

"The Changing World" - Keynote Speech by Ms Jacqueline Loh, Deputy Managing Director, Monetary Authority of Singapore, at The World Federation of Exchanges General Assembly and Annual Meeting on 9 October 2019

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Ladies and gentlemen, good morning.

Introduction

- 1 Let me begin by welcoming you to Singapore for the World Federation of Exchanges 59th General Assembly and Annual Meeting.
- 2 Exchanges have a long and illustrious history, dating back to the establishment of the Amsterdam Stock Exchange from as early as 1602. Four centuries on, exchanges continue to play a crucial role in facilitating trade and disseminating information, enabling companies to raise capital, and providing investors with a fair, orderly, and transparent marketplace to trade financial assets and carry out risk management activities.
- 3 The World Federation of Exchanges (“WFE”) has played a critical role in promoting the development of organised and regulated markets to meet the world’s capital raising needs. As the leading global industry group for exchanges and clearing houses, the WFE has actively pushed for greater industry collaboration and international regulatory coherence to make public markets more vibrant and robust.

4 The agenda of this year's WFE General Assembly and Annual Meeting will further the WFE's objectives and work as it covers a wide spectrum of issues that are forward-looking and relevant to how WFE members can navigate the changing world. These include the future of capital raising and the adoption of distributed ledger technology. In the same vein, I will speak about **three trends that continue to shape the financial markets of tomorrow - sustainable finance, technology and innovation, and the evolving dynamics of our public and private markets.**

5 Before I outline these trends, let me first start by setting out the macroeconomic picture, as this is the backdrop against which we must view these developments.

Global Economy – Heightened Uncertainty

6 There is no doubt that these are challenging times. Global growth is expected to slow going forward. IMF's World Economic Outlook forecast for April 2019 sees global growth moderating to 3.3% this year, from 3.6% in 2018 [\[1\]](#). Indications are that the October World Economic Outlook to be released next week will likely paint a cautious assessment of global growth prospects and include downward revisions to growth forecasts. Slowing global growth is chiefly due to an elevated level of policy and geopolitical uncertainty, with ongoing trade tensions that continue to dent business sentiment and investment. These ongoing developments have important implications for the financial industry and we need to be vigilant and flexible to adapt and respond.

Regional Developments: ASEAN – Grounds for Optimism

7 Within ASEAN, the picture is rosier. According to the IMF, the major ASEAN economies are expected to continue outperforming emerging markets and developing economies as a whole, with projected GDP growth of about 5.0% annually for 2019-2020 [\[2\]](#). ASEAN has become one of the fast-growing regions in the world in the last few decades, and is home to eight of the world's best performing developing economies [\[3\]](#). Looking ahead to 2050, it is projected that ASEAN – with a population of close to 800 million people by then - could become the fourth largest single market, behind China, India, and the US [\[4\]](#).

- In the next few years, growth in ASEAN will continue to be driven by intra and extra-regional trade as well as strong investment flows, even as domestic demand will play a more important role.
- ASEAN also has demographics on its side: we are for the most part a young region, with a rapidly growing middle class who is increasingly consuming higher value-added goods and services.

- Asian wealth accumulation is also growing quickly. Assets under management in the Asia Pacific is expected to increase faster than any other region globally, almost doubling from 2017 to about US\$30 trillion in 2025. This will result in increased demand for investment opportunities across a wide range of products like equities, fixed-income, and risk management tools.

8 These factors underpin the promising economic prospects in ASEAN, with the corresponding need for regional enterprises to raise capital to support their growth.

9 Looking ahead, these are opportunities to be harnessed both within ASEAN and globally, and exchanges as well as clearing houses need to innovate and remain relevant to all stakeholders. I will now speak about three key trends, the opportunities they present, and what MAS is doing to support the Singapore financial services industry in these areas.

Trend 1: Catalysing Sustainable Finance for Growth

10 The first trend is growth in **sustainable finance**. This is increasingly an area of both concern as well as interest to financial players, especially millennial investors.

