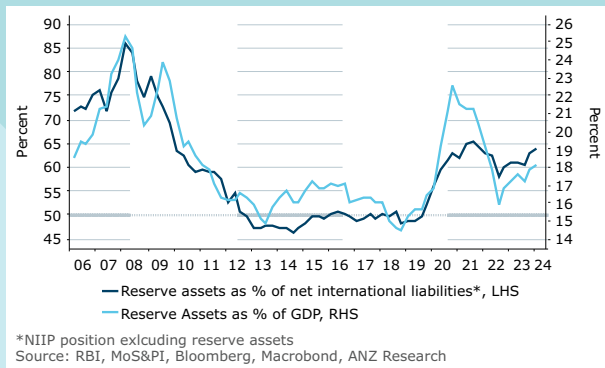
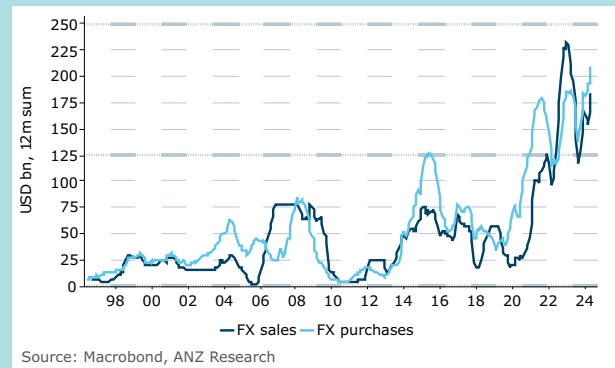


Figure 2. Two-sided intervention



The RBI hasn't offered any formal explanation behind its aggressive two-sided intervention with a bias for FX purchases, but the central bank has repeatedly highlighted the virtue of a stable exchange rate and ample FX reserves. In the words of the RBI Governor Shaktikanta Das:

“Under uncertain global economic environment, EMEs typically remain at the receiving end. In order to mitigate global spillovers, they have no recourse but to build their own forex reserve buffers, even though at the cost of being included in currency manipulators list or monitoring list of the US Treasury.”

Below we discuss three defensible aspects of the RBI's FX intervention policy.

- 1) **Monetary policy freedom** : An exceptionally stable rupee has allowed the RBI to retain the domestic orientation of its monetary policy decisions. In a volatile global environment marked by unexpected geopolitical, commodity price and monetary policy shocks, sharp exchange rate moves can easily overwhelm domestic policy rate decisions, if left unchecked. This can lead to a sub-optimal policy rate decision and increase the uncertainty around the growth-inflation outlook.

For instance, the RBI sold nearly USD 38bn in the period between June and October 2022 after the escalation of the Russia-Ukraine conflict to stabilize the rupee without jeopardizing its FX reserve adequacy. This strategy enabled the RBI to adjust the policy repo rate based solely on domestic growth-inflation outlook, avoiding excessive tightening. Despite 250 basis points in cumulative rate hikes between May 2022 and August 2023, the RBI views its policy stance, as viewed from the lens of the real policy rate, as non-restrictive for growth.

Figure 3. A stable rupee

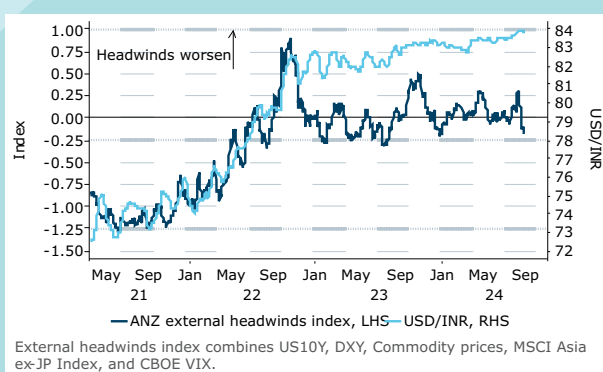
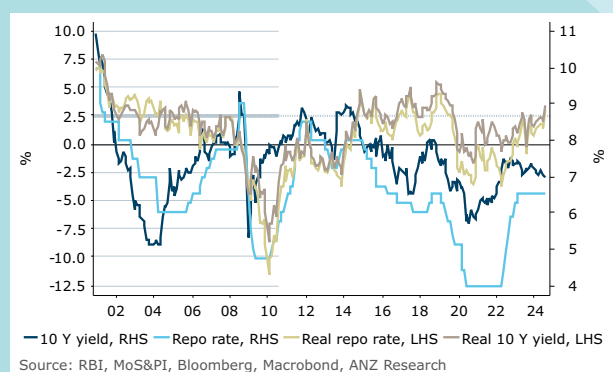


Figure 4. Real rates not too high



- 2) **Balance of payments composition:** India's balance of payments composition warrants a stronger FX reserve accumulation than before. From a medium-term viewpoint, the financial account surpluses have exceeded the current account deficit by a substantial margin. If left unchecked, the large financial inflows can easily overwhelm the rupee and erode its competitiveness. This could mean adverse outcomes for domestic industries, especially those producing and exporting low-tech goods. When this had happened in the early 2000s during the global growth boom, the rupee was allowed to appreciate against the US dollar materially. This culminated into a protracted period of rupee overvaluation. Thus, the RBI is wary of history repeating itself.

Additionally, since mid-2021, portfolio flows have replaced foreign direct investment (FDI) as the largest component of India's financial account surplus. Unlike sticky FDI inflows that augment the long-term growth potential, portfolio flows are volatile and sensitive to global shocks, including geopolitical events and policy changes in developed countries.

