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TO OUR READERS

South Korean and Japanese Governments on a Collision Course

The normalization of diplomatic relations between South Korea and Japan commemorated its 55th anniversary on June 22. Still, the bilateral relations are currently the worst on the economic and national security sides as well as the history side.

The Japanese government implemented export restrictions one year ago after the South Korean Supreme Court’s ruling on forced wartime labor. The restrictions covering three semiconductor and display materials, however, led to South Korea’s efforts for substitute development and more and more South Korean companies are standing on their own feet to the point of the restrictions being criticized by none other than Japanese news outlets.

At present, the issue is developing in the WTO. The Japanese government continued to ignore the South Korean government’s call for withdrawal of the measure, and then the latter sent the WTO a panel installation request on June 18. Previously, it suspended its WTO litigation procedure and opted not to terminate the GSOMIA in November last year.

More recently, the Japanese government objected to the United States’ plan for G7 expansion to include South Korea, Australia, India and Russia, making an issue of the Moon Jae-in administration’sfriendliness to China and North Korea. It is true that the administration’s pro-North stance is something worrisome, yet the overall term of the current administration is about to end, and the administration and the country need to be distinguished from each other.

The South Korean and Japanese governments’ behaviors are unacceptably pathetic in view of mutual interests that they could achieve by cooperation amidst the massive economic impact of COVID-19 and the fast-changing international political dynamics in Northeast Asia. According to the Federation of Korean Industries, collaboration between South Korean and Japanese companies in the material, component and equipment industries would result in no less than 136 trillion won (around US$105 billion) in added-value newly created in both countries’ manufacturing sectors as of 2018. “China is likely to benefit the most from the ongoing trade disputes,” it explained, adding, “in the global electrical and electronics industry, which has been led by South Korea and China, Japan’s production will increase 2.1 percent while those of South Korea and Japan fall 20.6 percent and 15.5 percent, respectively.”

The two countries are currently on a collision course despite the fact that the two governments’ insistence is of no practical use. In the end, their bilateral relations can be improved only after their historical issues are properly addressed. The trade disputes resulted from political managerial mistakes over those historical issues. Trade-based response to the political and diplomatic failures creates nothing but how unwilling both governments are to bring their relations back to normal.
A s the U.S. government is pushing for “semiconductor self-sufficiency” in the wake of the spread of COVID-19, attention is being paid to its impact on South Korean semiconductor companies such as Samsung Electronics and SK Hynix. In particular, as the U.S. is seeking to attract Taiwan's TSMC plant, which is the world's largest foundry company, Samsung Electronics’ response is drawing attention as the company is in hot pursuit of TSMC in the foundry sector.

According to foreign media reports, the Trump administration is trying to stabilize the supply chain of semiconductors by attracting TSMC plants, as the key customers of the Taiwanese foundry are U.S. semiconductor companies such as Apple, Qualcomm, AMD, and NVIDIA. The global spread of the novel coronavirus is fueling concerns about the collapse of the semiconductor supply chain, so the United States wants to reduce its dependence on Korea and Taiwan by attracting TSMC and Samsung Electronics’ factories.

The United States also intends to keep in check China which is also keen to promote its semiconductor industry. In particular, Huawei, the world's largest telecommunications equipment maker and the world's second-largest smartphone maker, is outsourcing production of semiconductors designed by its subsidiary HiSilicon to TSMC. Currently, Huawei accounts for 14 percent of TSMC’s total sales. Trade between the two companies is expected to be halted beginning the fourth quarter of 2020 due to tougher U.S. sanctions on Huawei.

Samsung Electronics seems to have a lot to ponder as the U.S. is interested in attracting TSMC’s plant in the U.S. while at the same time expecting Samsung Electronics to expand its plant in the U.S. The Korean semiconductor giant could be in trouble if the Donald Trump administration pushes ahead with its move to attract a TSMC plant and U.S. semiconductor companies such as Intel, Qualcomm, and NVIDIA, which are Samsung’s major customers, support it.

Recently, U.S. semiconductor companies such as Qualcomm and NVIDIA have placed foundry orders on Samsung Electronics to reduce their dependence on TSMC. Samsung Electronics could make it possible for the company to achieve its Semiconductor Vision 2030, a bid to surpass TSMC by 2030 when it secure the major U.S. customers successfully.

Industry watchers say Samsung Electronics is likely to expand its Austin plant if TSMC sets up a new plant in the U.S. to take more orders from its major customers such as Apple, Qualcomm, NVIDIA, and AMD. Industry insiders have previously speculated that Samsung Electronics could introduce a new EUV line to its Austin plant. Samsung Electronics is known to have recently purchased additional land near the Austin plant with plant expansion in mind.

Yet Samsung cannot easily decide to expand its factory in Austin as expanding a foundry production line is a risky business. A new line requires investments worth trillions of trillion won, and furthermore, demand for semiconductors may shrink due to the Corona 19 incident.

Samsung's plant in Austin provides foundry services for semiconductor designers. It is its only overseas foundry plant. While Samsung Electronics’ extreme ultraviolet (EUV) line at its Hwaseong plant in South Korea makes ultra-fine process semiconductors with less than 10 nanometers (nm), such as 6-nm and 7-nm devices, its Austin plant mainly produces 14-nm products.

Samsung Electronics also will boost its foundry capacity at the company’s new production line in Pyeongtaek, Korea. The new foundry line will focus on EUV-based 5 nanometer (nm) and below process technology. Construction started on May this year, with full operation expected to begin in the second half of 2021.
It will play a pivotal role as Samsung aims to expand the use of state-of-the-art process technologies across a myriad of current and next generation applications, including 5G, high-performance computing (HPC) and artificial intelligence (AI).

Samsung is scheduled to start mass production of 5-nm EUV process in the Hwaseong fab in the second half of this year. With the addition of the Pyeongtaek fab, Samsung will have a total of seven foundry production lines located in South Korea and the United States, comprised of six 12-inch lines and one 8-inch line. While TSMC is planning to start operating a 3-nano process in 2022, Samsung Electronics is also expected to start running a 3-nano process around that time.

**TSMC Expected to Widen Its Lead over Samsung Even without Sales to Huawei**

However, Taiwan's TSMC will continue on its uptrend in 2021 despite its severance of business ties with China's Huawei under pressure from the U.S. government, a recent report predicted.

Credit Suisse predicted in a recent report that TSMC's sales will increase 6 percent from 2020 to reach US$37.711 million in 2021. This forecast is based on the assumption that Huawei's share in the company's total sales will fall from 8.9 percent in 2020 to 0 percent in 2021.

Taiwan’s MediaTek is expected to place an additional order of US$1.4 billion on TSMC in 2021. Apple is also expected to increase its order by US$2.1 billion. As a result, MediaTek and Apple’s shares in TSMC’s sales will rise from 4.9 percent to 8.2 percent and from 22.7 percent to 26.4 percent, respectively. The report also forecast that Qualcomm will account for 6.8 percent, Broadcom 8.6 percent, AMD 9.3 percent and NVIDIA 4.9 percent of TSMC’s sales in 2021.

Although Samsung Electronics narrowed its market share gap with Taiwan's TSMC in the global foundry market in the second quarter of 2020, Samsung Electronics’ efforts to overtake the Taiwanese company are expected to take more time as the U.S. sanctions against Huawei are expected to have a limited impact on TSMC. According to market research firm TrendForce, Samsung's market share reached 18.8 percent in the second quarter, up 2.9 percentage points from the previous quarter while TSMC saw its market share slide 2.6 percentage points from the previous quarter to 51.5 percent.

The first reason behind Samsung Electronics’ increase in its foundry market share is the growth of the 5G mobile phone market. Currently, only Samsung Electronics and TSMC are operating sub-5 nanometer foundry processes. The two receive steady orders from major application processor (AP) design companies such as Qualcomm. The biggest client of Samsung Electronics' foundry business department is the company’s system LSI business department.

The increase in Samsung’s foundry sales is partly attributable to the system LSI department’s acquisition of application processors (APs), contact image sensors (CISs) and display driver ICs (DDIs) for the Galaxy Note 20.

Although Samsung has grown significantly from 2016 when it placed 4th with a 5 percent market share, its presence has remained at the 18-19 percent range for more than a year since the beginning of 2019.

According to a report released by SK Securities on June 16, TSMC is superior to Samsung Electronics in terms of transistor concentration per unit area in the 5-nano process. TSMC is seeking to stay ahead of Samsung Electronics in microfabrication competition by beginning to install 3-nano process equipment.

**Competition in Ramping up Facility Investment**

TSMC stated in a recent earnings conference that it will invest US$15 billion to US$16 billion in facilities this year. TSMC invested US$10.5 billion in 2018, but the figure increased to US$14.8 billion in 2019 as the company swept away the extreme ultraviolet (EUV) exposure equipment exclusively supplied by ASML of the Netherlands. TSMC is planning to widen the gap with Samsung Electronics, the second largest foundry, by securing EUV equipment aggressively.

TSMC is capable of producing US$3,338 worth of semiconductors per wafer, higher than Samsung Electronics’ US$2,490, according to Information Network, a market research company.

Samsung Electronics did not suggest its expected investment in 2020. But it is expected to increase investment compared to 2019. Samsung Electronics invested 6 trillion won in semiconductor facilities in the fourth quarter of 2020, up 66 percent on year. The company needs to make additional investment in production lines of its foundry and system semiconductor plants. Samsung Electronics introduced EUV equipment to its DRAM production process to create a “supergap” with competitors. Samsung Electronics is expected to focus its investment on improving profitability rather than increasing production volume.
A city is bound to evolve when its citizens keep learning after school. In this kind of city, citizens learn not to pass school entrance examinations but to enjoy learning in life and feel rewarded. Incheon’s Yeonsu-gu (district), which is home to Songdo International City, has dreamed of becoming such a city. One prerequisite of a future city, says Ko Nam-seok, mayor of Yeonsu-gu, is to create an environment where people can learn freely anytime, anywhere and feel joy out of it. Ko is convinced that citizens’ enthusiasm for learning and expanding knowledge eventually drives the evolution of a city. In this regard, he has been committed to creating an excellent learning environment in Yeonsu-gu. The following are excerpts from an interview with him. -- Ed.

