Financial Markets - Emerging Trends and Challenges

I would like to begin by thanking CAFRAL for inviting me to this Conference of Treasury Heads – Emerging Trends and Challenges.

2. CAFRAL has been playing an important role in publishing quality research on the issues relating to the Indian financial system and in providing a platform for facilitating discussion on important policy issues.

3. Let me begin with some recent global events. The banking crisis in the US and in Europe have brought to the fore issues of financial stability. Central banks are grappling with the larger question whether there is a trade-off between monetary policy and financial stability. But, at its simplest, the crisis happened because some banks were unable to manage the most rudimentary risk all bankers are taught to manage when they are recruited from college – that is – interest rate risk. The Fed Reserve Vice Chairman of Supervision Michael Barr called it 'a textbook case of mismanagement'. All this has happened in a country where bankers and financial market participants have access to all the hedging tools. In retrospect, it is easy to say that they should have seen it coming. But then no one saw the iceberg on the Titanic until it was too late. Now how did this happen? We will know better on May 1st when the Fed's internal review will be published. But at present we know sufficiently enough to say that there are risks hidden in assets that are not marked to market. The banking book, if marked to market, can lose value significantly to threaten bank's liquidity and, ultimately, its solvency.

4. In a short period of time, uninsured deposits moved away from mid-sized regional banks to bigger banks and money market funds. But money market funds are no safe haven either. We have seen instances of money market funds breaking the buck. Breaking the buck may happen when interest rates drop to very low levels, or the fund uses leverage to create capital risk in otherwise risk-free instruments.

5. The US episode has thrown up a few other related issues.

One: Accountability: There will be greater scrutiny of the banks' risk management practices and public disclosures.

Two: The Federal Reserve supervision has also come under review, with proposals for an independent investigator-general as well as restrictions that would prohibit bank executives from serving on regional Fed boards. They may also bar Fed employees from investing in institutions under its jurisdiction.

Three: More Regulation or More Rigorous Regulatory Oversight: The debate among policy makers is whether more regulation is needed over smaller and mid-sized banks, or whether the Federal Reserve needs to adjust its stress tests to address the impact of higher interest rates more realistically.

Finally, the Deposit Insurance Debate: Expanding Federal Deposit Insurance Corporation (FDIC) deposit insurance either temporarily or permanently is the subject of ongoing discussion. Offering universal insurance and expanding the role of the federal government in the banking system is one approach. It remains to be seen whether the crisis will bring about a bipartisan approach to banking regulation. Anyway, how this debate plays out will have lasting impact on the US banking system and implications for banks outside the US as well.

6. Such events naturally make all banking supervisors the world over to introspect. In India, we have recently issued guidelines on **Governance, measurement and management of Interest Rate Risk in Banking Book.** Interest Rate Risk in Banking Book (IRRBB) refers to the current or prospective risk to banks' capital and earnings arising from adverse movements in interest rates that affect its banking book positions. This is precisely the risk that is at the centre of the US crisis. Excessive IRR on the BB can pose significant risk to banks' current capital base and/or future earnings. The guidelines require banks to measure, monitor, and disclose their exposure to IRRBB. These guidelines are in alignment with the revised framework issued by the Basel Committee on Banking Supervision (BCBS). Where do we stand now? The Financial Stability Report (FSR) of December 2022 states "IRRBB analysis using Duration Gap Analysis (DGA)[1] reveals that Private Sector Banks and Foreign Banks' Market Value of Equity (MVE) would reduce marginally by an upward movement in interest rate,

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[1] The DGA method involves bucketing of all rate-sensitive assets (RSA) and rate-sensitive liabilities (RSL) as per residual maturity/ re-pricing dates in various time bands and computing the Modified Duration Gap (MDG)

while that of Public Sector Banks would be positively impacted." I think there are two lessons we need to imbibe from this episode – the first is we need more vigilance on the part of risk managers and supervisors especially during a sharp monetary tightening phase such as the one we have seen now. The second is sound banking regulation and supervision needs to be bolstered by equally sound financial markets regulation and surveillance. Both, in my view, go hand in hand.