Figure 5. Financial flows and current account

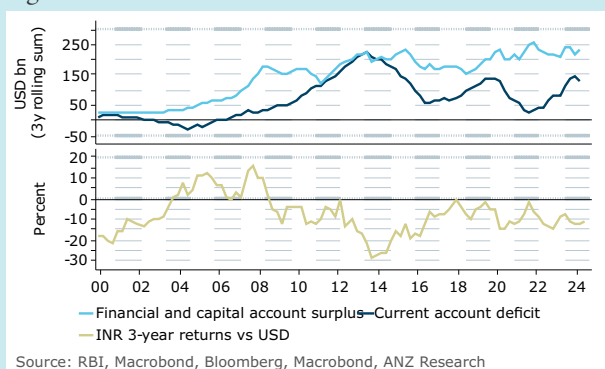
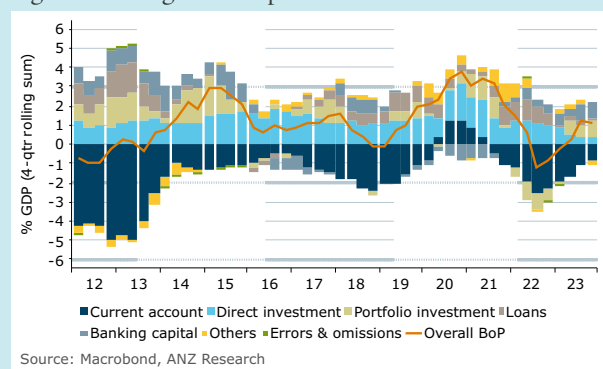


Figure 6. Rising share of portfolio flows



- 3) **Focus on nominal effective exchange rate (NEER):** The RBI's FX policy shift is evident in a stable-to-weaker NEER in the recent years, which makes sense. Unique price shocks aside, from a medium-term perspective, India's inflation differential with its key trading partners has broadly been falling thanks to flexible inflation targeting. In other words, high domestic inflation is no longer as biting a constraint on the rupee's competitiveness as it was a decade ago. Therefore, it makes sense to guide the real effective exchange rate by targeting NEER so that the rupee does not lose competitiveness against key trading partners like China.

The RBI's 40-currency trade-weighted NEER index, introduced in January 2021, highlights this bilateral trade-weight issue. China's 12% weight in the NEER/REER is the highest for any country, surpassing the euro area's weight in the previous 36-currency index. In the export-weighted index, however, China's weight is only 6%. This reflects the skewed trade dynamics between India and China.

Figure 7. India's falling NEER

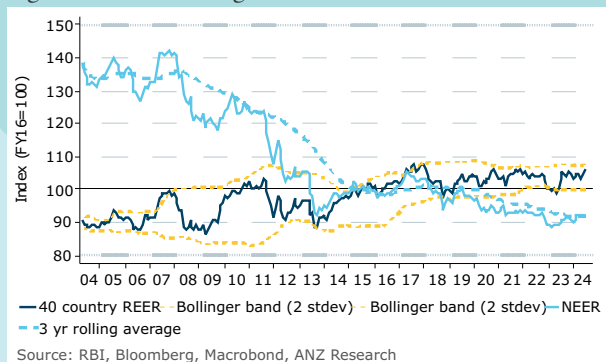
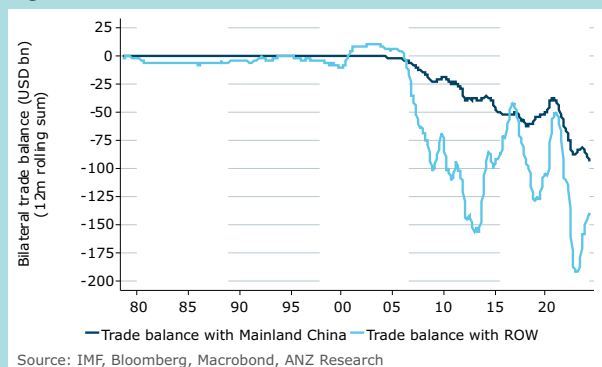


Figure 8. India's trade balance



In sum, the shifts in the RBI's FX policy have been brewing for over a decade. But it has become much more aggressive in the last five years. The motivation behind these shifts is defensible but not without shortcomings. A wide goods trade deficit continues to warrant a weaker rupee, but strong financial inflows, if not absorbed, can overwhelm the currency dynamic and lead to overvaluation. A stable rupee has helped secure domestic monetary policy freedom when the global backdrop has been quite volatile, but it has prompted debate whether the aggressive FX intervention is really warranted. Nevertheless, there is little reason to expect that the RBI's FX policy will change anytime soon.

India Merchandise Trade – Lessons from China



By Jijo Sam
Research Analyst
SBI Global Markets

Goods exports play an important role in the economic development of a nation and can be a major contributor to employment generation. Since World War II, we have seen many countries grow their per capita incomes rapidly through an exports led strategy. South Korea, China, Vietnam and to some extent, Malaysia are some examples from within Asia where goods exports have played an important role in economic development.

How have India's exports undergone a shift?

India's merchandise exports stood at USD 437 billion in FY2023-24. An analysis of the export data for the last several years shows that our merchandise exports have moved away from traditional low value products, such as textiles and gems and jewellery, and have focused more on higher value-added items like engineering goods, organic and inorganic chemicals, and electronic goods.

As per World Bank data, India's share in global goods exports was 1.87% in 2023 (up from 0.50% in 1982, 0.69% in 2000 and 1.54% in 2010). The biggest growth was seen in the decade 2000-01 to 2009-10, when Indian exports grew at 16.8% annually. Since then, growth has lagged but we have seen greater diversification of Indian exports. In the last few years, with an objective of increasing Indian exports, several policy steps have been taken like the PLI schemes, lower corporate taxes, negotiation of FTAs, etc.

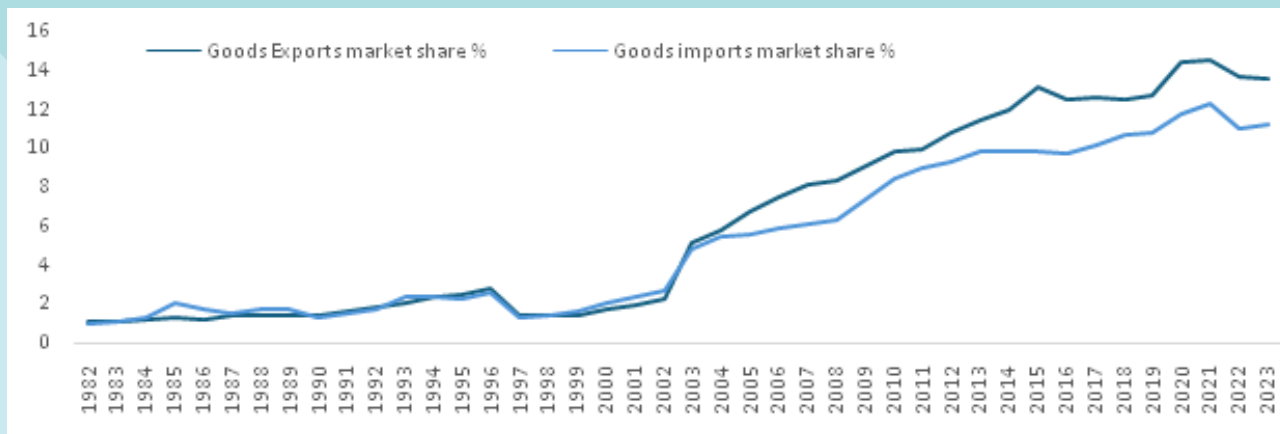
India's share in global merchandise trade (%)