11 The estimated financing needs to support the greening of Asian economies are high. China has estimated that it will require US\$450-600 billion of investments annually to achieve its green policy goals under its 13th Five Year Plan while ASEAN will need an estimated US\$200 billion in green investments annually through 2030 [\[5\]](#).

12 Sustainable finance is still at a nascent stage but we are seeing increasing focus from financial institutions to develop new environmental, social and governance (“ESG”)-related products. Similarly, with increased investor demand and awareness for sustainable financial products, exchanges like yourselves can look to expand and support product offerings that will meet the needs of socially and environmentally conscious enterprises and investors.

13 One such area of growth is in **green bonds**. Global green bond issuance volume reached US\$168 billion in 2018, a four-fold increase from US\$42 billion in 2015. The Asia-Pacific region accounted for almost US\$50 billion of issuance, or almost 30% of global volumes, of which US\$31 billion was from China. Exchanges can support the listings of green, social, and sustainability bonds, as countries and corporates transition towards a low-carbon and climate resilient model.

- To foster sustainable growth in ASEAN, the ASEAN Capital Markets Forum (ACMF) has developed the **ASEAN Green Bonds Standards**, in collaboration with the International Capital Market Association (ICMA). The standards, based on ICMA's globally recognised Green Bond Principles, seek to facilitate ASEAN capital markets in tapping green finance to support sustainable regional growth and meet investor demand for green investments. As of October 2019, 80 such bonds from Singapore, Malaysia, Thailand, and the Philippines have been issued for renewable energy, green buildings and low carbon transportation [\[6\]](#).

14 Exchanges can also play an active role in **supporting sustainable growth through sustainability reporting and integrating sustainability considerations in products that you launch**. In particular, sustainability reporting is a key tool in encouraging enterprises to integrate ESG considerations in their performance and value proposition to both internal and external stakeholders.

- Sustainable reporting has become more important with growing concerns from consumers and investors that financial returns are achieved with integrity, backed by ESG considerations.
- In recognition of such trends, the Singapore Exchange (“SGX”) has introduced a “comply or explain” regime for sustainability reporting in 2017, where listed companies are required to disclose and explain their sustainability practices.
- ASEAN governments have also imposed regulatory drivers, to assist companies with identifying gaps and areas for improvements in their sustainability efforts [\[7\]](#). For example, in the mining and minerals sectors, companies are subject to commonly-agreed-upon regional guidelines for assessing and reporting on the affected environment.

15 We are heartened that the WFE has taken the lead in advancing the sustainability agenda in two particular areas:

- First, the integration of sustainability with commodity derivatives. The WFE has published a white paper that explores how commodity derivatives exchanges could create new mitigation or investment tools that respond to environmental challenges, and incorporate sustainability elements into existing contracts;
- Second, the adoption of sustainable practices and principles. The WFE has partnered the United Nations Sustainable Stock Exchanges to set out a

blueprint to support exchanges in embedding sustainability in their operations.

16 Overall, these efforts will drive wider discussions on sustainability as well as provide guidelines on how WFE members could adopt relevant sustainable practices and principles in their strategies for growth and operations.

Trend 2: Leveraging Technology Developments and Innovations

17 **The second trend relates to technology.** Technology is widely viewed as having the potential to be a significant disrupter to financial markets globally, whilst offering tremendous opportunities, including changing traditional ways of doing business, lowering operating costs and enhancing productivity.

18 In its current form, securities trading and clearing involve many stakeholders from exchanges, clearing houses, broker-dealers, and agent banks, which adds to frictional costs and lowers the efficiency of trading and clearing.

Exchanges have shown growing interest in technologies like distributed ledger technology (“DLT”) to develop solutions that could simplify and speed up some of these processes.

- Many of you have made significant headway in deploying technology in multiple ways. A 2018 report commissioned by Nasdaq [8] found that 70% of stock exchange operators surveyed were working on pilot projects to deploy DLT. This includes exchanges from the US, Europe, Australia, and Singapore.
- In Singapore, SGX and MAS successfully developed Delivery vs Payment (DvP) capabilities for the settlement of tokenised assets across different blockchain platforms last year. This can simplify post-trade processes and shorten the settlement cycle. Australia’s stock exchange, the ASX, is also using blockchain to replace its post-trade clearing and settlement platform.