7. In India, we know that the Reserve Bank of India is, by legal mandate, the regulator and supervisor of the banking system. Additionally, we also have the mandate to regulate the financial market segments that matter most to banks – Section 45W of the RBI Act enjoins the RBI to determine the policy relating to interest rates or interest rate products and give directions in that behalf to entities dealing in securities, money market instruments, foreign exchange, derivatives, or other instruments of like nature as the Bank may specify. So essentially it is the money market, government securities market, forex market and derivatives related to interest rate, foreign exchange and credit, that are under the RBI's purview. These are the market segments that banks need to access to manage most of its risks.

8. The Indian financial markets have evolved to (i) enable users to manage their risks and funding requirements through various financial instruments, (ii) ensure availability of robust financial market infrastructure for users and (iii) ensure an environment of fair market conduct. Let me now discuss some of the recent regulatory and market infrastructure measures which have helped develop these financial market segments in recent years.

Product Diversity

9. Recent product regulations issued by the Reserve Bank provide the freedom to offer more sophisticated products with product innovation while providing for customer protection. Market-makers can offer derivative products of varying complexity, based on the nature of the user – whether they are retail or non-retail. Derivative products such as barrier options, swaptions, etc., are now being offered in India. Such products enable active management of risks by users who understand them. As Treasury heads, you have the freedom to offer innovative products but have a responsibility too. For the non-retail user, you must ensure the suitability of the product and ensure that

the user is aware of the risks involved in using such products. As for the retail user – where the bouquet of available products has been set out in regulations, transparency and fairness in pricing is the key responsibility of treasuries.

10. The Directions on market-makers issued in 2021 prescribe regulations on governance arrangements and suitability and appropriateness for market-makers dealing in over-the-counter (OTC) derivative products. The market-maker needs to undertake robust suitability and appropriateness assessment of a product before the same is offered to the user. Market-makers are also required to provide a product disclosure and risk disclosure statement to the user of each derivative product. While offering complex derivative products to users, the market-maker will have to undertake enhanced due-diligence. Adherence to the letter and spirit of the directions will ensure customer protection.

Market Integration

11. A key reform measure undertaken by the Reserve Bank has been the removing of the segmentation between the onshore and the offshore foreign exchange and the interest rate derivative market. Market-makers can now deal in non-deliverable derivative contracts among themselves and with non-resident clients for the purpose of hedging or otherwise. This has enabled the reduction in spread between the onshore and the offshore markets. However, more efforts are needed to bring to the onshore market diverse users in the offshore markets, enabling the development of India as a hub for offering INR based financial contracts. Our aim is to enable any user, whether resident or non-resident, to utilise Indian markets for managing INR risk. Earlier this month, we have announced that market-makers will be able to offer non-deliverable forex derivative products to resident users – a move expected to further enable development of the onshore foreign exchange market.

Retail Investor in G-sec Market

12. In the Government securities (G-sec) market, the RBI Retail Direct Scheme has been an important reform measure for providing retail investors direct access to G-sec market. This is a small beginning, but we believe it is in the right direction towards a stronger and more stable domestic investor base. Having provided the retail investor

access to this market, it is our responsibility to ensure adequate liquidity in the secondary market for the retail investor should he desires to exit the market.

FPI

13. The Reserve Bank has been taking measures for greater access for Foreign Portfolio Investors (FPIs) to the Indian debt market. Limits and the basket of eligible debt instruments available for FPIs have been progressively liberalised. Operational constraints for FPIs to access the debt market have been addressed to a great extent. FPI access to derivative markets – FX, interest rate and credit derivative markets – have been progressively liberalised with FPIs (and in some cases, non-residents in general) now able to access most domestic risk markets for hedging or expressing a view. Banks may take steps to highlight to its non-resident clients the opportunities to access the Indian debt market.