Please tell us your vision of Yeonsu-gu.

Yeonsu-gu is close to Incheon International Airport and a wide new port. This part of Incheon City is changing every day. The continued expansion of Songdo International City and an urban renewal project underway in the Old Town is injecting vitality into this district. Although Yeonsu-go has been suffering from the spread of COVID-19 since early this year, it is continuing to make big strides towards a future cultural and educational city. We want to make Yeonsu-gu an education and welfare city where people are at the center, a culture and tourism city where people enjoy a relaxed and abundant daily life, and a future high-tech zone that grow in a balanced and harmonious manner. This is the vision that will drive the evolution of Yeonsu-gu.

How have you been coping with the COVID-19 crisis?

The world is now paying attention to Songdo International City as it is home to various international organizations including the Green Climate Fund (GCF) and global campuses of such renowned universities as the State University of A City That Leads UNESCO’s Global Citizenship Education

Yeonsu-gu Aspiring to Become a Future City Powered by Lifelong Learning

By Michael Herh
New York and nine Korean universities, including Incheon National University and Yonsei University. Foreigners and Koreans live together in the same living culture. In responding to COVID-19, they have been treated equally in the whole process from diagnosis to isolation to self-quarantine since the outbreak of the infection. We have been making anti-COVID-19 announcements in Korean and English, distributed English-language anti-COVID-19 leaflets, and placed medical staff members who can speak foreign languages at selected medical centers at all times. Our standard on treatment and quarantine benefits an international city. The Philippine Embassy in Seoul delivered thank-you notes and comfort articles to the Yeonsu-gu Health Center to express its gratitude for the sincere care that the center provided for the family of a Philippine citizen working at an international organization in Songdo.

Yeonsu-gu is a member city of the UNESCO Global Network of Learning Cities (UNESCO GNLC). What is the network about?

Yeonsu-gu has been practicing community sharing through lifelong education. It was first selected as a member city of the UNESCO GNLC in August 2018, securing a foundation for international exchange activities in the field of lifelong learning. Launched in 2012, the GNLC has been supporting networks between international cities to strengthen individual capabilities, social integration, and economic and cultural improvements based on sustainable development. A total of 224 cities in 52 countries are working as members of the network, sharing their strategies to attain the goal of lifetime learning for all. It has served as an international community to create a sustainable and comprehensive learning system that leaves no one in the cold.

You led the Yeonsu-gu delegation to GNLC International Conference in 2019. Please tell us more about it.

In 2019, we participated in the 4th International Conference on Learning Cities held in Medellin, Colombia as a member city of the GNLC. We achieved many things despite a busy schedule. I made a presentation during the plenary session on how Yeonsu-gu addressed the problems of residents whose social quality of life deteriorated recently due to their poor digital accessibility. Audience response to my presentation was more than expected. I signed a memorandum of understanding on cooperation in lifelong learning with the mayor of Villa Maria, Argentina which was selected as an excellent learning city in 2017. I also received a letter of appreciation from the Argentine National Assembly.

Yeonsu-gu has also been selected as a cluster coordinator city for the Global Citizenship Education (GCED). What is the role of a coordinator city?

One of the most notable achievements we have made on our long journey towards our vision is Yeonsu-gu’s selection last year as a cluster coordinator city for the Global Citizenship Education (GCED), a UNESCO program aimed at empowering learners of all ages to assume active roles, both locally and globally, in building more peaceful, tolerant, inclusive and secure societies.

Yeonsu-gu has partnered with Larissa of Greece, which received the UNESCO Learning City Award in 2017. We regularly communicate with cities around the world and share related platforms with them. With international citizenship education as the theme, the two cities are working together to lead other cities in the world. What duties and responsibilities an individual should fulfill as a citizen is an eternal social education task in any country. When a city supports civic education so that it becomes the foundation of the community, educated citizens will eventually become the most reliable force to support the city.

Please tell us in more detail the tasks that Yeonsu-gu is expected to do as a GCED coordinator city.

By being selected as a cluster coordinator city last year, Yeonsu-gu was given the duty to share its experience in citizenship education with cities around the world. A future city that we have been pursuing cannot be imagined without a community culture. It is a city where members share their knowledge and enjoy benefits from sharing it. Sharing learning and creating our own community culture in that process holds the key to creating a better future. This is exactly what the private schools of the Joseon Dynasty had done. This is why citizenship is emphasized for all of us as a big step toward making Yeonsu-gu a global model city in the era of the Fourth Industrial Revolution.

Please tell us the challenges that lie ahead for Yeonsu-gu’s evolution as a learning city.

Now we all face the task of coming out of the long tunnel of the COVID-19 crisis. Despite the crisis, Yeonsu-gu has built outstanding infrastructure for lifelong learning including the Incheon City Lifelong Learning Center, public libraries, social welfare institutions and various cultural centers. Moreover, we take pride in various programs recognized by the Ministry of Education and the UNESCO and residents’ enthusiasm toward learning. Yeonsu-gu has started a journey towards building a constructive and organic knowledge-sharing global community based on its international network. The evolution of Yeonsu-gu towards a global city powered by lifelong learning has just begun.
The Ministry of Economy and Finance announced on June 26 that it has approved US$75.5 million of new projects for 13 countries, including Ethiopia and Myanmar, in order to assist in their response to COVID-19.

The ministry is continuing to share South Korea’s COVID-19 response experience with the world and provide relevant assistance in developing countries. Its first project to that end started in Paraguay last month and the latest projects are based on the Economic Development Cooperation Fund (EDCF) and World Bank (WB) and European Bank for Reconstruction and Development (EBRD) trust funds.

A total of US$130 million have been earmarked for the purpose so far. The EDCF-based projects, worth 70 million in total, constitute the second phase of the South Korean government’s US$400 million official development assistance against COVID-19. Specifically, the projects are to provide public health and quarantine budget assistance along with medical supplies and equipment.

The project in Ethiopia, which is the first EDCF-based anti-COVID-19 assistance in Africa, will take the form of joint financing via the African Development Bank. The eight projects based on the WB and EBRD trust funds have a combined size of US$5.5 million.

The Ministry of Food and Drug Safety said on June 11 that the government has finalized a roadmap to make Korea’s “3T” COVID-19 response model a global standard. The 3T refers to Test (diagnosis/confirmation), Trace (epidemiological survey/trace) and Treat (isolation/treatment). The 3T approach is also called “K-quarantine,” or a Korean quarantine model.

The government will use the roadmap to propose a total of 18 international standards to various international organizations, including the International Standard Organization (ISO).

The 18 proposals consist of six regarding the test stage, including the RT-PCR diagnostic method and drive-thru and walk-thru testing facilities; four regarding the trace stage, including the mobile self-diagnosis app; and eight regarding the treat stage, including the operation of non-hospital quarantine centers and medical resources management.

The roadmap also includes standardization plans for clinical data and materials gained from research and development on COVID-19.

The government will first put forward proposals for drive-thru and walk-thru testing facilities, self-diagnosis apps and non-hospital quarantine centers as they can be standardized immediately. For other areas that require research to develop a model formula, proposal will be presented gradually by the first half of 2022.

“The roadmap is meaningful as Korea is seeking to establish an international standard in coping with the outbreak of a fatal infectious disease, a project that has not been attempted before,” the government said in a press release. “By making K-quarantine an international standard, the nation will strengthen its global leadership and play a leading role in forming a new international order.”
Seoul Expects to Become Formal Member of Expanded G7

S. Korean President Moon Chooses U.S. over China by Accepting Invitation to G7 Summit

By Jung Suk-yee

President Moon Jae-in has accepted U.S. President Donald Trump's invitation to a G7 meeting. Amid the hegemonic rivalry growing between the United States and China, the South Korean government appears to be leaning toward the former, a staunch ally based on a security alliance.

Moon had a 15-minute phone call with President Trump on June 1. The U.S. president explained about his plan to host a gathering of G7 members and the other four or five nations in the U.S. as early as in September. Moon expressed support for the plan, saying he would attend the meeting.

The South Korean government appears to have decided to stand on the side of the United States in the face of the U.S.-China conflict, as Washington exercises enormous influence on South Korea's security. For South Korea, taking the side of the United States is in fact not a matter of choice, given that the two countries are tied by a blood alliance.

The decision is expected to raise Korea's status as a developed country in the midst of a new world order emerging following the outbreak of COVID-19, and give South Korea an upper hand in various pending issues that need to be addressed between South Korea and the United States including the defense cost sharing issue.

On the other hand, South Korea-China relations are expected to face a rough road. Recently, South Korea and China created a fast track to facilitate business trips by businesspeople of the two countries amid the COVID-19 crisis and officially announced Chinese President Xi Jinping's visit to Seoul within this year. However, it has become difficult for the two countries to continue this trend.

There is a possibility that China, which is bent on securing allies or friends amid the hegemonic competition, may protest the South Korean government’s decision or put political and economic pressure on South Korea in an indirect manner. If this kind of development takes place, the deterioration of South Korea-China relations can become a reality.

However, some analysts say that China may not react sensitively because the G7 summit will mainly deal with COVID-19 and economic issues. China may rather employ a strategy to attract South Korea to its side.

"China may feel uncomfortable about the United States establishing a network, but this does not seem likely to cause China to hit South Korea directly," said Shin Beom-chul, head of the Center for Security and Unification Studies at the Korea Research Institute for National Strategy.

Meanwhile, China has stressed that the United States’ expansion of the G7 should not be an attempt to bully China.

"It will not succeed if it is intended to leave China out in the cold," a Chinese Foreign Ministry spokesperson said on June 2 regarding the United States’ invitation of the leaders of South Korea, Russia, Australia and India to the G7 summit.

"This kind of behavior does not match the interests of the countries concerned."

"Chinese authorities seem to feel threatened by the United States’ move to attract neighboring countries to the G7," said a Korean source in Beijing. "In particular, they seem to feel uncomfortable with the participation of Australia, which is demanding an independent investigation regarding the origin of the COVID-19 virus, and India, a key player in the United State’s India-Pacific Initiative, which is intended to hold China in check."

