## Opening Address SEACEN-BIS High-Level Seminar Veerathai Santiprabhob, Governor of the Bank of Thailand Bangkok, Thailand 15 September, 2018

Governor Subbarao,
Deputy Governors of SEACEN central banks,
Executive Director Genberg,
Members of SEACEN Executive Committee,
Executives from the BIS,
Distinguished participants and speakers,
Ladies and gentlemen,

Good morning. I am delighted to welcome all of you to the Bank of Thailand for the SEACEN-BIS High-Level Seminar. The theme of this seminar is Digital Technologies, Financial System and Central Bank Policy. These are very important topics, especially for the members of the SEACEN Executive Committee who will play critical roles in shaping strategic direction of the SEACEN and how its programs evolve over the years.

The impact of rapid transformation of technology is powerful and farreaching. Advancement in information technology has given rise to various data technologies and network platforms, changing many facets of our lives and helping uplift productivity for firms and individuals. These developments have led to greater connectivity between nations, cultures, and people and break down the barriers of international trades, supply-chains, and capital flows.

At the same time, these digital transformations, along with new landscapes they introduced, bring new forms of risks for firms and individuals and pose challenges for central banks. Firms will face greater operational risks from IT transformation and cyber threat while being at risk of increased competition and disrupted business models. Widening adoption of automotive process could lead to work displacement; a large number of individuals, especially those in mid-career, will need to be re-trained and equipped with new skill sets. These changes in business and labor market conditions will have considerable impacts on central bank policies and how central banks operate, including those in macroeconomic analysis, payment systems, and financial supervision. Moreover, growing interconnectedness in trade, finance, and supply-chains have resulted in increased real and financial spillovers and globalized price-level, thus complicating central banks' job of maintaining price and financial stability.

Many powerful developments are taking place today, from the growing influence of FinTechs and BigTechs to introduction of cryptocurrencies and electronic payment technologies. For many of us, central bankers, when dealing with new developments that can transform our financial system and how we conduct our policies, several key policy questions are often brought up:

What are the risks and rewards of these developments? Should we regulate them? If so, how best to regulate them? How can we make use of these digital developments in our policy setting? And, what roles could central banks play in promoting new technologies and new digital platforms?

To begin approaching these questions, we first have to admit that the boundary for new innovations or technologies is limitless and their potential impacts, at current juncture, may not be fully uncovered. There are things that we know and things that we don't. And even what we know and can identify today, our perceptions may be obscured by our perceived understanding based on past world views. There is a fine line between the knowns and the unknowns. Navigating through these will require striking the right balance between having an open mindset to allow innovations to prosper while ensuring that key risks can be contained.

For the "known territory," essentially developments that we have begun to identify use cases, can control the risks, and believe that the benefits will outweigh the costs, we must continue to refine our understanding, expand our knowledge, and find ways to streamline them into our policymaking process. This is so that the perception or the extent of what we know becomes clearer.

For instance, growing popularity of internet-of-things—from usage of smartphones to various data-transmitting devices—has created massive amount of individual-level and transaction-level data. These "big data" can help unlock our understanding of the behavioral patterns, perhaps, not even realized by individual data owners. At the Bank of Thailand, we have begun employing big data analysis in macroeconomic, banking sector, and financial market assessments to complement our policymaking process. This has helped ensure that our policy actions are evidence-based and timely. At the same time, necessary steps are taken to validate the integrity and quality of data used as well as to safeguard data privacy. We are just scratching the surface of the potential usage of big data and much more work will be done in this area in the years to come.

Many other "known" areas still require further refinement:

 from understanding the impacts of deepening adoption of digital technology on productions, labor markets, inflation dynamics, and hence conduct of monetary policy;

- to the emergence of cryptocurrencies and associated payment technologies that may improve financial inclusion and incorporate 'smart-contracts', but may have implications on financial stability, consumer protection and even the environment; and
- to the various proof-of-concept initiatives using DLT or Blockchain on wholesale Central Bank Digital Currency (CBDC), where design and technology choices are being explored.

Meanwhile, there remain many puzzles and unknowns, where the costs and benefits are unclear and require much more research, study, and debate to identify potential impacts or to assess whether a particular development should be pursued. These include unknowns such as introduction of retail CBDC, which can have implications on the business model of banks and the financial sector and on transmission mechanism of monetary policy. Or, broader issues such as the autonomy of central bank's policy, which will be challenged by BigTechs and cross-border technologies, as much of central banking has been designed based on a world with national borders. Other unknowns will arise in the future; all of which dictate that we have to be nimble and forward looking.

Ultimately, when facing the challenges from the knowns and unknowns, the role of central banks is not only to understand key issues and provide stewardship in the right direction but also to ensure that benefits and costs are well balanced and unintended consequences minimized. During the period of rapid digital transformations, there is no denying that digital divide can worsen, especially in emerging economies. There will be those with access, are able to take advantage of technological advancement, and prosper; and those who lack access or capability to leverage on modern technology, fall behind, and perish. Finding that right balancing will certainly be a challenge for us, central bankers, but it can be an area where international collaboration and networking platforms, like the SEACEN Centre, can play a role.

Refining the knowns, looking ahead for the unknowns, and balancing our actions. These are how we should approach our policy questions.

I am glad the SEACEN and its organizers have selected a number of topics that will allow us to think deeply about digital transformations and implications for central banks and encourage that future SEACEN activities put even greater emphasis on how we can balance our policy actions and enhance collaboration among members in this new area. I would also like to thank the group of scholars and practitioners here with us today, who will share their thoughts on many important topics, help broaden our perceptions of the knowns, and shed some lights on the unknowns.

And on this note, allow me to introduce Governor Duvvuri Subbarao, Former Governor of the Reserve Bank of India and currently a Distinguished Visiting Fellow at the Institute of South Asian Studies of the National University of Singapore. Governor Subbarao has been a staunch advocate of RBI's pro-active role in addressing financial inclusion to help those underserved. As the world's second most populous country, India has faced an uphill task to expand financial inclusion, especially to individuals in remote areas. But the numbers speak for themselves: in 2011, just 35 percent of adults have bank accounts according to the World Bank's Global Findex Report. By 2017 that number has dramatically risen to 80 percent. In his keynote address this morning Governor Subbarao will share with us India's remarkable experience on improving financial inclusion by using digital technologies.

Please join me in giving a warm welcome to Governor Subbarao.