1. Let me start by reminding ourselves of some numbers that are a key backdrop for today’s panel discussion. Total global external liabilities have grown from 30 per cent to 190 per cent of global GDP between 1980 and 2015, far outpacing the growth in global trade (from 19 per cent to 28 per cent of GDP over the same period). The main vehicle of this new globalisation has been cross-border banking flows, which constituted a third of global capital flows in the decade prior to the financial crisis. In parallel, the global trade network has become increasingly interconnected through supply chains that transcend national borders, and by the advent of new players, especially from the developing world. China now accounts for about 11 per cent of global trade and emerging market and developing countries (EMDCs) taken together contribute 37 per cent (up by about 15 percentage points since 2000).

2. During the global financial crisis, the explicit pre-crisis assignment of policy instruments to objectives became blurred. The experience demonstrated that macroeconomic policymaking is expected to do a fine balancing act to achieve multiple and, at times, conflicting objectives of monetary stability, fiscal stability and financial stability. Within these trade-offs, financial stability has assumed some seniority, entailing for national authorities the constant need to monitor, identify and minimise the build-up of systemic risks in financial systems and reduce spill overs in the most efficient and effective way. This involves a fine dovetailing of the objectives of market efficiency into consumer protection and the management – even pre-emption – of systemic risks.

3. In my remarks today, I would focus on the following issues in the role of financial regulation in averting the next crisis:

   - Globalisation and adherence to global rules/standards – synergies and challenges.
   - Financial regulation and suddenness of crisis incidence – regulatory intervention needs to be more anticipatory and data-based.
   - Backward-looking versus forward-looking risk-based supervision – need for global systemically important banks to disclose their internal rating models.
   - Too-big-to-fail and moral hazard.
• Adequacy of global financial safety nets (GFSNs) in the context of the size and speed of crises – gaps and discriminatory practices in the international financial architecture.

(i) **Globalisation and global rules/standards.**

4. Emerging market economies (EMEs) have undoubtedly benefited from globalisation, but they are also more exposed than before to vulnerabilities that come with globalisation. As we access markets abroad and spread our activities on a global scale, our financial systems are also required to embrace global norms, especially on capital, risk recognition and accounting standards; monetary policy based on some rule relating to a nominal anchor such as inflation; fiscal policy based on a budget or expenditure rule; and market-based exchange rate regimes, complemented by strong and effective financial sector regulation and supervision, corporate governance and enforcement rules, and bankruptcy and resolution architecture.

5. Markets inherently impose these exacting standards of discipline when they allow access to banks and corporates. For example, international capital tends to punish monetary and fiscal indiscipline severely. Even as some shocks tend to be impervious to fundamentals, economies with sound, prudent, transparent and accountable macro-policy frameworks have demonstrated success in containing negative externalities as well as in restoring normalcy faster. In this context, prudent policy frameworks tie down policy actions to final goals. Some of us may think that rules are a cost imposed on us in the form of sacrifice of independence and sovereignty. While all rules may not best fit us, the ones that I will highlight, specifically, monetary, fiscal and accounting, are widely accepted by reasonable people as a basic minimum.

**First,** fiscal rules are institutionalised or legally binding rules that credibly commit authorities to fiscal discipline. By restraining expenditure or overall deficits, they enhance the credibility of macroeconomic policies, by keeping public debt within sustainable levels improving thereby the credibility of the fiscal authority as a participant in financial markets.

**Second,** a transparent and predictable monetary policy framework is, almost by definition, rule-based.
Third, while regulation is imposed from outside, corporate governance is internal to firms and is more in the nature of self-regulation with safeguards that principles and rules laid down by the regulations are followed conscientiously. Nevertheless, regulation and corporate governance have to complement each other.

Fourth, with globalisation, operations of large firms have become transnational, and massive cross-border movement of capital requires adoption of uniform accounting standards, such as the International Financial Reporting Standards (IFRS). When these standards are applied rigorously and consistently, investors, regulators and other stakeholders all benefit with higher quality information to make decisions.

6. With globalisation, it is imperative for banks in EMEs to adhere to standards emanating from the global standard setting bodies. While challenges remain in adopting standards like IFRS in EMEs, we welcome the forward looking provisioning framework. Banks generally tend to delay provisioning for bad loans until cyclical downturns have already set in and it is too late, possibly magnifying the impact of the economic cycle on banks’ income and capital. In such circumstances, providing for and recognising actual and potential loan losses at an earlier stage in the credit cycle could potentially reduce procyclicality and foster financial stability.