A Multilateral Currency Swap Agreement Among ASEAN Plus Three

New CMIM Agreement Put into Effect

By Jung Suk-yee

A revised agreement of the Chiang Mai Initiative Multilateralization (CMIM) became effective on June 23.

The CMIM is a multilateral currency swap agreement of the ASEAN, South Korea, China and Japan. In the CMIM, South Korea can withdraw US$38.4 billion when there is a sign of a financial or currency crisis.

The Ministry of Economy and Finance said on June 23 that the 27 member organizations of the 13 member countries of the CMIM completed their signing on June 16 for the revised agreement to take effect on June 23. According to the agreement, each member country can provide its currency in exchange for the U.S. dollar when necessary and within a predetermined range.

The total withdrawal limit is US$243.5 billion and the exchange is on an inter-organization contract basis. South Korea contributed US$38.4 billion to the currency swap mechanism.
The South Korean government has decided to resume the process of filing a complaint with the World Trade Organization against Japan’s export restrictions. The process was temporarily halted in November 2019.

The Korean Ministry of Trade, Industry and Energy (MOTIE) announced on June 2 that it will file a complaint with the WTO against Japan’s measures to restrict exports of three key items -- EUV photoresist, fluoride polyimide, and hydrogen fluoride -- to Korea since July 2019.

The Korean government filed a complaint with the WTO in September 2019, but temporarily suspended it in November of the same year, citing the resumption of "export management policy dialogue" between the two countries.

The Korean government’s decision to resume the WTO proceeding was prompted by Japan’s virtual ignoring of the Korean government’s continued request to revoke the export restrictions. Since the resumption of the Korea-Japan export management policy dialogue, the MOTIE revised the Foreign Trade Act in March to strengthen export control of strategic materials that may be diverted to conventional weapons. In May, it expanded the organization in charge of trade security by appointing a trade security policy officer. These measures were intended to address the problems that Japan cited when it began imposing export restrictions in July 2019. "There was an answer to our ultimatum from the Japanese side, but it was not the one we wanted to hear," a MOTIE official said in a briefing.

Meanwhile, Japan’s Chief Cabinet Secretary Yoshihide Suga expressed his regrets. "We are very sorry for the Korean government's announcement as it was made at a time when export authorities of the two countries were in talks," he said. "The Japanese government's review of export management operations announced in July 2019 has been in line with the WTO agreement. We will continue to clarify Japan's position in the future."

The Japanese government uses the term "export management" instead of "export regulations" in describing its action, to avoid giving the impression that its measures are retaliatory against the Korean Supreme Court's ruling on compensation for Koreans who suffered forced labor by the Japanese government in the past.

"It is regrettable that Korea unilaterally announced the resumption of the WTO complaint process despite continued talks between authorities of both countries," Japanese Foreign Minister Toshimitsu Motegi said in a press conference later on the day.

Earlier, the Korean government urged Japan to clarify its position on the export regulations by May 31, saying it had addressed the matters cited by the Japanese government as reasons for tightening the export regulations. However, as the Japanese government did not give a sincere response, the Korean government officially announced that it would take the matter to the WTO.

Japanese companies are also suffering from the Japanese export regulations. Stellar Chemical, a hydrogen fluoride producer, saw its net profit drop 18 percent in 2019. Another company, Morita Chemical Industries, also saw its trading volume with South Korea drop 30 percent following the export regulations.
A Result of Japan Boycott by S. Koreans

South Korea’s Current Account Deficit with Japan on the Decrease

By Jung Suk-ye

The Bank of Korea announced on June 19 that South Korea’s current account deficit with Japan dropped from US$24.7 billion to a five-year low of US$18.82 billion in 2019.

According to the bank, this has to do with Japan’s export restrictions implemented in July last year to result in a decline in trade between the two countries. Since the measure, a large number of South Koreans have boycotted Japanese products and travel to Japan. The number of outbound tourists to Japan fell from 7.54 million to 5.58 million in 2019.

In the meantime, South Korea’s current trade surplus with the United States fell 10.6 percent to US$22.05 billion last year. The surplus had totaled US$41.5 billion in 2014 and fell for the fifth consecutive year. Especially, the goods account surplus reached a seven-year low of US$30.05 billion in 2019.

This has to do with declined exports of information and communications equipment, semiconductor products, and so on and increased crude oil and shale gas imports. South Korea’s goods imports from the United States hit an all-time high of US$61.44 billion last year. At the same time, South Korea’s primary income surplus reached a record high of US$8.03 billion as its interest income from investment in the United States went up.

Last year, South Korea’s current account surplus with China almost halved from US$47.37 billion to US$25.24 billion, the lowest since 2009. A decline in exports to China led to the substantial decrease although the services and primary income balances improved based on increases in tourism income and overseas investment income.

Specifically, South Korea’s goods exports to China fell 17.7 percent to US$116.29 billion due to a slump in the semiconductor industry and trade disputes between the United States and China. On the other hand, its service account surplus vis-à-vis China increased to US$2.97 billion, led by a tourism income of US$10.06 billion.

In 2019, South Korea’s current account surplus with Southeast Asia fell from US$93.91 billion to US$79.94 billion. The figures are the highest and the second-highest annual figures, respectively. South Korea’s goods account surplus with the region totaled US$75.31 billion, the third-highest in history, and its primary income surplus with the region reached a new high of US$6.54 billion. In addition, its service account surplus in relation to Southeast Asia rose from below zero to US$600 million as its tourism income from the region hit an all-time high.

Last year, South Korea’s current account deficit with the Middle East fell from US$61.29 billion to US$52.7 billion, led by lowered oil prices and less crude oil imports. The deficit with the European Union was US$6.09 billion, the lowest since 2013. In the same period, South Korea’s overseas direct investment added up to US$35.53 billion, the second highest in history. Its investment in the United States increased to US$10.02 billion and those in China and the European Union rose to US$5.05 billion and US$7.11 billion, respectively.

Japan’s Export Curbs Backfire

Japanese Newspaper Criticizes Japan’s Trade Retaliation against South Korea

By Jung Suk-ye

The Tokyo Shimbun reported on June 23 that Japan’s export curbs against South Korea that started a year ago have unexpectedly backfired and it is Japanese companies that are currently suffering.

“It was predicted that higher uncertainties on the supply side would lead to a significant impact on the South Korean economy, but South Korea’s semiconductor production has not been affected at all by the export curbs,” the newspaper reported, adding, “In response to the restrictions, South Korean companies have reduced their dependence on Japanese components and materials and diversified their supply sources and their successful efforts are not limited to those items subject to the restrictions.”

The newspaper also said that the export curbs have resulted in a prolonged boycott of Japanese products and travel to Japan in South Korea and companies such as Nissan and GU had to decide to withdraw from the South Korean market. “Doubts are rising about whether the Japanese government’s method was appropriate,” it pointed out.
Climbing 5 Notches to Place 23rd
South Korea Rises in IMD National Competitiveness Index

By Jung Suk-yee

The Ministry of Economy and Finance announced on June 16 that South Korea ranked 23rd out of 63 countries in this year’s IMD national competitiveness index. The country climbed five notches in one year, the greatest improvement since 2000. In the group of 28 countries with a population of at least 20 million, South Korea rose from eleventh to eighth, the highest since 2002.

In 2016 and 2017, South Korea stood at 29th, the lowest since the global financial crisis of 2008. In 2019, it came in 28th. Its lowest ranking, 41st, was in 1999 and its highest ranking, 22nd, was in 2011 to 2013. This year, South Korea remained at 27th in economic performance, rose from 31st to 28th in government efficiency, rose from 20th to 16th in infrastructure, and rose from 34th to 28th in business efficiency.

In the assessment category of business efficiency, South Korea moved up from 36th to 28th in labor market, led by strengthened education and training and an increase in economically active population. In the subcategory of management practices, it climbed from 47th to 36th based on improved trust in executives, improved corporate crisis response and more use of information technology in the process of business. In attitudes and values, South Koreans’ exemplary response to COVID-19 raised it from 25th to 15th. Railway extension and more support for venture firms contributed to its improvement in the category of infrastructure.

Meanwhile, South Korea improved its ranking only to 46th from 50th when it comes to corporate regulations. In addition, its productivity ranking remained at 38th. This year’s chart is topped by Singapore, which is followed by Denmark and Switzerland. China and Japan fell six and four notches to 20th and 34th, respectively.

The Bank of Korea announced on June 25 that South Korea’s labor productivity in the period of 2009 to 2017 fell 1.72 percentage points as compared with the period of 2002 to 2008.

Between the two periods, OECD member countries posted an average decline of 0.54 percentage point and those of Germany, the United States and Japan stood at 0.76 percentage point, 0.51 percentage point and 0.57 percentage point, respectively. The labor productivity of Britain rose 0.96 percentage point.

South Korea’s labor productivity decline was led by that of the manufacturing industry, which dropped 6.3 percentage points. Especially, the electronic component, automobile, other machinery and shipbuilding sectors of the industry showed a 10.3 percentage point decline in average annual labor productivity growth.

The labor productivity was affected more by large corporations than by smaller companies. Specifically, the former’s labor productivity dropped 7.9 percentage points while the latter’s fell 4.6 percentage points. This is because information technology and global value chain expansions reached saturation and restructuring of low-profitability companies showed little progress between 2009 and 2017.
Policies Focus on Fiscal Spending

Economists Criticizing Government’s Economic Policies for H2

By Jung Suk-yee

The South Korean government announced its economic policies for the second half of this year on June 1 and economists pointed out that the policies lack fundamental elements to revive the private economic sector.

“The policies focus on fiscal spending rather than deregulation and the government is planning to maintain employment by spending more rather than dealing with fundamental problems such as working hours,” said Dankook University professor Kim Tae-ki, adding, “When it comes to the supplementary budget bill to be submitted to the National Assembly on June 4, the IMF already warned that the South Korean government’s fiscal expansion is too fast and any other supplementary budget may lead to the so-called Korea discount.”

“It appears that the government is concentrating on maintaining the status quo and managing indices rather than overcoming the ongoing crisis and seeking new opportunities by restructuring,” Yonsei University professor Yang Joon-mo remarked, continuing, “The government’s measures for more reshoring and high-tech R&D center attraction cannot be effective unless the side and negative effects of its income-led growth policy are addressed.”