Source: World Bank, SBI Global Markets Research

The next wave of exports – lessons from China

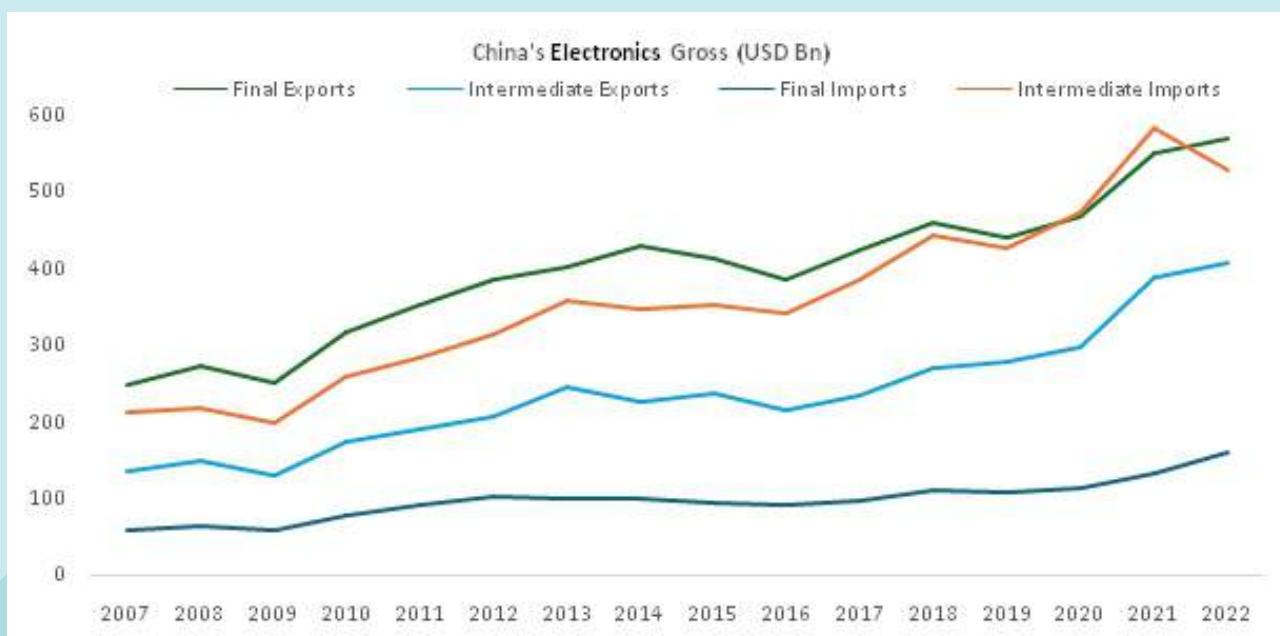
Sharp uptick in China's goods trade post 2001. China joined the WTO in December 2001.



Source: World Bank, SBI Global Markets Research

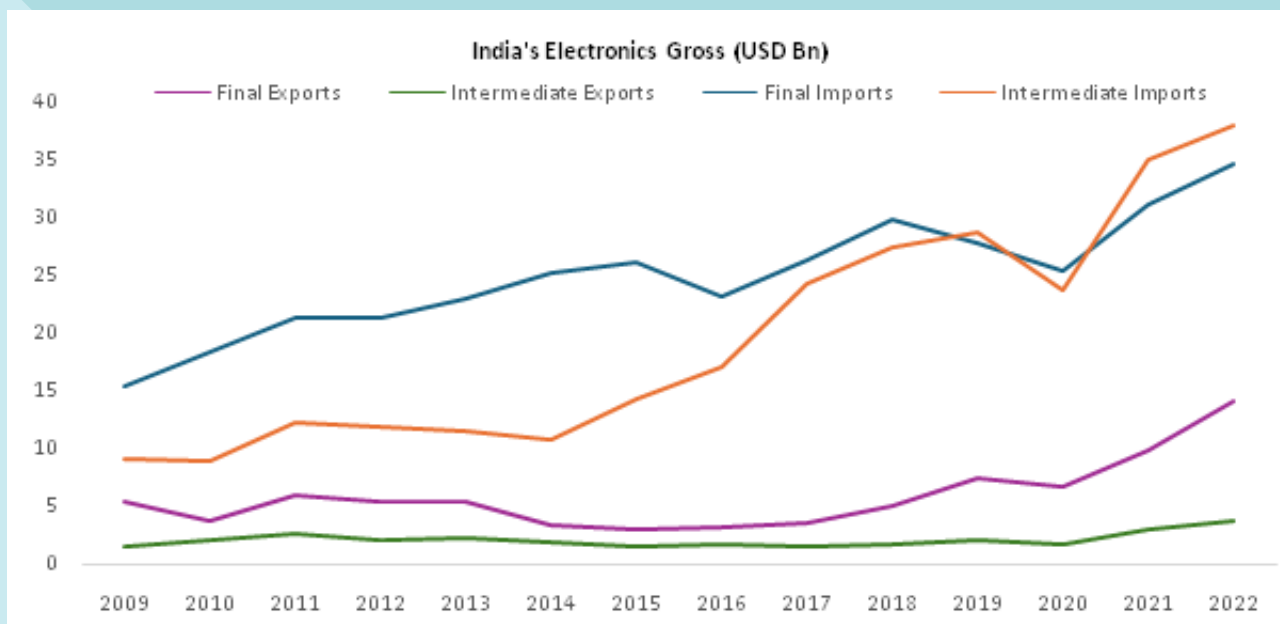
To seek lessons from China's merchandise export dominance for the next wave of India's exports growth, we do a comparative analysis of the change in trade composition for China and India for select product categories: Electronics, Vehicles and Apparel & Footwear.