(ii) Financial regulation and suddenness of crisis incidence: Need for regulatory intervention to be more anticipatory and data-based.

7. In the context of financial stability, acceptable regulation should have three broad characteristics: Firstly, regulation ought to be predictable. A regulation susceptible to forbearing instincts carries the concomitant chance of risk inducing behaviour by stakeholders. Second, regulation should aim to shoehorn internal governance mechanisms of the regulated entities in an incentive compatible way. Finally, it should aim to address information asymmetry between the key stakeholders since the lack of information often leads to herd behaviour, thus precipitating crises.

8. Backward looking regulation attempts to address gaps in regulation in one sector, region, and nation; but given the complexity and inter-connectedness of the financial system, activity swiftly shifts to another sector, region or nation and builds financial excesses. However, the next threat to financial stability may come from
quarters that regulators are completely unaware of. Thus, forward-looking regulations are required to tackle such unforeseen risks. With the advent of big data analytics, cloud computing and artificial intelligence, we are at a stage where data can be used to model future events with certain confidence intervals, and our regulations can potentially be structured to deal with such events. The recent thrust on two areas - cybersecurity and FinTech - is a case in point. A decade back, few bankers or policymakers talked about this threat. Today these are identified as major risks to the financial system.

9. The allergy to intrusive regulation pre-crisis has been overturned into a necessity in the post-crisis period across advanced economies (AEs) and EMEs. In the post-crisis hyper-active regulatory environment, it is possible to develop detailed dos and don’ts to potentially avert a crisis. In such a milieu, certain basic characteristics of a regulatory framework, coupled with a supervisory regime that is responsive to investors’ and other stakeholders’ concerns, has the best chance of inducing prudential behaviour among regulatees. Regulators have been slapping record fines on major banks and financial institutions for making undue profits or masking their problems by fraudulently rigging rates. A lot of mis-selling of products by banks in certain jurisdictions has also raised serious concerns among regulators, which is attracting more intrusive regulation with a significant bearing on banks’ compliance costs.

(iii) Reliance on internal rating-based risk assessment by global banks: Black-box requires reasonable disclosure and transparency.

10. The last financial crisis has prompted doubts that the internal ratings based (IRB) approach may have been used opportunistically to minimize capital requirements, thus helping banks to disguise credit bubbles by keeping their risk weighted assets (RWAs) artificially low. The evidence suggests that internal risk estimates employed for regulatory purposes systematically under-predict actual default rates. Supervisory confidence in risk weights is critical to the success of the regulatory framework. The BCBS’s work on the implementation of the Basel capital framework has gathered evidence that significant variations in capital outcomes generated by internal models (with respect to portfolios with similar risk profiles) may be unwarranted. Thus, there is a need to improve transparency and comparability across internal models to ensure that internal ratings are built and
validated on the basis of a set of common standards. A reasonable degree of transparency and disclosure will help establish the credibility of the risk assessment models used currently by many large global banks. “Sunlight is said to be the best of disinfectants”.

(iv) Too-big-to-fail (TBTF) and moral hazard.

11. There are concerns related to the implicit government guarantee for TBTF institutions. These concerns derive from the belief that the TBTF status gives large banks a competitive edge and incentives to take on additional risks. If investors believe that the largest banks are too big to fail, they will be willing to offer them funding at a discount. Together with expectations of rescues, this discount gives the TBTF banks incentives to engage in riskier activities. This, in turn, could drive smaller banks that compete with them to take on further risks, exacerbating the riskiness of the entire financial system.

12. Regulatory labelling of systemically important financial institutions/banks (SIFIs/SIBs) may convey the promise of implicit taxpayer-sponsored bailouts for uninsured deposits in case of insolvency. While they also bring in additional regulatory capital prescriptions to act as a loss absorbent, in a competitive capital market, the possibility of SIFIs/SIBs taking additional risks to earn the additional returns on capital and thereby negating the role of additional capital can never be ruled out. Hence, the nature of supervisory oversight of SIFIs/SIBs ought to be a lot more intrusive relative to other financial institutions. The bank bailouts experience in Europe shows that political economy of bailouts is more important than regulatory labelling.