The economic policies include groundwork for universal employment insurance. Experts point out that the insurance is likely to cause significant problems down the road with the government’s employment insurance fund about to be exhausted.

The Korean economy is fast contracting as the negative impact of COVID-19 spreads across all industries, the Korea Development Institute (KDI) announced on June 8.

In its latest monthly economic trends report, the state-run think tank said that April’s all industry production dropped sharply on shrinking domestic and foreign demand.

Services production continued to slide by a large margin led by businesses relying on interpersonal contact, while manufacturing production sank significantly as the production of major export items remained stagnant due to the global economic recession.

May’s exports continued to rapidly decrease as external uncertainties mounted on intensifying political and economic tensions between the United States and China, the KDI said.

The overall contraction in industrial activities is affecting the job market, significantly diminishing the number of employed in April.

In particular, the number of employed posted huge losses in services (due to face-to-face interaction), small-sized workplaces with fewer than 30 employees, and among temporary and daily workers, the institute said.

COVID-19 Impact Spread Across All Industries

South Korean Economy Contracting Fast, KDI Says

By Jung Suk-yee

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In May, Korea shifted to a more relaxed ‘daily quarantine’ scheme as emergency disaster relief funds were provided to all households, partially reviving consumer sentiment.

On May 20, the institute forecast that the South Korean economy would grow 0.2 percent this year, the slowest pace since 1998, due to a sharp drop in exports and private consumption amid the COVID-19 pandemic.

In November 2019, the think tank projected the domestic economy to grow 2.3 percent in 2020.
Nominal GDP Reaches US$1.64 Tril. in 2019
South Korea’s Nominal GDP Ranking Falls
By Jung Suk-ye

The OECD announced on May 27 that South Korea recorded a nominal GDP of US$1,642,180 million in 2019, coming in 10th among 38 OECD member and major emerging economies. South Korea ranked eighth in 2018 and Canada and Russia came in eighth and ninth in 2019, respectively.

Nominal GNI Drops 2.0% on Year in Q1
Concerns Rise over S. Korea’s GNI Falling below US$30,000 Mark
By Jung Suk-ye

Hit hard by the COVID-19 pandemic, South Korea’s gross national income (GNI) per capita is showing a steep decline after seeing a downward trend since last year. The country celebrated its GNI per capita topping the milestone figure of US$30,000 for the first time in 2017.

According to Gross National Income: First Quarter of 2020 (Preliminary) report released by the Bank of Korea (BOK) on June 2, nominal GNI dropped by 2.0 percent in the first quarter of 2020 relative to the quarter before. This drop is the sharpest to be posted since the drop seen in the second quarter of 1998 when many Asian countries were struck...
hard by a financial crisis. GNI per capita, an index that represents the purchasing power of the country, is calculated by adding up all the income earned by a country’s residents, including the income earned outside the country. Real GNI, which reflects the price changes, also decreased by 0.8 percent compared to the previous quarter.

The sharp drop in the nominal GNI, which is used as an index to determine the national income per capita, has raised concerns that the GNI per capita for this year may not meet the symbolic US$30,000 mark. South Korea’s GNI per capita for 2017 was recorded at US$31,734, topping the $30,000 mark for the first time. In 2018, the figure reached $33,564. Since 2017, the country’s GNI per capita has been seeing a decline. GNI per capita of US$30,000 mark is regarded as the threshold for joining the ranks of advanced countries. If the decline in gross domestic product (GDP) and appreciation of the won continue due to the COVID-19 shock and other factors, there is a possibility that GNI per capita will indeed fall below the US$30,000 mark.

Park Yang-soo, director of the BOK’s economic statistics bureau, said, “If this year’s GDP deflator is similar to that of last year and real GDP growth rate is -0.2 percent, nominal GDP growth rate is estimated to stand at -1 percent.” He added, “If the won-dollar exchange rate remains in the range of between 1,250 and 1,260 until the end of this year, GNI per capita may fall below the US$30,000 mark.” First-quarter GDP deflator, which represents the extent of price level changes, fell by 0.6 percent year on year. GDP deflator has been recording negative growth for five quarters straight since last year’s first quarter.

Kang Sam-mo, professor of economics at Dongguk University, said, “The possibility of GNI per capita dropping to the US$20,000 range becomes higher if exports continue to struggle due to the COVID-19 pandemic.” He also added, “With the Korean government’s focus on distribution rather than growth, our economy has lost the motor to outperform the advanced economies. The current situation is a reflection of this policy failure.”

The Moon Jae-in administration’s populist fiscal spending is adding to concerns over national debts and its tax revenue shortfall estimated to reach 30 trillion won this year. The president remarked on May 25 that the current fiscal conditions are very sound, finance is a cure for the COVID-19 pandemic, and a tertiary supplementary budget exceeding the previous two needs to be prepared without delay.

The size of the tertiary supplementary budget is estimated at 30 trillion won whereas the previous two are 11.7 trillion won and 12.2 trillion won, respectively. Besides, the estimated size is larger than the all-time high of 28.4 trillion won recorded in 2009.

The ruling party and the government are planning to continue with their expansionary fiscal policy until next year. They are going to conduct fiscal soundness management in the mid to long term in step with the future recovery of the national economy and focus on welfare for a while in spending fiscal resources.

“In other words, the government’s current perspective is very short-sighted,” an expert pointed out, adding, “The government is already well aware of the fact that fiscal deficits and national debts are snowballing, and yet it is shifting the burden onto future generations.”

Assuming that the South Korean economy’s nominal growth rate for this year is 0 percent and the tertiary supplementary budget is 30 trillion won, the country’s sovereign debt-to-GDP ratio for this year is estimated to soar to 45 percent once the tertiary supplementary budget is finalized as scheduled next month.
The South Korean government announced a supplementary budget of 35.3 trillion won on June 3, increasing this year’s total supplementary budget to 59.2 trillion won. Over 58 percent of the amount will be prepared from deficit-financing government bonds and the issuance is estimated to top 110 trillion won this year.

In the third supplementary budget, five trillion won will be spent for companies and jobs at risk, 3.1 trillion won will go to key industries via the government’s bond market stabilization fund and special purpose vehicle for corporate bond purchase and 5.1 trillion won will be spent on its digital and green new deal projects.

Deficit-financing government bonds will constitute 58.3 percent of the three supplementary budgets. South Korea’s total debt is likely to reach 840.2 trillion won and its debt-to-GDP ratio is estimated to increase to 43.5 percent as a result. The government’s annual deficit-financing bond issuance is likely to exceed 100 trillion won for the first time in history. The amount was 34.3 trillion won in 2019. The government’s annual fiscal deficit excluding social security funds is predicted to soar from 37.6 trillion won to 112.2 trillion won.

Then, the ratio of the fiscal deficit to the GDP will go up from 1.9 percent to 5.8 percent, the highest since 1998. Likewise, the sovereign debt will increase from 740.8 trillion won to 840.2 trillion won and the sovereign debt-to-GDP ratio will jump from 37.1 percent to 43.5 percent to significantly exceed the pre-supplementary budget target of 39.8 percent. The fiscal authorities have tried for a while to keep the fiscal deficit-to-GDP and sovereign debt-to-GDP ratios below 40 percent and 3 percent, respectively.

A controversial issue is that spending directly related to more corporate investment stands at just 43 billion won in the third supplementary budget. In other words, the government’s 250 trillion won emergency financial assistance based on the 59.2 trillion won supplementary budgets is focusing on consumption promotion, employment stabilization, welfare, etc. Besides, the government has cut the national defense budget by approximately two trillion won to prepare the supplementary budgets.

In the meantime, the Bank of Korea’s potential market intervention is drawing much attention in relation to the deficit-financing government bond issuance. The central bank’s government bond purchase is likely to exceed 10 trillion won this year with government bond issuance predicted to more than double due to the massive supplementary budgets.

As a result of the third supplementary budget, this year’s net government bond increase amounts to 108.5 trillion won, including 97.6 trillion won of deficit-financing bonds. For reference, the net increase was 44.5 trillion won and the sum of deficit-financing bonds was 34.3 trillion won in 2019.
Government Debt Increases by 111 Tril. Won in Just 6 Months

South Korea’s Fiscal Soundness Deteriorating Too Fast

By Jung Suk-ye

Concerns are mounting over South Korea’s fiscal soundness as this year’s three supplementary budgets worth a total of 60 trillion won are leading to an increase in government debt of no less than 111 trillion won in just six months.

The concerns have to do with South Korea’s extremely low fertility rate and the rapid aging of the population. According to Statistics Korea, the ratio of those aged at least 65 to the population is estimated to rise from 14.9 percent to 46.5 percent from 2019 to 2067. In addition, the working age population is estimated to fall 10 percent from 37.57 million from 2017 to 2029.

The demographic trend is likely to keep putting pressure on the country’s fiscal conditions. Especially, the South Korean government’s debts have shown a substantial increase since the outbreak of COVID-19 and its restorability is being doubted by many. For example, the budget required for the basic old-age pension is estimated to soar from 14.7 trillion won to 127.5 trillion won from 2019 to 2050.

The government debt already increased from 728.8 trillion won to 840.2 trillion won in just six months as a result of the third supplementary budget. At the same time, the fiscal deficit-to-GDP ratio rose to 5.8 percent. According to fiscal experts, South Korea’s government debt ratio, which is approximately 40 percent now, will skyrocket to 60 percent or 70 percent within a short period of time.

Jobseekers Allowance Payment Tops 1 Tril. Won in May

Unemployment Payouts Soaring

By Jung Suk-ye

The Ministry of Employment and Labor announced on June 8 that the jobseekers allowance payment totaled 1,016.2 billion won last month, up 33.9 percent from a year ago, with the number of jobseekers allowance applicants increasing 32.1 percent to 111,000. The figures are the largest May figures since 1998.

The monthly payment reached a new high of 781.9 billion won in February this year and has continued to increase since then. The South Korean government is increasing related budgets in a hurry with concerns mounting over the exhaustion of the employment insurance fund.