China & India Electronics Trade over the years



Source: World Bank

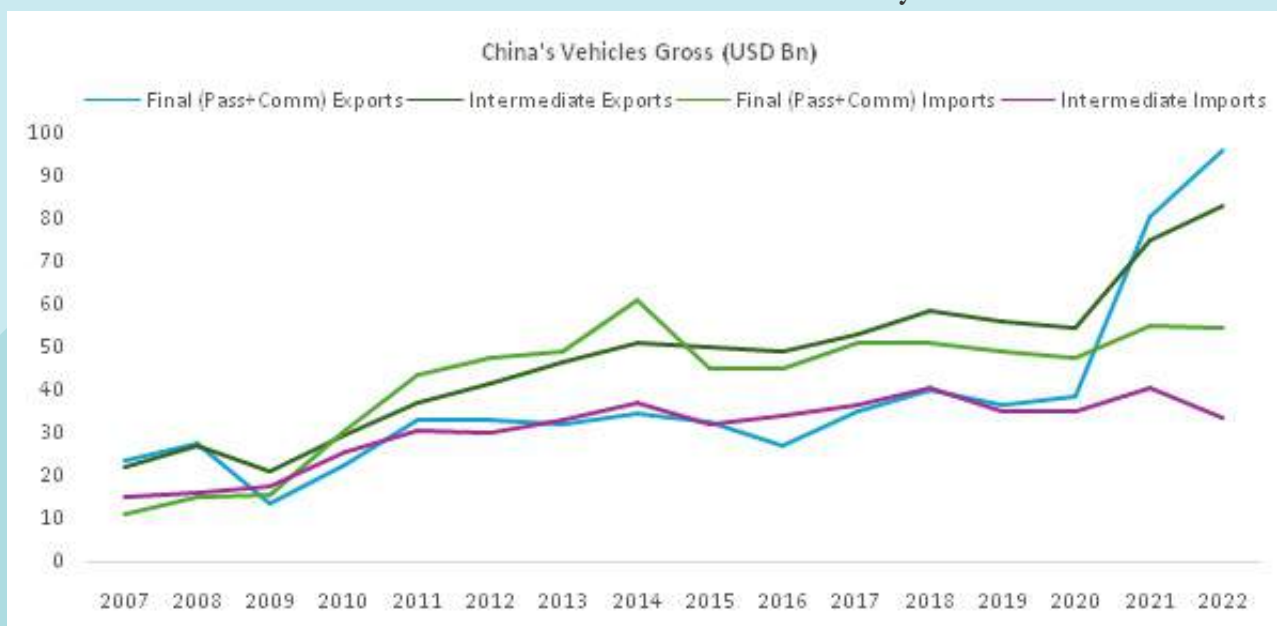
China's final and intermediate electronics exports have shown a continuous upward momentum, whereas in imports final goods have grown at a much slower pace than intermediate goods, clearly indicating focus on gradually increasing value addition. The high intermediate imports also indicate large domestic consumption of final electronics goods.



Source: World Bank

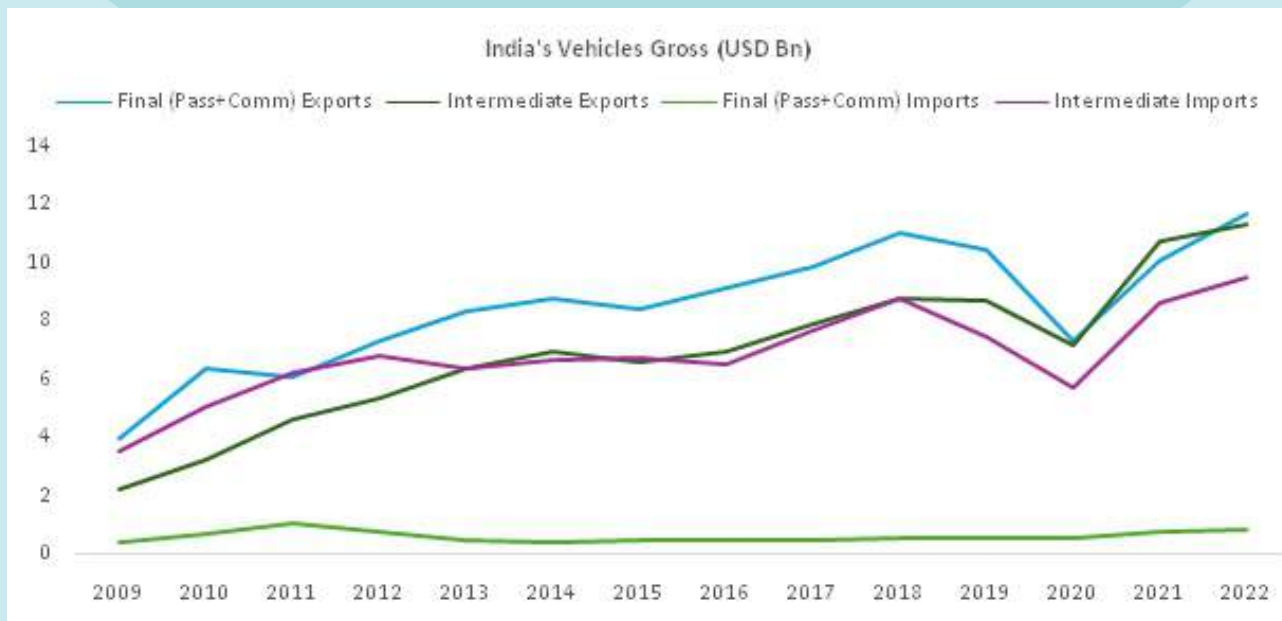
In India's case, final electronics exports have seen a turnaround post 2016 and have expanded sharply in the recent years. Intermediate exports have started to pick up some pace in recent years, indicating increasing value chain participation, but the much larger size of imports, both finished products and intermediate shows that we still have a long way to go in even import substitution. The positive part is that intermediate imports have overtaken final imports, indicating increasing domestic value addition.