Corporate Bonds

14. Development of an active corporate bond market has attracted a lot of attention of policy makers in India. The market has witnessed wide ranging reforms in terms of trading and settlement infrastructure, market transparency and investor protection. Concomitantly, a facilitative regulatory framework to encourage raising capital through the market and measures to enhance secondary market liquidity have also been put in place. The Reserve Bank has taken measures towards the development of the corporate bond market. These include prescription of mandatory market-based borrowing by certain “specified” large borrowers. Recent pandemic time measures including the Long Term Repo Operations (LTRO) and the Targeted Long Term Repo Operations (TLTROs) also facilitated liquidity in the corporate bond market during stressful times and also enabled a number of issuers to access the corporate bond market for the first time. Notwithstanding, the corporate bond market continues to witness thin liquidity compared to other asset classes such as equity and G-sec market. While liquidity in Indian corporate bond market is in line or even better than some of the other emerging market economies, there is room to improve liquidity in the market.

15. A supportive measure for the development of a corporate debt market is the credit derivative market to hedge and price credit risk. The revised Directions issued by the

Reserve Bank in 2022 facilitate its development by expanding the participant base for credit default swaps to include all major non-bank regulated entities viz., primary dealers, NBFCs, insurance companies, pension funds, alternate investment funds and mutual funds in addition to banks and foreign investors and provide flexibility to the market to express their views. Participation from financial sector entities will help activate the market.

Financial Market Infrastructure

16. A key enabler for the continued growth of the financial markets is the availability of robust financial market infrastructure. Electronic Trading Platforms (ETPs) in various markets provide the institutions/individuals a common platform and a transparent mechanism, to obtain market prices. Unlike in most other jurisdictions, the secondary market Government Security (G-Sec) transactions are predominantly undertaken on the NDS-OM platform and are settled through a Central Counterparty (CCP), providing price transparency and mitigating counterparty risk. The regulatory framework prescribed by the Reserve Bank for the authorisation of the ETPs ensure that ETPs for various financial market instruments are governed by robust standards.

17. The FX Retail platform of CCIL provides retail participants the ability to access foreign exchange at competitive rates. The adoption of the FX retail platform needs to pick up. Banks need to freely allow their clients access to this platform.

18. On a related issue, in recent years, there has been an increase in the proliferation of several unauthorised ETPs offering forex trading facilities to residents. To begin with, cautionary advices were issued to alert the members of public against dealing on such platforms. An ‘Alert List’ of such entities has also been issued for the guidance of public. Banks have an important role to sensitise customers on the risks on these unauthorised platforms.

19. Another important financial market infrastructure is the financial benchmark, which serves the need for the market for a reference for pricing financial contracts and is used extensively for trading and valuation. The regulations prescribed by the Reserve Bank for financial benchmark administrators administering ‘significant benchmarks’ has ensured that the benchmark governance processes of the benchmark

administrators are robust. Currently, it is observed that a significant volume of derivative contracts is referenced to a few financial benchmarks. Market participants should explore the possibility of diversifying their product basket and offer contracts referencing different financial benchmarks, thereby providing the market participants with more flexibility to manage risks.

Trade Repository

20. Trade Repository (TR) is another key market infrastructure. We were among the first to set up a TR for reporting of OTC derivative trades. The CCIL-TR is now a comprehensive database of all OTC derivatives. The TR reporting structure has matured to a large extent over more than two decades of reporting. Here, there may be opportunities in the use of TR data for offering value-added services to the reporting entities. For the TR to be effective, it is contingent on each market participant to ensure timely and accurate reporting of derivative transactions to the TR. There is also a need to think how TR can be leveraged further for development of financial markets beyond meeting regulatory needs and market transparency. A potential value-added service could be facilitating a reporting entity to manage the risk related to its derivatives portfolio - TR contains transaction information covering interbank and customer trades across multiple asset classes and the data could be used to develop a system to provide banks risk metrics, such as price value of a basis point (PV01 sensitivity) for interest rate swaps, greeks for options portfolio, etc. Another potential value-added service could be use of TR for calculation of margin requirements for non-centrally cleared derivative trades.