The payment totaled 4,424.4 billion won and the income of the employment insurance fund totaled 4,143.9 billion won, including transfers from general accounts of 580.2 billion won, for the first five months of this year. In other words, the income of the fund is insufficient for payment and the employment insurance fund is likely to post another deficit this year after last year’s 2,087.7 billion won. The ministry has increased the budget for the payment from 9,515.8 billion won to 12,909.6 billion won in the government’s third supplementary budget bill for this year.

At present, the COVID-19 pandemic is leading to an employment crisis in the younger generation and the manufacturing sector in particular. For example, the number of employment insurance policyholders in the manufacturing sector fell 54,000 to 3,529,000 last month. The number has continued to decrease since September last year and last month’s decline is the biggest since January 1998.

The number in the service sector increased 194,000 to 9,437,000 after an increase of 192,000 in the previous month. Healthcare, welfare and public administration account for most of the increment, which means the slight improvement was led by the public rather than private sector.

By age group, the numbers of policyholders in their 20s and 30s respectively fell 2.6 percent and 1.8 percent year on year unlike the numbers of those in their 40s, 50s and 60s. This is because companies have suspended hiring of both part-time and full-time workers in the wake of COVID-19.
The Ministry of Economy and Finance announced on June 19 that South Korea’s foreign direct investment totaled US$12.62 billion in the first quarter of this year, down 15.3 percent from a year ago. The investment fell little in January and February but dropped 45.6 percent year on year in March.

Korean FDI net outflows in the first quarter were US$10.35 billion as US$2.08 billion was flowed back. The figure represented a 21.4 percent drop. The net investment in the financial and insurance sector was US$3.6 billion, followed by manufacturing (US$2.6 billion), real estate (US$2.02 billion), electricity and gas supply (US$1.5 billion) and wholesale and retail (US$1.11 billion). The investment from the financial and insurance sector fell 31.3 percent in the wake of COVID-19 and that from the manufacturing sector dropped 55.4 percent due to base effects and global demand contractions.

On the other hand, that from the real estate sector increased 23.9 percent based on large-scale investments in North America and Europe and that from electricity and gas supply jumped 694 percent based on a state-run energy company’s liquefaction plant investment in Canada.

In the first quarter, South Korea’s direct investment in the United States fell 7.1 percent year on year to US$3.58 billion whereas that in Canada increased 134.6 percent to US$1.37 billion. Those in the Cayman Islands fell 17.2 percent to US$1.08 billion, Singapore fell 20.4 percent to US$860 million, Vietnam fell 16 percent to US$790 million, China fell 56.7 percent to US$730 million, and Hong Kong fell 74.9 percent to US$170 million.

The investment in North America totaled US$4.95 billion (39.2 percent), followed by Asia with US$3.56 billion (28.2 percent), Europe with US$2.35 billion (18.6 percent) and Latin America with US$1.37 billion (10.8 percent).

As for recouped investments, financial and insurance, real estate and manufacturing posted US$1.14 billion, US$270 million and US$250 million, respectively. Those recouped from the Cayman Islands, the United States and Britain added up to US$590 million, US$400 million and US$180 million, respectively.

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Singapore Emerges as Top Investor in Vietnam

S. Korea Relegated To 5th Place in Foreign Investment in Vietnam

By Michael Herh

South Korea has been relegated to fifth place in terms of the amount of investment in Vietnam.

The amount of foreign direct and indirect investment made in Vietnam until May 20 this year reached US$13.89 billion, down about 17 percent from the same period of 2019, according to Vietnam's Ministry of Planning and Investment (MPI) and local media outlets including VN Explorer on June 2. Singapore turned out to be the biggest investor in Vietnam, followed by Thailand, China and Japan.

In 2019, Korea was the largest investor in Vietnam. In that year, Korea invested a total of US$7.92 billion in Vietnam, reclaiming the top spot in three years.

Foreign investment in Vietnam fell as indirect investments including equity investment and stock purchases plummeted 60.9 percent on year to US$2.99 billion. The amount of fresh foreign direct investment (FDI) in Vietnam totaled US$7.44 billion, up 15.2 percent from the previous year. The amount of subsequent FDI hit US$3.45 billion, up 31.4 percent from 2019.

Vietnam's largest FDI attraction in the first five months of 2020 is a US$4 billion wind power plant construction project in the southern province of Bac Lieu.

Vietnamese Prime Minister Nguyen Xuan Phuc said at a recent meeting that Vietnam should attract FDI by focusing on leading companies and high-tech companies by industries. He also stressed the need to create a business-friendly environment.
Semiconductor Exports Increase 7.1%

Exports from South Korea Drop Over 23% in May

By Jung Suk-yee

The Ministry of Trade, Industry and Energy announced on June 1 that South Korea’s exports totaled US$34.86 billion last month, down 23.7 percent from a year ago, with the average daily exports falling 18.4 percent year on year to US$1,621 million.

South Korea posted a trade surplus of US$440 million in May after a trade deficit of US$1.39 billion in April. Last month, its exports fell US$1.7 billion and imports fell US$3.5 billion compared to the previous month.

Its semiconductor exports increased 7.1 percent in May to show a positive growth for the first time in 18 months. The exports for use in PCs and servers increased whereas those for use in smartphones decreased. Computer exports increased 82.7 percent and biotech and healthcare product exports increased 59.4 percent from a year earlier.

On the other hand, automobile and auto parts exports dropped 54.1 percent and 66.7 percent, respectively. Likewise, general machinery, petroleum product, display, steel and textile exports dropped 27.8 percent, 69.9 percent, 29.7 percent, 34.8 percent and 43.5 percent.

By export destination, those to the United States, the European Union, the ASEAN region and China fell 29.3 percent, 25 percent, 30.2 percent and 2.8 percent, respectively.

The South Korean government announced on June 14 that exports from the information and communications technology (ICT) sector totaled US$13.93 billion last month, down 2.6 percent from a year ago. Korea’s ICT exports fell year on year for the second consecutive month.

Semiconductor exports added up to US$8.15 billion, up 6.5 percent from a year earlier and up 12.3 percent from the previous month. Specifically, memory chip exports rose 9.8 percent to US$5.78 billion based on increasing demands for those for use in servers and PCs. Likewise, system-on-chip exports rose 5.3 percent to US$1.94 billion. In addition, exports of computers and peripherals jumped 73 percent year on year to US$1.22 billion.

On the other hand, display exports fell 21.2 percent to US$1.28 billion due to mass production of LCDs in China and a decline in OLED demand. The exports fell for the 21st consecutive month. Mobile phone exports dropped 21.5 percent to US$730 million due to a decline in smartphone demand.

Previously, the overall exports from the ICT sector increased 8.2 percent and 1.1 percent year on year in February and March, respectively. However, the exports dropped 15.3 percent in April.

Exports to China totaled US$7.27 billion, followed by those to the United States (US$1.74 billion), Vietnam (US$1.71 billion), the European Union (US$850 million) and Japan (US$300 million). Those to China and the United States increased unlike the rest.

Last month, South Korea’s ICT imports added up to US$8.92 billion, down 7.8 percent from a year ago. Mobile phone imports rose 6.5 percent and those of computers and peripherals increased 34.2 percent whereas semiconductor and display imports fell 14.8 percent and 11.9 percent, respectively.
The Korea Economic Research Institute (KERI) said on May 25 that the consumer-oriented manufacturing sector should not be subject to the digital tax the OECD is currently working on.

In October last year, the Secretariat of the OECD decided on taxation rights granted to cover market jurisdictions and proportional allocation of taxation rights by country in relation to excess profits in order to promote international negotiations related to digital taxes. The OECD is likely to come up with a digital tax imposition plan late this year and introduce the taxes within three years.

During the OECD discussions, general manufacturers as well as digital services were included in the taxation objects and member countries agreed on digital tax application to global manufacturers with sales of at least 750 million euros. Specifically, the newly added objects include hotel and restaurant franchises and companies manufacturing computers, consumer electronics, mobile phones, automobiles, cosmetics and clothes, which include major South Korean companies such as Samsung Electronics and Hyundai Motor Group.

According to the institute’s report published on May 25, the digital taxes South Korean companies are to pay abroad are likely to exceed the digital taxes to be paid by foreign companies in South Korea. “The South Korean government needs to raise a question as to the appropriateness of the taxation,” the institute pointed out, adding, “The purpose of digital taxes is to prevent tax avoidance by global IT companies and the inclusion of non-IT manufacturers is against the purpose.”

The institute also called for the government to work with Asian countries so that the inclusion does not actually occur. “The OECD agreement is absolutely disadvantageous for Asian countries such as South Korea, China, India, Japan and Vietnam, which are home to a lot of consumer-oriented companies, and South Korea’s tax sovereignty may be infringed upon by the United States and the European Union,” it went on to say.

As discussions on the introduction of the so-called “Google tax” led by the Organization for Economic Cooperation and Development have been delayed, countries around the world are arbitrarily introducing their own versions of “digital service tax.” Concerns are being raised that introduction of such a tax in foreign countries will weigh on Korean digital service companies such as Naver and Kakao.

The Federation of Korean Industries (FKI) held an annual meeting of the Korean Committee of Business at OECD (BIAC), an economic advisory body under the OECD, on June 24 to discuss the matter. The digital tax is a tax designed to tax global IT companies that generate sales without fixed business sites. Although the OECD is working to draft a guideline by the end of this year, it is likely to take four to five years to implement the tax due to a conflict of interests among member countries.

In response, governments in many countries are unilaterally introducing their own versions of the digital service tax and imposing it on sales of online advertisements and data. FKI says that India, Indonesia, Thailand and Vietnam have introduced or want to introduce digital service tax or similar withholding tax. The FKI, in particular, said that the scope of taxation in Asian countries where many Korean companies have entered will be wider as it covers overall digital products and services such as software and videos.

Lee Kyung-geun, a member of the BIAC’s Taxational Policy Group, pointed out that this move will likely to raise concerns over double taxation. Under an agreement to prevent double taxation, tax deductions can be made in Korea if income and corporate taxes are paid overseas, but digital service tax is close to indirect tax imposed on sales so can hardly be deducted.
High Wages Hinder Reshoring

South Korean Government to Promote Reshoring

By Jung Suk-ye

The South Korean government announced a series of reshoring promotion plans on June 1. According to the plans, a business income tax cut will be applied to companies reshoring by domestic business place expansion whereas the same tax cut has been applied to those reshoring by reducing a place of business abroad and opening a new place of business in South Korea. In addition, a corporate tax cut proportional to overseas production curtailment will be available on certain conditions.