China & India Vehicles Trade over the years



Source: World Bank

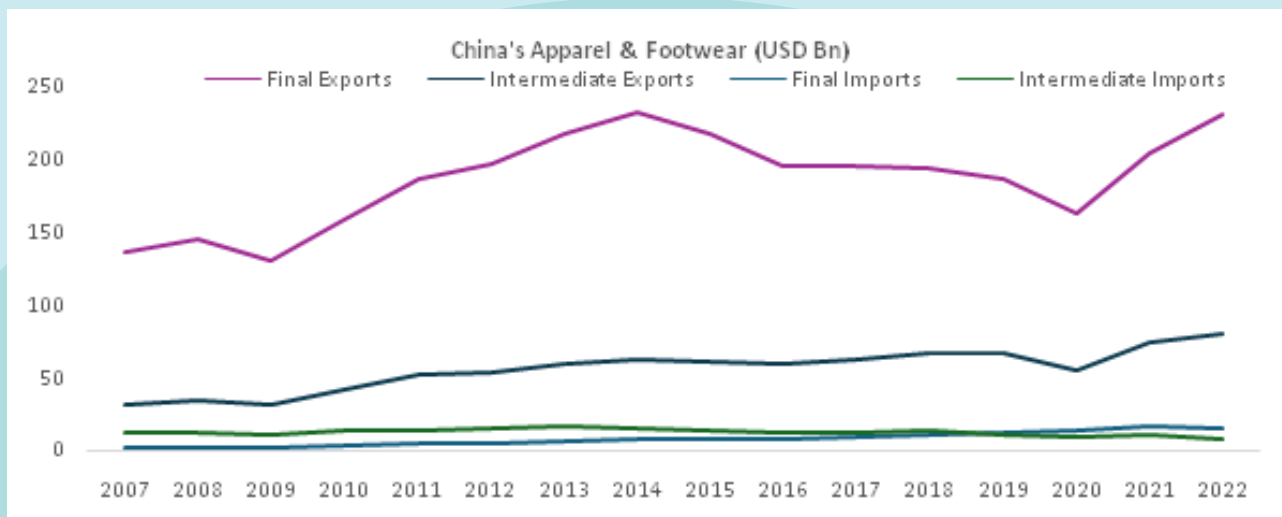
In vehicles, China's focus on EVs has started to bear fruit in recent years, as it has become a major exporter of both finished vehicles and their parts, helped by Tesla setting up its Gigafactory in Shanghai in 2019. The dip in vehicle imports leads the jump in exports as EV sales first acted towards import substitution, before becoming a major export. Also, there is no jump in intermediate goods, showing that China dominated the whole value chain much ahead of the exports jump.



Source: World Bank

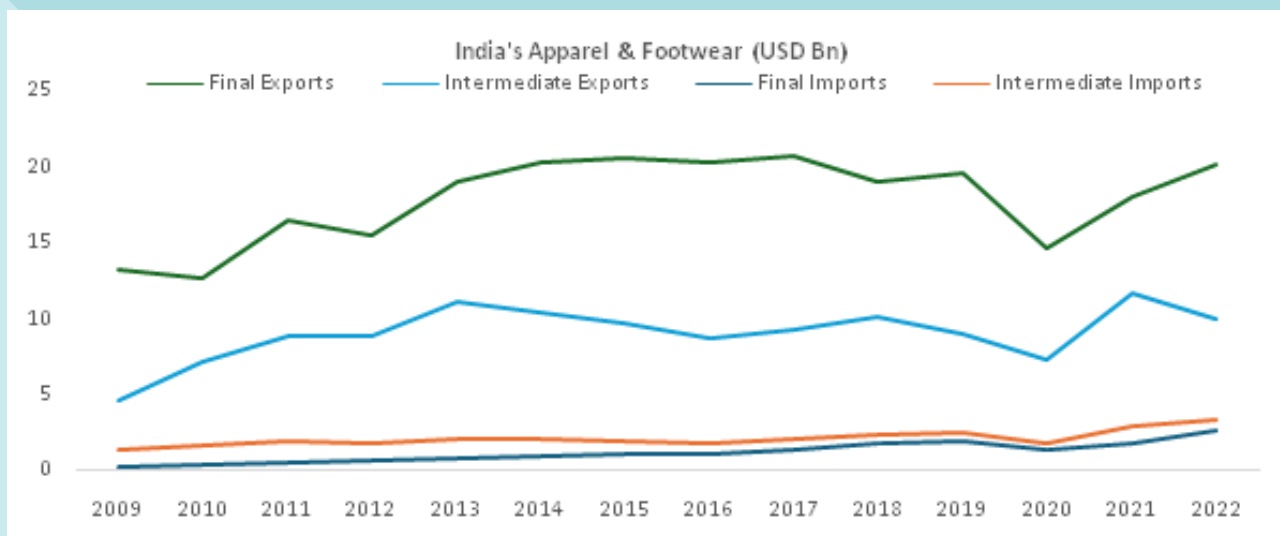
India has seen steady growth in exports of both finished vehicles and their parts, barring the Covid blip. On the other hand, regulations have ensured that most of the vehicles imported are in the knocked down form. However, Indian automakers need to upgrade quickly to compete in the fast growing EV space.

China & India Apparel & Footwear Trade over the years



Source: World Bank

In the relatively lower value addition, but highly labour intensive apparel and footwear segments, the gap between China's exports and imports is notable, as it had already become a major exporter by 2007. On the import side, once again intermediate goods imports have come down in recent years, indicating the continuing substitution of the value chain.



Source: World Bank

For India, the growth in exports of apparels and footwear has tapered off, while imports have continued to grow, though at a much smaller pace. Improving competitiveness of Indian products to gain greater market share, as well as increasing focus on manufacturing the intermediate goods domestically will be a major policy challenge with significant ramifications for employment growth.

The next wave of export growth: Increasing Value Addition

In the above charts we have focussed on trends, while ignoring the huge difference in scale between China and India. This difference shows the significant potential for Indian manufacturing to grow and capture market share. For example, California is the 5th largest economy in the world, with a population of 3.9 crores but it has 57 companies on the Fortune 500 list (source: US State Governor website). This growth is driven by a pocket of concentrated and specialized hubs. The recent success of China's EV industry is that Chinese companies have collaborated broadly with other automakers and technology companies to strengthen their capabilities in terms of EV manufacturing. More importantly, Chinese players enjoy proximity to many critical raw material supplies, which means that Chinese battery companies hold a pivotal position in the supply chain.

"It's very easy to be different but very difficult to be better." – Jonathan Ive, former Chief Design Officer, Apple. The success of many countries shows that they were early innovators and collaborated to overcome operational hurdles. The government policy also supported the adoption.

The India Government has liberalized the policy and introduced various schemes like incentives, and subsidize etc. This has resulted in the expansion of many sectors, for instance smart phone export increased to \$15.6 billion in FY24 from \$11.1 billion in FY23, up by \$4.5 billion.