19 To support technological adoption and innovation in the financial sector, MAS introduced the **FinTech Regulatory Sandbox**. The sandbox is also a regulatory innovation for MAS, where we support financial institutions and fintech players to experiment with innovative financial products or services in a live environment, within well-defined boundaries. Upon successful experimentation and exit of the sandbox, entities will then have to comply fully with the relevant regulatory requirements.

20 The sandbox has been well received. Since its launch three years ago, MAS has provided guidance to more than 250 firms, and received more than 60 applications to experiment in the sandbox. iSTOX, a private market platform

leveraging on DLT and offering the trading of tokenised private securities, is the first market operator to enter MAS' sandbox.

21 The approach that we have adopted requires an extensive review of each application. This is necessary as each sandbox is customised to facilitate meaningful experiments, with appropriate safeguards to contain the consequences of failure. We have learnt along the way that for certain types of activities regulated by MAS, risks can be well managed within certain specific boundaries. Hence, we launched an enhanced version of the regulatory sandbox, **Sandbox Express**, to complement the current sandbox approach, in August this year. For a start, we have offered three activities under Sandbox Express, including the activity of establishing or operating an organised market, which may be of interest to WFE members. This provides firms with a faster avenue to test innovative financial products and services in the market.

Trend 3: Remaining Nimble to Developments in Public and Private Markets

22 Lastly, of crucial relevance to Singapore and the WFE, is the **changing dynamics of public and private markets**. Globally, capital raising by enterprises has been shifting from public to private markets [9]. This shift is driven by a combination of factors, including secular factors, such as the increased importance of intangible assets, as well as cyclical factors, such as the abundance of private capital, higher expected valuations in private markets, and low interest rates globally [10].

23 New firms are also taking longer than before to tap on public funding via an IPO listing, with the average firm age of technology companies going public increasing from four years in 1999 to 12 years in 2018.

24 Most exchanges over the world are also seeing a trend of de-listings, as public companies go private or are acquired. In the US, the number of listed companies in 2018 stands at just over 4,000, half of that in 1996 [11]. Similar trends have been observed in the United Kingdom and parts of Western Europe [12]. On the flipside, we are seeing significant growth in the number of private-equity (“PE”) backed companies, with the number of such companies in the United States doubling from about 4,000 in 2006 to about 8,000 in 2017 [13].

25 Reforms in the Markets in Financial Instruments Directive II (MiFID II) have also affected the global investment research climate, with potential spill-on effects on the liquidity and vibrancy of public markets. Research budgets are shrinking and small to mid-cap stocks are increasingly seeing a reduction in research coverage [14]. These factors could impact the liquidity of public markets, especially for thinly-traded smaller firms which may not receive sufficient investor attention despite having strong fundamentals.

26 Amidst these trends, there is a need to respond to changing funding needs and be flexible to accommodate these evolving business models.

27 In Singapore, we seek to support **corporates' financing capabilities and needs across the corporate lifecycle – from early stage financing to mature companies looking to tap on financing from public markets**. As part of Singapore's Financial Services Industry Transformation Map (ITM) to transform Singapore into a leading global financial centre that connects global markets and supports Asia's development, MAS has introduced a number of initiatives to support enterprise financing in both private and public markets.

- Venture capital and private equity managers are an essential element in the financing lifecycle, by providing smart capital and operational and business expertise to portfolio companies.
 - To facilitate activities of venture capitalists to support small and medium-sized enterprises (SMEs), we have simplified and shortened the authorisation process for venture capital managers.
 - We have also set up a deal making platform called MATCH, or Meet ASEAN's Talents and Champions) [\[15\]](#), to connect global capital and the ASEAN enterprise community in 2018. This will help to grow the pipeline of companies that will eventually require listing in our public markets.
 - Singapore also organises the annual Singapore FinTech Festival (SFF) and this will be combined with the Singapore Week of Innovation and Technology (SWITCH) that is coming up on the 11-15th November, to provide a platform for industry players to gain greater understanding of fintech applications and developments as well as support innovative solutions to find commercialisation opportunities.
- SGX is also working with licensed private market platforms to facilitate the listing process for portfolio companies. Such platforms provide PE/VC managers with opportunities to invest or exit, and provide a pipeline of companies that could list on SGX. Such private-public markets partnerships can serve as an engine of growth for our public markets and provide support for enterprises throughout their corporate lifecycle.

