Seminar on Accelerating Innovation and Digitalization in Asia to Boost Productivity

The Office of the National Economic and Social Development Council (NESDC) and the International Monetary Fund (IMF) held a seminar on the topic of **Accelerating Innovation and Digitalization in Asia to Boost Productivity** on Friday, January 13th, 2023, at the Montathip Room, Anantara Siam Bangkok Hotel, Bangkok, Thailand.

The seminar included opening remarks by **Mr. Danucha Pichayanan, Secretary General of the National Economic and Social Development Council** and **Dr. Antoinette M. Sayeh, Deputy Managing Director of the International Monetary Fund.** The seminar featured a presentation of the IMF's recent publication entitled **"Accelerating Innovation and Digitalization in Asia to Boost Productivity"** presented by **Dr. Eteri Kvintradze**, Director of the IMF Capacity Development Office in Thailand. The presentation was followed by a panel discussion from outstanding panelists including **Mr. Suriyon Thunkijjanukij,** Senior Advisor on Policy and Plan at NESDC, **Dr. Pun-Arj Chairatana**, Executive Director of The National Innovation Agency, **Dr. Atip Asvanund**, Director General at Digital Council of Thailand, and **Dr. Kiatipong Ariyapruchya**, Senior Country Economist of the World Bank.

The IMF's paper produced by the Asia and Pacific Department revealed that Asia's strong economic rebound from the pandemic is losing steam as tightening financial conditions reduce export demand, and China's sharp and uncharacteristic slowdown dim the outlook. More broadly, deep economic scars from the pandemic and the lackluster productivity growth that preceded it are weighing on the region's longer-term growth prospects. But, despite these challenges, the IMF sees a promising path for boosting Asia's productivity through digitalization, an area where it has a history of leadership.

The Asian digital landscape has expanded fast in recent years. From 40 percent two decades ago, the region accounted for 60 percent of patents in digital and computer technologies right before the pandemic. The manufacturing powerhouse enjoys a wide global lead in installation of industrial robots. China is the single biggest robot user, accounting for some 30 percent of the market. Japan's Rakuten, China's Alibaba Group, and Indonesia's GoTo Group are major players in e-commerce, with revenues that rival those of Amazon and Walmart. India's pioneering of digital infrastructure known as stacks has made it a leading example of how to bring together digital payments and identification to expand access to finance. Growing youth populations in Bangladesh, Indonesia and Vietnam have rapidly adopted new technologies and become a sizable potential customer base for the digital economy.

The pandemic accelerated the region's digitalization trend. The proportion of patent applications for remote work and e-commerce technologies surged during the pandemic as did spending on e-commerce, with Asia now accounting for nearly 60 percent of the world's online retail sales. E-commerce revenues grew by 40–50 percent in Vietnam, Indonesia, and India in 2020, outpacing most of the world. This rapid increase was spurred by the shift away from cash payments and a resulting boom in digital alternatives, particularly e-wallets and prepaid cards.

Despite successes, the region's digital divides constrain productivity growth. Access to cutting-edge digital technologies, is highly uneven within countries, and across firms. Small and medium-sized enterprises face significant barriers to access and use of digital technologies. The study shows that nearly half of SMEs and about a third of large firms in emerging and developing Asia report difficulty in obtaining financing as a major barrier to technology adoption.

A slow diffusion of technology between leading and lagging firms also underpins the technological divide. Constraints such as the scarcity of a digital-savvy workforce, unequal access to digital infrastructure, weaknesses in the legal environment, including lack of adequate legislation on data protection and intellectual property rights, hinder information sharing and confidence in technological adoption. Digital gaps also prevent workers from reaping the full rewards of participating in the new economy and reaching their full potential.

For Thailand, Dr. Antoinette Sayeh, IMF's Deputy Managing Director, mentioned that the country has made significant progress in digital development, including through its industrial transformation policy. It expanded internet access to nearly 78 percent of its population in 2022, from less than 4 percent in 2000. As in countries across the region, the pandemic accelerated the rise of the digital economy. E-commerce sales in Thailand grew from less than1 percent of GDP in 2017 to around 4 percent in 2021. Just between 2019 and 2021, they grew by over 140 percent, the highest among the major ASEAN economies. This acceleration may very well continue, supported by a conducive digital environment and growth in digital payments that have thrived since the launch of PromptPay. Broader adoption of digital technologies can boost productivity and growth even further. The government already sees the digital sector as one of the country's engines of growth over the next decades: Thailand's 4.0 strategy and the Eastern Economic Corridor initiative aim at boosting productivity by accelerating the digital transformation. The IMF emphasizes that the continued focus in this area and ensuring effective implementation of existing plans will give Thailand the spark its needs to reach higher income status.

The new IMF paper also provides key recommendation for further improving digital literacy and reducing the digital divide across firms, industries, and workers in order to help close productivity gaps. The study focuses on needed reforms to bolster broad-based innovation and digitalization to boost aggregate productivity and growth in Asia. Reform priorities for the region include:

(i) Enhancing countries' digital infrastructure to improve access to information and technology;

(ii) Upgrading digital literacy and upskilling the young workforce in many countries to meet employers' demand;

(iii) Alleviating financing constraints faced by SMEs to help them adopt new technologies. Greater access to finance would help innovators introduce new products; and

(iv) Facilitating adoption of new technologies by streamlining regulations in line with the evolving digital industry, enhancing the legal environment, including on data and intellectual property rights protection, and facilitating digital trade.

Office of the National Economic and Social Development Council

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