However, India must focus more on leveraging, expanding capabilities, skills and should accelerate the adoption of new technologies.

- Policies should be reviewed and maintained to overcome operational hurdles and to capture emerging comparative advantages in pharma, chemicals, manufactured goods, and R&D in mechanical – engineering etc.
- India also needs to facilitate exports in the capital-intensive sectors, which are increasingly dominating the global trade basket.
- India should look for much needed labour reforms, skill development and reskilling of the labour force.
- India should continually focus on increasing the value and quality of high- and medium manufactured exports.
- India can also look promotion of organic food products and niche products covered under the geographical tag which can particularly boost agricultural products.
- New technologies and innovation will shape the next wave of growth. Therefore, the policy should support innovation and the adoption of newer tech.
- Diversify services underpin the modern manufacturing supply chain.

“Look at the sky. We are not alone. The whole universe is friendly to us and conspires only to give the best to those who dream and work” - APJ Abdul Kalam

About Prague-Czech Republic

Prague : A Timeless European Jewel

Nestled in the heart of Central Europe, Prague the capital of the Czech Republic is one of Europe's most enchanting destinations. Known as "The City of a Hundred Spires" based on a count by 19th century mathematician Bernard Bolzano. Today's count is estimated by the Prague Information Service at 500. Nicknames for Prague have also included: The Golden City, The Mother of Cities and the Heart of Europe. It boasts a rich history, stunning array of architecture from Gothic to Baroque to Art Nouveau and a vibrant cultural scene. From its medieval roots to its modern-day allure, Prague offers visitors a journey through time, where every corner of the city tells a story.

Prague's history is a testament to its resilience and enduring significance in European history. It is a city where the past is intricately woven into the fabric of the present, offering visitors a chance to experience a rich cultural heritage in a setting of remarkable beauty.

The official currency of Prague, and the entire Czech Republic, is the Czech koruna (CZK), often abbreviated as KC (1 CZK = 3.65 INR). The official language is Czech, a West Slavic language closely related to Slovak and Polish. English and German are widely spoken, especially in larger cities and tourist areas. (Useful Czech Phrases Hello: Ahoj / Thank you: Dekuji/ Yes: Ano /No: Ne/ Please: Prosím/ Excuse me / Sorry: Omlouvám se/ How much does this cost? Kolik to stojí? Prague has an efficient public transportation system, including metro, trams and buses making travel in city easy.

Prague experiences a temperate continental climate, characterized by four distinct seasons- Spring, Summer, Autumn, Winter. The month of September marks Autumn season with average temperatures: 11°C to 20°C (52°F to 68°F). Autumn is a picturesque time to visit Prague, as the city is adorned with autumn foliage.

Prague is a city rich with history, culture, and beautiful sights. Here are some popular things to do and visit in Prague:

Prague Castle : Dominating the city's skyline, Prague Castle is the largest ancient castle in the world. Founded in the 9th century, it has been the seat of Czech kings, emperors, and presidents. Explore its vast complex, including St. Vitus Cathedral, the Old Royal Palace, and Golden Lane. Don't miss the stunning stained-glass windows in St. Vitus Cathedral and the Changing of the Guard ceremony.

Stroll Across Charles Bridge : Walk along one of Prague's most iconic landmarks- Charles Bridge. It connects the Old Town with the Lesser Town (Malá Strana) across the Vltava River. The bridge, adorned with 30 statues of saints, is a masterpiece of Gothic architecture and a lively gathering place for tourists, street performers, and local artists

Lennon Wall : Located in Malá Strana, the Lennon Wall is a colourful and constantly evolving mural dedicated to John Lennon and peace. Since the 1980s, it has been covered in graffiti, lyrics, and messages of love and hope, making it a symbol of freedom and non-violent resistance.

Old Town Square : The heart of Prague's historic center, Old Town Square is surrounded by stunning Gothic and Baroque buildings. The Astronomical Clock, mounted on the Old Town

Hall, is a must-see attraction. Every hour, the clock puts on a show with its "Walk of the Apostles," drawing crowds to witness this unique medieval timepiece in action.

Wenceslas Square : Named after Saint Wenceslas, the patron saint of Bohemia, this square is a bustling hub of commerce and culture. It has been the site of many significant historical events, including the Velvet Revolution in 1989. Today, the square is lined with shops, cafes, and the National Museum at its top end.

Letna Park : Enjoy a relaxing break in Letna Park, which offers stunning panoramic views of Prague's cityscape, including the Vltava River and its many bridges.

Cruise on the Vltava River : See Prague from a different perspective by taking a cruise on the Vltava River. Enjoy views of landmarks like Charles Bridge, Prague Castle, and the National Theatre from the water.

National Museum : Located at the top of Wenceslas Square, the National Museum is one of Prague's most important cultural institutions. Explore its extensive collections of natural history, archaeology and art.

Gastronomy and Nightlife:

Czech Cuisine: Indulge in traditional Czech dishes such as svíčková (marinated beef with creamy vegetable sauce), goulash, and trdelník (a sweet, cinnamon-sugar-coated pastry), Smažený sýr (Fried Cheese), Cesneca (Garlic Soup)

Farmers Market : Visit one of Prague's farmers' markets to enjoy fresh produce, baked goods, and street food. Náplavka Farmers' Market and Jirákov Farmers' Market are particularly popular.

Experience Czech Beer Culture : Prague is famous for its beer, and there's no better place to enjoy it than in a traditional Czech beer hall. Try local brews like Pilsner Urquell or Budvar, and pair them with hearty Czech dishes like goulash or svíčková.

BeerGeek Bar : Known for its extensive selection of craft beers, BeerGeek Bar offers over 30 beers on tap, including many from Czech microbreweries. **Zlý Casy:** A bit off the beaten path, this bar is a haven for beer enthusiasts with a rotating selection of craft beers from both Czech and international breweries.

Pubs : No visit to Prague is complete without experiencing the city's traditional Czech pubs, known as pivnice. These establishments are perfect for tasting the famous Czech beer, which is considered some of the best in the world. U Fleku and Lokál are one of the oldest and most famous pubs in Prague.

Cafes : Prague's café culture is legendary. The city's historic cafés, such as Café Slavia and Café Louvre, were once frequented by famous writers and intellectuals. These establishments offer the perfect setting to enjoy a coffee or a slice of traditional Czech cake.