Subsidies to cover reshoring companies’ facility investments and relocation costs have been prepared. Specifically, the amount per business place is 20 billion won in non-capital areas and 15 billion won in the case of high-tech companies returning to the capital area. In addition, companies with a trade-to-sales ratio of 20 percent or more, instead of 30 percent or more, can be located in port hinterland complexes and more assistance will be provided for reshoring companies wishing to be located in industrial complexes.

Also, the government is planning to accelerate smart manufacturing and industrial robot popularization by increasing the upper limit of its financial assistance to that end from 300 million won to 500 million won per reshoring company. Reshoring material, component and equipment exporters can be provided with guarantee in relation to capital expenditures and visa-related assistance will be given so that reshoring companies can bring their employees in.

Experts point out that the outcome of the measures may fall short of expectations. “Many South Korean companies outside their home country have already established industrial ecosystems there and the high wages in South Korea, the biggest hindrance to their reshoring, still remain as they are,” the Korea Economic Research Institute explained, adding, “This means the government’s reshoring efforts need to focus more on a slower increase in labor cost and higher labor productivity.”

Third Application for Immigrant Workers Available from June 1 to 15

S. Korean Government Tightens Screening of Immigrant Workers

By Jung Suk-ye

The Korea Federation of SMEs announced on May 31 that this year’s third application for immigrant workers would be available from June 1 to 15.

The foreign worker quota for that period is 6,026 consisting of those from the 16 countries including Nepal, Myanmar, Bangladesh, Vietnam, Sri Lanka, Indonesia, Uzbekistan and Cambodia. Small and medium-sized enterprises that already made a request 14 or more days ago can submit their applications on the official website of the Ministry of Employment and Labor.

The South Korean government temporarily banned the entry of foreign workers in April this year, in order to block the spread of COVID-19, with the only exception of those previously permitted and without COVID-19 symptoms.

This time, the government extended the period of stay of those whose period expires between April 14 and June 30 by 50 days without exception so that a shortage of workers can be minimized. According to the government, the newly entering workers will be dispatched to manufacturers after online job training, two-week self-quarantine and thorough infection prevention measures.
Consumers to Get Exchanged Foreign Currencies Delivered

Korean Government Unveils Foreign Exchange Service Innovation Plan

By Jung Suk-ye

Consumers will be able to receive exchanged foreign currencies at home via parcel delivery service or at parking lots. Also, consumers will be allowed to withdraw money transferred from overseas via automated teller machine (ATM) at any time of the day.

Deputy Prime Minister and Finance Minister Hong Nam-ki announced on June 4 the measures for innovation in foreign exchange policy through increased convergence and contactless solutions at the innovative growth strategy meeting.

Plans for innovation in foreign exchange policy include enhancing convergence and contactless services, introducing measures to rapidly review regulations for new businesses and providing exemptions, promoting fair competition among foreign exchange service providers, and streamlining foreign exchange transaction processes and increasing the efficiency of supervision.

As for expanding convergence and contactless services, customers will be allowed to consign money exchange or remittance to a third party under the extent that such actions do not violate the anti-money laundering law or the real-name financial system. Under the eased rules, new type of services can emerge among service providers through cooperation such as sharing the remittance network.

Until now, customers had to visit currency exchange shops located within banks or airports to exchange foreign currencies. Now, channels through which customers can exchange foreign currencies have widened to include financial companies such as brokerages, insurers, airlines, duty-free shops, and parcel delivery companies. Customers will also be able to withdraw the exchanged money via ATM.

A remittance brokerage system will be introduced to provide more opportunities for small-sized remittance companies. With the newly introduced system, remittance companies that do not have any partner companies in countries to which the customer wishes to transfer money will be able to provide the service by sharing the remittance network.

To help fintech companies easily exchange foreign currencies and transfer money, another form of transferring or exchanging money besides the traditional method of transferring money from an account to another account is allowed. Small-sum overseas remittance service will be available via ATM or at bank counters.

Moreover, when fintech companies start a new business, the government will check within 30 days whether the business is subject to regulations. If needed, deregulation will be applied across the industry. This process of speeding up the government review was applicable only to companies that applied to regulatory sandbox.

Competition among foreign exchange service providers such as banks and non-monetary institutions will be promoted. Foreign exchange transaction process will be much more streamlined to enable ‘foreign exchange by a third party’, through which a foreign investor can exchange currencies through securities companies instead of banks. As of now, foreign exchange process for foreign investors is handled by banks only after the foreign investor opens a bank account under his name and transfers the money to his account.

With the streamlined process, the foreign investor can simply transfer the money to his account created at a securities company where the money will be exchanged into a foreign currency. Securities companies and credit card companies can handle money transfers of small sum – up to US$5,000 per transaction and US$50,000 per customer annually. However, exceptions are made for cases in which a large amount of money can be transferred by small-sum remittance companies to overseas partner companies.

Foreign exchange transaction processes will be much more simplified as well. When a customer exchanges money to another currency for the first time, if the customer has reported the transaction in advance, simple changes in the customer’s profile such as the customer’s business name, customer’s name and address can be reported after the transaction has been made. The government plans to finish revising the enforcement decree of the Foreign Exchange Control Act and related regulations by this September.
Korean EV Battery Manufacturers Strengthening Global Alliances

By Jung Min-hee
The growth of the electrical vehicle (EV) market should bolster the rechargeable battery industry. In particular, battery firms that are constructing facilities close to EV production centers are expected to emerge as attractive sourcing players.

At present, sales of Korean EVs are increasing fast in Europe in particular under stricter carbon dioxide emission regulations. In January this year, a total of 44,361 EVs, up 149 percent from a year earlier, were sold in Germany, France, Britain, Italy and Sweden. The sales volume increased 138.4 percent to 16,131 units in Germany and jumped 145.5 percent, 490.5 percent and 93.4 percent in France, Britain, Italy and Sweden, respectively.

The global EV battery demand is increasing, too. The rechargeable battery demand is expected to increase from 211GWh in 2020 to 1,390GWh by 2025. The demand for rechargeable batteries for xEVs (passenger vehicle basis) is forecasted to grow from 118GWh in 2020 to 1,012GWh by 2025. The xEV portion of rechargeable battery demand is estimated to climb from 56% in 2020 to 73% by 2025.

Considering automakers’ efforts to boost driving ranges for xEVs, demand for xEV rechargeable batteries might surpass current projections. Major automakers have announced their plans to launch long-range xEVs that require adoption of high capacity rechargeable batteries.

Battery firms that are constructing facilities close to EV production centers are expected to emerge as attractive sourcing players. Accordingly, the capacity expansions for major domestic rechargeable battery makers such as LG Chem, Samsung SDI, and SK Innovation are expected to concentrate in Europe and the US to strengthen their influence in the rechargeable battery market. The Europe and North America portion out of Korean rechargeable battery makers’ total production capacity is to rise from 38% in 2020 to 51% by 2025. The Europe and North America portion out of the global xEV market is expected to climb from 36% in 2019 to 55% by 2025. Considering their production bases in the European and North American market which would to take up around a half of global demand, domestic rechargeable battery makers are expected to enjoy a more than 40% share of the global market.

Three Korean Battery Makers Continue Massive Investment

The three major Korean electric vehicle (EV) battery manufacturers will continue to invest in production facilities aggressively in 2020.

The three major Korean electric vehicle (EV) battery manufacturers — LG Chem, Samsung SDI, and SK Innovation — invested a total of seven trillion won in production facilities in 2019. They are determined to continue to invest aggressively in 2020.

Last year, LG Chem invested 3.9 trillion won, more than twice its investment in the previous year. Samsung SDI also spent 1.59 trillion won, which was a bit smaller than its invest-
SK Innovation publicly discloses facility investments every two years. It invested 2.29 trillion won in facilities for the battery business in 2018 and 2019. Considering that the amount spent in the previous two years (2017-2018) was 879 billion won, the company’s investment in 2019 is estimated to have exceeded 1.5 trillion won.

The aggregate investment made by the three companies in 2019 represented an increase of 3 trillion won compared to 2018 (about 4 trillion) and the largest amount ever. Battery cells, like semiconductors, require large-scale facility investment.

The three Korean battery makers are expected to make large-scale investments in 2020. LG Chem has already announced that it plans to invest 3 trillion won in facilities this year. The company recently purchased a site in Poland to expand its battery plant. It plans to increase the Polish plant’s output from the current 100 GWh to 120 GWh by 2021, which can charge about 2.4 million EVs.

In particular, LG Chem has started to inject capital into a battery joint venture with GM. LG Chem invested US$35.29 million in Ultium Cells in April. LG Chem and GM announced in December 2019 their plans to invest a total of 2.7 trillion won in the battery joint venture, with LG Chem investing one trillion won over four years until 2023. LG Chem has started to make full-fledged investments in Ultium Cells.

When the Ultium Cells plant goes into operation, LG Chem will secure two production bases in the United States. The production capacity of its plant in Holland, Michigan is 5 GWh per year. Ultium Cells' production capacity is 30 GWh per year. The company will also expand its battery production capacity in Asia and Europe. It plans to build a joint venture battery plant with a production capacity of 10 GWh by the end of 2021 with Chinese automaker Geely. Its Wroclaw plant in Poland will increase its production capacity to 60 GWh per year through expansion.

Accordingly, LG Chem's battery production capacity will expand to 200 GWh in 2023, which can charge 3.3 million pure electric vehicles that can run 380 kilometers on a single charge.

SK Innovation also has an order backlog worth 60 trillion won, and plans to increase battery production more than 10 times in two years to meet the orders. The company is investing in facility expansion in the United States and Europe.

Recently, SK Innovation has decided to invest US$727 million to build a second electric vehicle (EV) battery plant in Georgia, the United States. SK Innovation’s board of directors approved on April 28 the company’s plan to invest in SK Battery America (SKBA), an electric vehicle battery subsidiary. SK Innovation additionally acquired 7,270 shares of SKBA, a wholly owned subsidiary, for 894.4 billion won.