28 In keeping up with changes in our public markets, such as the rise of new-economy start-ups and technology firms, **exchanges have continued to innovate** to provide product offerings that support the varying needs of these companies.

- For example, SGX has joined global exchanges in Canada, Europe, and the US, in introducing the Dual Class Share (DCS) structure to support firms which have shares with different voting rights to raise funds. DCS listings will broaden the range of investment options for investors and add vibrancy to Singapore's capital markets and capital markets globally.

29 With the recognition that public markets play an important and key role in our entrepreneurial ecosystem by providing public financing for growing companies, MAS will continue to support growth in public equity markets.

- MAS has committed S\$75 million over three years to help companies list and raise equity capital on SGX and support initiatives that broaden and deepen our research ecosystem. This will help to mitigate the growing and global phenomena of shrinking research coverage and build up our capabilities in covering public markets.

Conclusion

30 In conclusion, as we move into a changing world with a less certain global order, rapidly advancing technology, and increasing threats and opportunities, it will be even more important for exchanges and clearing houses to keep pace with global trends and be ready to adapt. This will ensure that you are well-placed to navigate challenges and remain relevant to the evolving needs of our financial markets.

31 The WFE, in continuing to advance a collective voice for the improvement of our public markets, will be an important contributor to global discussions with regulators on how our public markets are shaped for the future. The WFE's ongoing efforts in advancing the sustainability agenda for exchanges and clearing houses, is testament to the leadership and contributions it has presented since its founding in 1961.

32 I wish you a fruitful general assembly and annual meeting in Singapore. Thank you.

[1] The IMF's 2019 global growth forecast was lowered to 3.2%, as cited in the World Economic Outlook, July 2019.

[2] IMF World Economic Outlook, July 2019

[3] The world's best performing developing economies are defined as those that have averaged at least 3.5% annual per capita GDP growth over 50 years or 5% annual growth

over 20 years, as cited in the McKinsey Global Institute Study on Outperformers Maintaining ASEAN Countries' Exceptional Growth Report in 2018.

[4] Population projections from the UN. The relative market size of ASEAN is cited by the US-ASEAN Business Council in its growth projections for ASEAN in 2050.

[5] DBS Bank and the UN Environment, Green Finance Opportunities in ASEAN 2017

[6] ASEAN Green / Social / Sustainability Bonds / Sukuk for October 2019

[7] GCIO Sustainability Reporting in ASEAN Research Report 2018

[8] Nasdaq and Celent July 2018, Global C-Suite Study on Capital Markets Infrastructure Technology

[9] Global private equity valuations has grown more than 700% since 2002 in 2017, outpacing public equity market valuations, McKinsey Global Private Markets Review 2019, Private markets come of age.

[10] CFA Institute Nov 2018, Capital Formation: The Evolving Role of Public and Private Markets

[11] Wall Street Journal Jan 2018, Fewer Listed Companies: Is That Good or Bad for Stock Markets?

[12] Duncan Lamont, Apr 2018, Market views - What is the point of equity market

[13] McKinsey Global Private Markets Review 2019, Private markets come of age

[14] CFA Institute Mar 2019, MIFID II Research Unbundling: A Survey Yielding Mixed Results

[15] This year, MATCH has been enhanced with a new “Deal Fridays” format, reflecting a joint partnership with Enterprise Singapore to connect a carefully curated list of growth-stage ASEAN companies with investors through weekly investor-company match-making events. Since the launch of “Deal Fridays” in June 2019, over 400 companies and 400 investors have participated in Deal Fridays.