Nightlife : Prague's nightlife is vibrant and diverse, with options ranging from traditional beer halls to trendy cocktail bars and nightclubs. The area around Wenceslas Square and the Dlouhá Street in Old Town are popular spots for a night out. If you're looking to dance the night away, Prague's nightclubs offer a variety of music genres and atmospheres, from mainstream to underground. Karlovy Lázně: One of the largest and most famous nightclubs in Central Europe, Karlovy Lázně is spread over five floors, each with its own music style. Located near Charles Bridge, it's a popular spot for both locals and tourists. Roxy: A legendary club in Prague's nightlife scene, Roxy is known for its eclectic lineup of DJs and live music, covering everything from electronic to alternative genres.

Shopping:

Souvenirs : Pick up Czech glassware, crystal, and garnet jewellery as souvenirs. Markets and shops in the Old Town offer a variety of items. Shopping Areas: Wenceslas Square and Na Příkope Street are popular for shopping, featuring both international and local brands.

Nearby Countries to visit:

Prague's central location in Europe makes it an excellent base for exploring nearby countries. Whether you're interested in history, nature, or vibrant cities, there are plenty of fantastic destinations within easy reach of Prague. Here are some nearby countries and the best places to visit : Austria, Germany, Poland, Slovakia, Switzerland, Hungary, Italy, Slovenia, Croatia. All approximately 330 km (205 miles) to about 700 km (435 miles) from Prague, around 4 to 8 hours by train or car.

Our Hotel Stay

Hilton Prague Old Town

(V Celnici 2079/7, Prague, 110 00, Czech Republic)

Hilton Prague Old Town is a luxurious hotel located in the heart of Prague's historic Old Town. Hilton Prague Old Town is centrally located, making it an ideal base for exploring Prague's main attractions. Exploring both sides of the Vltava River and nestled among the orange rooftops, hotels Art Deco-style is moments from The Powder Tower and Old Town gates. Within walking distance, reach Republic Square, Prague's main railway station, and the statue-lined Charles Bridge. Cross the Vltava River to reach Prague Castle, a half-hour walk away. The hotel offers a range of rooms and suites with modern amenities. Rooms are well-furnished, featuring comfortable beds, spacious work areas, and high-speed internet. Many rooms offer views of the city or the hotel's internal courtyard. Hotels indoor pool, sauna, and spa complete your stay.

Zinc Lounge & Bar located in the lobby seats up to 70 guests in a contemporary setting. The interior has been designed by David Collins, reflecting the architecture of Prague with inspiration from the city's landmarks as well as the Czech Modernism, Cubism and Art Deco. Hilton Prague Old Town's stylish Zinc Restaurant with Art Deco touches seats up to 110 guests and is open daily for breakfast. Guests can choose from a wide range of the breakfast offering including healthy options, gluten free and vegan items as well as a live omelette and egg station. Guests often praise the Hilton Prague Old Town for its excellent location, comfortable accommodations, and friendly staff.

Prague is a city that effortlessly blends history with modern charm, offering a wide array of activities and experiences for every type of traveller. Whether you're interested in exploring its rich cultural heritage, enjoying its vibrant nightlife, or simply taking in its stunning architecture, Prague is sure to captivate you. Whether you're strolling across the Charles Bridge at sunrise, exploring the narrow streets of the Old Town, or enjoying a concert in a historic venue, Prague captivates with its beauty and charm. It's a destination that leaves a lasting impression on everyone who visits.

“Bavte se a užívejte si “Have Fun and Enjoy...”

By Farhad Doctor
IDBI Bank
Member - FAI

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CCP Settlements	FOREX	MONEY MARKET	G SECS	DERIVATIVES
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LEI	LEGAL ENTITY IDENTIFIERS			
Reporting Platforms	CORE		F-TRAC	
Trade Repository	RATE DERIVATIVES	CREDIT DERIVATIVES	FOREX DERIVATIVES	
Value Added Services	PORTFOLIO COMPRESSION		PUBLICATIONS	TRAINING
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Clearing Corporation of India



The **Clearing Corporation of India (CCIL)** has been providing Central Counterparty (CCP) services in the Indian G-Sec, Money (Repo and TREP), Forex and OTC Derivative markets. CCIL being pioneer in the Indian Financial markets, after setting up in 2001 at the initiative of RBI as the CCP for OTC markets in India, has been launching new products and services to improve the market infrastructure. CCIL is proud to wear the tag of **Qualified Central Counterparty (QCCP)**, a recognition bestowed on it by RBI along with being designated as a critical Financial Market Infrastructure (FMI) by the central bank.

CCIL is one of the few CCPs globally guaranteeing trades (outright and repos) in G-Sec, Forex and derivatives markets. CCIL as a Central Counterparty has helped in reducing counterparty risk, and multilateral netting has facilitated reduction of liquidity requirements for the entire system.

In the **forex market**, CCIL since 2002 has played a critical role in mitigating risks, facilitating process and settlement efficiencies and providing solutions from dealing to settlement. The introduction of Payment v/s Payment (PvP) mode of settlement has helped to eliminate principal risk from interbank forex transactions in India. The unique settlement services offered by CCIL for cross currency deals through CLS Bank, by way of its third party arrangement with a Settlement Member has helped in risk mitigation, liquidity savings and process efficiencies. CLS settlement services have been extended to overseas branches of Indian banks effective October 2022. The CCP clearing services offered by CCIL for the forex forward transactions has helped to reduce settlement risk, facilitate transparent and reliable valuation of outstanding positions and help in savings on capital and reduction in exposures.

Further, CCIL provides CCP services in the government securities market, money market consisting of Market Repo and Tri-party Repo transactions and to Rupee denominated derivatives benchmarked to MIBOR.

Complementing its CCP services, CCIL through its fully owned subsidiary, Clearcorp Dealing Systems Limited (Clearcorp) manages electronic anonymous platforms in these markets, which has helped to facilitate better price discovery and transparency for participants in the Forex, G-Sec markets, Money and Derivative markets.

In the forex market, **Clearcorp hosts, FX-Clear trading platform** which caters to the interbank forex market. The platform, post its merger with the FX-Swap Platform in March 2024, offers trading in the Spot, Swap and Forward segments. In addition to trading in the inter-bank Spot market, the platform also provides trading on the FBIL reference rate over a spread on the benchmark rate.