SK Innovation started the construction of the first plant, which has an annual capacity of 9.8 GWh, in Georgia, the United States in 2019. The capacity of the second plant is 11.7 GWh per year. Ground will be broken in July 2020, with mass-production scheduled to start in 2023.

The construction of the second plant will cost a total of US$1.5 billion (1.8 trillion won). SK Innovation has thus far finalized 3 trillion won investment in the U.S. battery factories. In the long term, it will invest up to US$5 billion (about 6 trillion won) in its U.S. production base.

SK Innovation will have a production capacity of 21.5 GWh in the United States when the two plans are completed in 2023, with its global production capacity expected to rise to 71 GWh by then.

The company is expanding its production bases not only in the U.S. but in Europe, China and Korea. Its goal is to become one of the world's leading producers of electric vehicle batteries with an annual production capacity of 100 GWh by 2025.

Intensifying Competition in Global EV Battery Market

Korean battery makers had stayed at the top spot in the battery market until several years ago, but have been pushed back by their Chinese competitors backed by the Chinese government. Chinese competitors have waged a price war. According to market research firm SNE Research, the three Korean companies’ combined market share exceeded 40 percent for the first time in February. This was largely due to the contraction of the Chinese domestic market arising from the end of the electric vehicle subsidy policy in China.

In April, CATL came in first in the global EV battery market with a 34.9 percent share, followed by LG Chem with 18.2 percent, Panasonic with 13.4 percent and BYD with 10.2 percent.
SK Innovation and Samsung SDI placed 5th and 6th, respectively. LG Chem alone grew 6.9 percent among the top 10 companies thanks to strong sales of Tesla’s ‘Model 3.’

During the January-April period, LG Chem maintained the top spot with 25.5 percent, followed by Panasonic with 22.9 percent and CATL with 21.0 percent. Samsung SDI placed 5th with 5.6 percent and SK Innovation 7th with 4.2 percent.

Chinese battery makers have seen their market shares tumble since 2019 when the Beijing government began to reduce subsidies for EVs powered by Chinese batteries. This helped Korean battery makers to stably supply their products. CATL and Guoxuan suffered a 36.1 percent and 48.5 percent drop, respectively, in the usage amount of their EV batteries in the first quarter compared to 2019, market research firm SNE Research said. During the same period, LG Chem, Samsung SDI, and SK Innovation enjoyed a 117.1 percent, 34 percent and 108.5 percent increase, respectively.

Now, Chinese EV battery makers are preparing to strike back at Korean EV makers by strengthening cooperation with global automakers. Volkswagen Group in Germany has reportedly decided to acquire a 26.5 percent stake in Chinese battery maker Guoxuan for 1.1 billion euros. Guoxuan is a Chinese company that ranked 9th in the global EV battery market in the first quarter of 2020 with a 1.2 percent share. Volkswagen will become the largest shareholder of Guoxuan.

Teslas has also recently asked the Chinese government to approve its Model 3 loaded with CATL batteries. Until now, Tesla has only used LG Chem’s batteries for Model 3 produced in China. According to the China Passenger Car Market Information Association (CPCA), Tesla enjoyed a 20 percent share of the eco-friendly vehicle market in China in March, helping LG Chem rank first in the global EV battery market.

Some industry experts are concerned that the Chinese companies’ counterattack will weaken the positions of South Korean battery companies. However, others say that the impact will be limited as automakers’ moves are based on the unique characteristics of the Chinese market. “We believe that the Chinese government probably told Tesla at the time of its entry into the Chinese market that it needs to adopt CATL batteries someday,” said an industry analyst.

In fact, CATL batteries are used for the Standard (SR), a low trim model of Tesla’s Model 3 in China. Long Range (LR) trim models which require a higher level of technology are loaded with LG Chem's batteries. It is highly likely that Guoxuan's batteries will also be supplied to a model to be launched by SAIC-Volkswagen, a joint venture between Volkswagen and SAIC of China, rather than Volkswagen's global electric vehicle models.

South Korean battery makers are responding by setting up joint ventures in China. BAIC’s premium electric sport utility vehicle (SUV) called the Alpha-T will be loaded with batteries from BEST, a joint venture between SK Innovation and Beijing Automotive Group. As BEST is a joint venture with a Chinese company, it can enjoy subsidies from the Chinese government. LG Chem is also working with China’s Geely Automotive to build an EV battery plant, which will be completed by the end of 2021.

South Korean battery makers are also concentrating their efforts on Europe, which is expected to become the largest EV market beyond China in 2022. LG Chem is expanding its battery plants in Poland. So are Samsung SDI and SK Innovation in Hungary. "Even if Korean battery makers’ market shares in China decreases, there will be no significant change in the long term as their market shares in Europe and the U.S. will grow," said an industry analyst.

In particular, CATL is stepping up efforts to expand its global market share. It has joined hands with global EV manufacturers such as Tesla and GM and has started building a research and development center. CATL has started building ‘21C Lab’ in Ningde, Fujian Province in China where its main office is located. The company will invest 3.3 billion yuan to build the R&D center, which will go online by the end of 2021.

The Chinese company is bracing itself for a duel with three Korean battery makers — LG Chem, SK Innovation, and Samsung SDI — which are pouring trillions of won to take control of the battery market.

Global EV manufacturers looking to enter the Chinese market are carefully monitoring CATL’s moves. Tesla is going to use batteries from CATL in addition to LG Chem for its Model 3 at the Shanghai plant. While LG Chem supplies high-tech NCM batteries, CATL supplies low-tech LiFePO4 (LFP) batteries. LFP batteries are low in output but cheap in price. Tesla chose them as it began to expand its product lineup in the Chinese market.

CATL is developing high-efficiency batteries in cooperation with Tesla. Some predict that Tesla may roll out EVs loaded with these batteries as early as the end of 2020. "For Tesla, the world's No. 1 electric vehicle maker, collaboration with Chinese companies such as CATL is essential to enter the Chinese market," said a battery industry insider. "With the Chinese government restricting foreign battery makers from entering the Chinese market by using subsidies, Korean companies will face difficulties in expanding their market shares even though they are superior in technology."

CATL is expanding its presence in the global market by securing customers ranging from BMW and Volkswagen to GM which struck a deal with CATL in May.
Hyundai Motor Seeking to Forge Korean EV Battery Alliance

Hyundai Motor announced its “2025 Strategy” to investors at the end of 2019. The automaker pledged to invest 10 trillion won in the electric vehicle sector over the next six years. The figure represented one sixth of its overall investment during the period. It plans to sell 560,000 electric vehicles (EVs) in 2025, becoming the world’s No. 3 in this sector.

Kia Motors announced its mid-to long-term strategy “Plan S” earlier this year. It pledged to invest 29 trillion won over the next six years to increase its EV models to 11 by 2025 and scale up the share of EVs in its total sales to 12.3 percent.

In the global EV market, the Hyundai-Kia group has already achieved remarkable results. The group ranked 15th in EV sales in 2014, but the ranking jumped to 5th place in 2019. According to global automotive market research firm MarkLines, the Global EV sales stood at 290,436 units in the first quarter of 2020. Among them, the Hyundai Motor’s group sales’ volume stood at 24,116 units, securing over 9 percent share of the global EV market and placing fourth after Tesla (88,400), Renault and Nissan Alliance (39,355), and Volkswagen Group (38,460). Their Combined sales are expected to exceed 30,000 units in 2021.

In particular, Hyundai Motor and Kia Motors are considered to be at the world’s highest level in terms of mileage, excluding Tesla. Tesla vehicles swept the first to third spots in a mileage test held by Hybrid Cars, a U.S. media outlet focusing on hybrid cars, in 2019. Hyundai’s Kona and Kia’s Soul and Niro took 4th to 6th places, respectively. The Chevrolet Bolt and Nissan Leaf were ranked behind the Hyundai and Kia models.

Moreover, beginning January 2021, Hyundai and Kia will launch EVs produced through the Electric-Global Modular Platform (E-GMP). Auto industry insiders say that using an internal combustion engine platform to produce EVs is inefficient in space allocation and disadvantageous in improving fuel economy. In the end, a platform for EVs only is needed. They say that Hyundai and Kia are ahead of competitors in this aspect.

Many policies are being announced to use the Covid-19 virus as strong momentum to expand electric vehicles around the world. Taking advantage of this trend, Hyundai Motor plans to launch its first next-generation electric vehicle (Project Name: NE) next year. The model will be based on e-GMP, an EV-only platform. The EV-only platform can increase battery spaces and mileage compared to current internal combustion engine-based platforms. In the long run, the cost structure will also be streamlined to ensure the quality and price competitiveness of vehicles. Starting with the NE in 2021, Hyundai Motor will expand its lineup of electric vehicles to 14 models by 2025. Kia also plans to increase the number of electric vehicle models to 11 during the same period. Hyundai and Kia believe that they can catch up with Tesla with various EV models.

Hyundai and Kia will launch a total of 44 green vehicles by 2025, with more than half of them being pure EVs. Currently, LG Chem batteries go into Hyundai EVs, and SK Innovation batteries power Kia EVs. Hyundai and Kia selected SK Innovation as the main supplier of batteries for their pure EVs, which are expected to be mass-produced in early 2021, and will place a 10 trillion won order for about 500,000 batteries for five years.

Securing stable and leading suppliers of batteries holds the key to securing a smooth flow of electrification. For this, Chung Eui-sun, senior vice chairman of Hyundai Motor Group, met with Samsung Electronics vice chairman Lee Jae-yong, extending the group’s business connection to Samsung SDI in addition to LG Chem and SK Innovation both of which have thus far worked with Hyundai and Kia.

On May 13, Chung Eui-sun, senior vice chairman of Hyundai Motor Group, met Lee Jae-yong, vice chairman of Samsung Group, and agreed to cooperate in fostering the EV industry, which has been selected as one of the key projects of the “Korean-style New Deal.” This marked the first time that the heads of the two groups representing Korea met face to face for business cooperation. On the day, Hyundai Motor Group’s top executives visited Samsung SDI’s Cheonan plant and talked with Samsung Group top executives. They shared views on the current status of the development of all-solid-state batteries, which are next-generation EV batteries.