21. RBI has mandated the implementation of the Legal Entity Identifier (LEI) system for all participants in the OTC derivatives in India. The reporting formats, for both Interbank and Client have been enhanced to include information on the counterparty LEI. The LEI data could be utilised to create group structure of all the group companies who are part of the LEI system, which in turn can be used to monitor risk exposures.

22. Technology has played an important role in enabling the market to ensure efficient execution of trades, effective settlement mechanisms and for centralised trade reporting. Market participants need to be proactive and adopt changing technologies. The use of central bank digital currency (CBDC) in Government Security transactions,

as a part of the pilot project, has provided the market an idea about how CBDCs can be used in the financial markets.

Market Conduct

23. While technology and market infrastructure help develop markets, equally important is the trust that the market participants place on the financial system. Financial Markets rest on the foundation of trust which ensures that transactions take place in a fair manner with no participant having access to privileged information. Market conduct, therefore, plays an important role in maintaining the integrity of the market and serving the need of end users. Institutions, market bodies and regulators need to play a role in creating an eco-system which encourages fair market conduct.

24. The Reserve Bank has proactively taken steps to enhance and strengthen market integrity. We have issued Directions on prevention of market abuse which clearly define market abuse practices such as market manipulation, benchmark manipulation, misuse of information, etc., and prescribe regulatory action on detection of the market abuse.

25. Complementing the Reserve Bank regulations are the code of conduct prescribed by the market bodies, standard setting bodies, etc. FIMMDA has issued for its members, the Code of Fair Practices for Debt markets. The Code aims to prevent improper conduct which leads to misleading or misinforming market participants resulting in losses (sometimes very large) or undue enrichment.

26. In respect of Forex markets, the FX Global Code, a single global code of conduct for the wholesale foreign exchange (FX) market was published in May 2017. The Code, which is voluntary in nature, sets out principles that promote a robust, fair, liquid, open and appropriately transparent market, underpinned by high ethical standards.

27. A significant event of attention in the global markets is the complete cessation of London Interbank Offered Rate (LIBOR) financial benchmark, which has been widely used in the global financial system, from July 01, 2023. Significant progress has been made in ensuring a smooth transition. In India and across the globe, the challenge of transition from USD LIBOR, which is the predominant financial benchmark, still

remains. The transition is bound to pose challenges especially for the less sophisticated non-financial customers. Banks need to sensitise clients to ensure a smooth LIBOR transition.

28. Another area of risk that is critical but perhaps does not get adequate attention is the operational risk. The nature of operational risks is such that the occurrence may be few but the severity when it occurs is potentially high. History has been replete globally with examples wherein banks have taken significant losses. With the steady liberalisation of the Indian financial markets, banks need to ensure that their internal processes and controls are robust to mitigate losses arising from operational risks.

Conclusion

29. With the growing integration of the Indian financial markets with the global financial markets, there is a need for adequate attention of the bank boards in management of market risk. Product regulations dealing with market instruments are now following a principle-based approach thereby providing freedom to banks for effective management of market risk. It is essential for the board to pay adequate attention on issues around market risk and frame appropriate policies.

30. Financial markets are a dynamic place wherein the nature of risks and the interaction between the various risk factors constantly evolve. The emergence of crypto assets and the exposure of banks to the crypto eco-system is another area of concern to regulators. This is an evolving area and every day brings in a new learning. We need to be alert to changing market dynamics.

31. The Indian markets have come a long way since the 1990s. But in an increasingly integrated world, we need to offer Indian businesses financial solutions that will make them compete with the rest of the world. At the same time, it is our responsibility to be wary of spill-over risks and strengthen our markets to make them more resilient.

Thank you.