In addition to this, Clearcorp manages the CROMS trading system, the anonymous order matching systems for Market Repos, TREPS, the electronic trading platform in the Triparty Repo

market, and the ASTROID platform for trading in the IRS market. It has also developed the NDS-OM anonymous trading platform for the Government Securities market and the NDS-CALL platform for transactions in the Call market on behalf of the Reserve Bank of India.

In the OTC derivatives market, CCIL through its products, platforms and services has aimed to mitigate the inherent risks of the market and widen the market to new products and market participants. The Trade Repository services for this market commenced in 2007, and CCIL has gradually expanded its gamut of activity to facilitate CCP services for MIBOR linked OIS swaps, provide valuation services for non-CCP settled transactions and periodic portfolio compression services to reduce outstanding positions of market participants. The Portfolio Compression services offered for Forex Forward and MIBOR linked OIS transactions have resulted in significant reduction in notional outstandings in these market segments. The Trade Repository services have brought greater transparency to these markets and the completeness of the information being made available now has helped the Regulator and market participants to gauge the level and depth of these markets at any point of time. CCIL has one more trade repository reporting platform (F-TRAC), that captures the secondary and primary market activity in the Commercial Paper and Certificate of Deposit market.

Moving beyond its role as a pioneer in the wholesale segment of the financial markets, CCIL has now moved to support the regulatory objective to expand the presence of smaller and retail participants in the Government Securities, Forex and OTC derivatives market. The Clearing Member structure launched in various settlement segments in 2020 has helped to extend the facility of clearing services to both retail and non-retail customers. Giving a push to the RBI initiative to expand the retail investor's footprint in the G-Sec market, CCIL manages the RBI Retail Direct Scheme launched in November 2021 on behalf of RBI. CCIL is also the aggregator/receiving office for the primary issuance of G-Secs. In the forex market, the FX-Retail platform is available to customers of banks to conduct their forex transactions. While providing transparent trading mechanism for customers, it also provides a market based solution to help in eliminating the price risk faced by banks in warehousing customer orders until they are aggregated and covered in the Inter-bank market.

CCIL's another wholly owned subsidiary **LEIL (Legal Entity Identifier India Limited)** is the Local Operating Unit (LOU) in India for issuing globally compatible Legal Entity Identifiers (LEIs) in India. LEIL has been accredited by the Global Legal Entity Identifier Foundation (GLEIF) as an LOU and is among the first LOUs to be accredited.

CCIL has been recognized as a Tier 1 non-UK Central Counter Party (CCP) under Article 25 of UK EMIR to offer services to UK clearing members and trading venues. The recognition is effective from 15th December, 2023

CCIL has also recently incorporated a new subsidiary named as “**CCIL IFSC Limited**” with its registered office in GIFT IFSC located in Gandhinagar, Gujarat. The company shall provide US Dollar settlement services for the Foreign Currency Settlement System (FCSS).

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About 360T Group

360T is far more than an award-winning multi-bank, multi-asset trading platform for OTC financial instruments. As the Deutsche Börse Group's global FX unit, 360T is able to provide firms on both the buy- and sell-side with all the technology, services and tools necessary to support their individual business requirements.

360T offers a full range of streamlined services across the entire trading workflow of FX, Short-Term Money Market products and commodities, enabling firms to transact in a more transparent and efficient manner, whilst also reducing operational and regulatory risk.

With over 2,400 buy-side customers and more than 200 liquidity providers across 75 different countries and offices in Europe, America, Asia Pacific, India and the Middle East., today 360T is uniquely positioned to help connect the global FX industry via our proprietary suite of web-based technology solutions.

Featured Products

Streaming NDFs

Market Maker Cockpit

Execution Management
System (EMS)

Streaming NDFs

360T's streaming NDFs, designed to complement our disclosed RFS offering, are a response to market demand for an alternative hedging venue.

✔ Multiple Credit Solutions

We support three credit models for SNDFs trading – bilateral, prime broker (PB) intermediated and the Standard Chartered Bank (SCB) credit hub/CCP – offering the maximum possible flexibility for accessing this service.

🔗 Additional Liquidity Sources

By supporting PB intermediated trading we have opened the door to non-traditional liquidity providers to trade our streaming NDFs, expanding the LP pool and ensuring that consumers ultimately benefit from narrower bid-offer spreads.

👤 A Distinctive Ecosystem

Our large, diverse client base of over 2,400 organisations across the globe and more than 200 LPs, enables 360T to connect local onshore liquidity in developing markets with a worldwide community of offshore users to create a truly global liquidity pool for streaming NDFs.

📈 Enhanced Execution Performance

The ability to execute in an undisclosed manner with a broad selection of counterparties via a CCP enables firms to deploy a wider range of trading strategies, whilst simultaneously reducing their market impact.

Market Maker Cockpit

With the Market Maker Cockpit (MMC), 360T operates an advanced, dynamic pricing engine solution. It gives Liquidity Providers the flexibility and confidence to take full control of their FX pricing.

Transparency

Various blotters keep the user informed in real-time about incoming client orders, outgoing hedge orders, trades, and positions. A sophisticated pricing monitor allows you to keep an overview of the inbound/outbound spread and skew across multiple instruments and pricing channels.

Safety

Apply-to-all button provides an easy safety valve for fast trading times. "Stop all" halts all pricing functionality.

Time Savings

Launched from a single sign-on applet, the MMC requires only minimal user configuration to start. An initial setup to manage a few currency pairs can be done within a few minutes and then it is ready to use.

Better Pricing

Fully leverage your Bank basket and available liquidity to provide competitive prices to your clients and maximise your position

Execution Management System (EMS)

360T's Execution Management System (EMS) is a functionally rich, easily configurable system which offers customised workflow solutions designed to cater for a wide range of trading requirements.

Ease of Integration

Our EMS is specifically designed to be seamlessly and easily integrated into firm's existing workflows.

Increased Control

A highly customisable, rules-based trading system allows firms to take complete control over trading desk activity.

Automated Trading

Advanced automation tools enable traders to focus on the value-add areas of their business.

Greater Efficiency

Our EMS helps to drive costs down and help firms improve their bottom-line.

Reduced Operational Risk

Using our EMS significantly reduces the risk of human error during the trading process.

Meet the 360T team at the 32nd Annual Forex Assembly or for questions after event, please do not hesitate to contact us at info@360t.com · www.360T.com

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