(v) Inadequacy of global financial safety nets (GFSNs) and discriminatory central bank swap lines force EMEs to self-insurance.

13. Monetary policy stances of systemic central banks, geo-political developments and uncertainty surrounding the direction of macroeconomic policies in AEs have been the main push factors driving the influx of capital flows to EMEs. For these recipient economies, this has translated into heightened financial market volatility with adverse implications for their growth prospects and for macroeconomic and financial stability. By and large, EMEs have absorbed the shocks by maintaining fairly open capital accounts and by strengthening their
macro fundamentals through prudent policies. Yet, as high intensity events starting with the taper tantrum have shown, macroeconomic fundamentals do not matter in the face of these large and sudden movements of capital, and their economies remain vulnerable to rapid materialization of risks.

14. So far, our quest for a robust, equitable and quickly deployable global financial safety net (GFSN) has remained elusive. As a consequence, EMEs have had to buffer themselves by maintaining reserves and managing financial volatility through a combination of policy instruments, including a macro-prudential/capital flow management toolkit, which are essentially pre-emptive in nature. Given the “stigma” attached to the IMF facilities and their quest for “self-insurance”, EMEs have resorted to building foreign exchange reserves as the “first line of defence” to calm volatility in financial markets and to provide adequate liquidity buffers for “sudden stop” and reversals. Second, regional financial safety nets have emerged to complement the agenda of financial stability.

15. In the post global financial crisis era, the GFSN has grown significantly with increased accumulation of reserves by countries, and increase in various bilateral and multilateral swap arrangements. Global reserves grew from about US$2 trillion in 2000 to about US$12 trillion by the end of Q2 of 2017 about 60 per cent of which are held by EMEs. However, according to the Fund’s Assessing Reserves Adequacy (ARA) metric, many EMEs (especially in Eastern Europe and Latin America) fall short of the range of 100–150 per cent of the composite metrics that are considered adequate for precautionary purposes. Bilateral swap lines between central banks expanded dramatically during the crisis and have further increased since then. The bilateral swaps are dominated by China’s extensive network of renminbi swap lines – 30 swap lines in place at end-2015 valued at US$500 billion. BRICS countries have established a US$100 billion multilateral currency swap arrangement aiming to provide regional short-term liquidity and to address balance of payments difficulties. Other regional financing arrangements (RFAs) that have emerged are Eurasian Fund for Stabilization and Development (EFSD) with contributions of US$8.5 billion, Arab Monetary Fund (AMF) and the Latin American Reserve Fund (FLAR).

16. With every new tail event, however, the churn becomes larger, the volatility ever higher, threatening to overwhelm the modest defences that EMEs are able to
muster. It is in this context that I would draw your attention to the stark asymmetry prevailing in the provision of swap lines by systemic central banks. In fact, I would go as far as describing the situation as a virtual “apartheid” by which systemic central banks protect themselves and their self-interest. Meanwhile, EMEs that are at the receiving end of global financial turbulence are systematically denied access. The time has come to end this sectarian approach and the access to swap lines be equally available. While EMEs have shown a degree of resilience to the turmoil of recent years, they are vulnerable to liquidity and bridge financing gaps that are transitory but debilitating. Access to swap lines will help them manage these risks better and prevent them from assuming systemic proportions, thereby threatening global financial stability. We must learn from the lessons of the global financial crisis and act expeditiously and comprehensively to establish a broader swap network. In its absence, the macroeconomic environment of each country will inform the choice of policy instruments. In such a milieu, there cannot be any common code or uniform approach to capital account liberalization.

17. There has been considerable focus on macro-prudential measures (MPMs) in the recent period. However, while legitimacy of MPMs has been well established, the same legitimacy for capital flow measures (CFMs) has not been universally accepted despite an explicit endorsement by the IMF for selective use of CFMs. It is important to recognize that amid global financial cycles and the inexorability of the trilemma, corner solutions are not feasible. So soft capital account management becomes a necessity – keeping external debt within practicable limits and prudence regarding the external sector help strengthen financial and macroeconomic stability.

18. The challenge before us is to identify what is going to strike us next? Hence, any regulation of the financial system should take a pre-emptive approach, and consider the potential fragility of banks alongside all other elements of the financial system. This would prevent regulatory arbitrage and help to ex ante determine the supervisory “guide rails/rules of the game” for the system.