Recently, the Samsung Advanced Institute of Technology unveiled through Nature Energy its innovative technology for all-solid-state batteries that enable EVs to run up to 800 kilometers on one single charge. This technology is the world’s first precipitation type lithium cathode technology that applies a five-
vice chairman Lee Jae-yong and LG chairman Koo, a battery alliance among the four major conglomerates, led by Hyundai Motor Group, will become a reality.

Three Korean EV Battery Makers Employ Different Strategies

The three South Korean EV battery makers have begun to differentiate their strategies to penetrate global markets. LG Chem is making a foray into the fast-growing European EV market with fast-paced investment, while SK Innovation is making efforts to expand its presence in the Chinese market based on a joint venture with a local Chinese automaker. Samsung SDI is expected to quickly increase its market share through cooperation with Hyundai Motor and Kia Motors.

LG Chem is expected to achieve the biggest growth among global battery manufacturers for three years starting 2020. Baek Young-chan, a researcher at KB Securities, predicted that sales and operating profit of LG Chem's battery division will grow 37.7 percent and 59.9 percent between 2021 and 2022, respectively, outperforming its rival CATL of China. LG Chem ranked first in global EV battery market share in the first quarter and is likely to maintain its lead for the time being.

This is because the EV market in Europe is growing rapidly. In 2019, sales of EVs in the world broke down into 55 percent in China, 30 percent in Europe, and 15 percent in the United States. But many experts forecast that Europe, China and the United States will account for 50 percent, 40 percent, and 10 percent, respectively, in 2022.

LG Chem supplies batteries to Audi, Daimler, Renault, Volvo, Volkswagen and Jaguar. It has an estimated 70-plus percent share of the EV battery market in Europe.

SK Innovation is pinning its hopes on the Chinese EV market, which is recovering rapidly from the new coronavirus crisis. China's Beijing Automotive Industry Holding Co. will launch its premium brand 'Arc Fox' and its electric sport utility vehicle 'Alpha-T' in September 2020. They will be loaded with batteries produced by 'Best,' a joint venture between SK Innovation and Beijing Automotive Group. "The Alpha-T will be able to become a rival horse of the Tesla in the Chinese EV market as it is made in China and can run 653 kilometers on one single charge," said an industry insider.

The Chinese government's decision to keep in place its subsidy policy for eco-friendly cars until 2022 is also good news to SK Innovation as it can benefit from it.

Samsung SDI, the world's fourth-largest EV battery maker, is expected to increase its market share through cooperation with Hyundai Motor Group due to the meeting between Samsung Electronics vice chairman Lee Jae-yong and Hyundai Motor Group vice chairman Chung Eui-sun. Hyundai Motor Group, which has only used batteries from LG Chem and SK Innovation, can help Samsung SDI raise its market share if it uses the latter’s products. In the first quarter of 2020, Hyundai and Kia ranked fourth in the global EV market. Hyundai Motor Group's goal is to become the world's third-largest EV maker by 2025.
The Bank of Korea announced on June 3 that South Korea’s foreign exchange reserves increased by US$3.33 billion to US$407.31 billion last month. The reserves, which showed a significant decrease in March in the wake of the spread of COVID-19, rebounded in April and continued to increase last month.

Marketable securities, which account for 89.8 percent of the reserves, increased by US$4.2 billion to US$365.71 billion whereas deposits in foreign central banks and major global banks decreased US$1.21 billion to US$30.01 billion. The IMF special drawing rights and gold reserves remained at US$2.8 billion and US$4.79 billion, respectively.

The central bank explained that an increase in its revenue from its foreign currency-denominated assets and a depreciation of the U.S. dollar that resulted in an increase in the value of its foreign currency assets converted to the U.S. dollar led to the increase in foreign exchange reserves.

As of the end of April this year, South Korea ranked ninth in the world, with US$404 billion, in terms of the size of foreign exchange reserves. China (US$3,091.5 billion) topped the list, followed by Japan (US$1,368.6 billion), Switzerland (US$887.7 billion), Russia (US$566 billion), Taiwan (US$481.8 billion), India (US$481.1 billion), Saudi Arabia (US$447.5 billion) and Hong Kong (US$441.3 billion).

South Korean securities companies’ assets have more than tripled in years based on financial deregulation and the government’s policy for investment banking growth acceleration. The increase in assets has come with expanded derivatives-linked securities (DLS) and shadow banking in the real estate sector though.

Their DLS that topped 100 trillion won have unexpectedly acted as a foreign exchange market disruptor. Although securities companies were not major players in the forex market, their U.S. dollar demand for additional margin payment broke the balance of supply and demand in the market. Besides, unlike banks, securities companies are subject to no regulation in relation to foreign currency liquidity. Local financial authorities are likely to introduce regulations targeting them in the near future.

The won-dollar exchange rate soared in March this year and this has to do with the U.S. dollar demand. Usually, securities companies obtained the U.S. dollar by one-day forex swap trading. However, they suddenly and sharply increased their target volume, and then the CRS rate dropped. In the CRS market for exchange between different currencies, interests are exchanged before maturity and nominal principals denominated in the currencies are exchanged at the maturity based on the exchange rate fixed at the time of contract conclusion. A securities company that needs the U.S. dollar conducts swap dealing to receive the U.S. dollar by giving the won.

Securities companies’ U.S. dollar demand increased a lot, leading to an increase in swap basis and a decrease in CRS rate. The won-dollar exchange rate was about to top 1,300 won per U.S. dollar. Then, foreign exchange banks suspended their U.S. dollar supply to avoid risks. The local foreign exchange authorities made an announcement on March 18 on a 25 percent expansion of banks’ foreign exchange position limit and signed a US$60 billion currency swap deal with the United States the next day.

Securities companies’ currency-related OTC derivatives trading balance has substantially increased along with DLS issuance, too. Specifically, the trading balance skyrocketed from 11 trillion won to 263 trillion won from 2009 to 2019.

As mentioned above, foreign currency liquidity regulations are yet to be put into effect despite the huge risks related to securities companies’ foreign currency financing. “It is no exaggeration to say that won liquidity ratio compliance is the only liquidity regulations targeting securities companies,” the financial authorities explained, adding, “Foreign currency liquidity management is absolutely necessary for U.S. dollar-based margin payment.”

S. Korea Ranks 9th in World in Forex Reserves

South Korea’s Foreign Exchange Reserves Increase in May

By Yoon Young-sil

Foreign Currency Liquidity Regulations Imminent

By Yoon Young-sil
The Bank of Korea announced on June 24 that the ratio of the private-sector credit to the nominal GDP reached 201.1 percent at the end of March this year, topping 200 percent for the first time in history. The ratio increased by 4.1 percentage points in three months to show the highest rate of increase since records began in 2000. Mortgage loans increased 5.7 percent from a year ago to result in a significant increase in household debts.

The debt-to-disposable income ratio reached 163.1 percent at the end of the first quarter, the highest since records began in 2007, with the pace of income growth falling to catch up with the pace of debt increase. This means South Korean households’ debt repayment burden is rising rapidly. Besides, their debt repayment capabilities may be further reduced as COVID-19 is continuing to affect employment and self-employed persons’ conditions.

The central bank warned that the pandemic may adversely affect enterprises’ financial soundness as well. According to the bank, their operating profit ratio, which was 4.8 percent last year, is estimated to fall to somewhere between 1.6 percent and 2.2 percent and their interest coverage ratio is estimated to fall from 3.7 to 1.5 or less during the same period. “In the worst-case scenario, the ratio of companies with an interest coverage ratio of less than 1 might rise to up to 50.5 percent,” it said.

The stability of financial systems is decreasing in the wake of COVID-19, too. For example, South Korea’s financial stability index (FSI) indicating an overall status of those systems jumped from 4.7 to 8.3 from January to February. An FSI of 8 to 22 means caution is required and an FSI of more than 22 means a crisis. The former indicates that financial systems are not seriously affected by internal and external impacts and the latter is vice versa. The FSI soared to 17.1 in March and 22.3 in April after falling to 18 last month.

The South Korean government and the Bank of Korea have come up with various liquidity supply measures to deal with the real economic impact of COVID-19. The measures are leading to side effects rather than intended investment.

The side effects include rapidly increasing household loans. More and more individuals are buying stocks by borrowing money and shifting their floating money to the real estate market to accelerate a rise in real estate prices. Experts point out that money is flocking to unproductive parts to exacerbate the imbalance of the real economy and the 121 trillion won that the government and the central bank have supplied since March this year is coming back to banks to lead to even more liquidity.

The Bank of Korea has supplied liquidity directly to financial institutions and enterprises by every means possible, and yet both investment and consumption are on the decline. At the same time, floating money is staying in the financial sector although loans from banks hit an all-time high. According to the central bank, the total corporate loan balance in the banking sector increased 16 trillion won to 945.1 trillion won last month with loans for non-large companies accounting for more than 80 percent of the total. In addition, the household loan balance in the banking sector increased five trillion won to 920.7 trillion won with the mortgage loan balance increasing by no less than 3.9 trillion won.

In April, the volume of M2 money reached over 3,015.81 trillion won with a year-on-year increase of 9.1 percent. The rate of increase was 7 percent or so in January and then rose to over 8 percent in March before topping 9 percent in April. This means enterprises’ and households’ increased loans are tied in the form of cash, deposits, and the like.

With debt repayment burdens following the continuous increase in loans, the borrowed money is flowing into the stock and real estate markets and housing prices and housing rental prices are showing signs of rebounding. In the corporate sector, many companies’ credit ratings are falling regardless of their continuous financing from the market. Their business performance and financial soundness are deteriorating and future economic uncertainties are leading to a decrease in investment. This is likely to continue for a while with the end of COVID-19 still distant.
Assets in the U.S., EU Increase Sharply

South Korea’s External Financial Assets Increase

By Yoon Young-sil

The Bank of Korea announced on June 23 that South Korea’s non-reserve external financial assets totaled US$1,290.9 billion at the end of 2019 with a year-on-year increase of US$148.3 billion. According to the bank, the increase in assets was conspicuous in the United States and the European Union in particular, led by their stock market rallies.

South Korea’s external financial assets can be defined as foreign financial products purchased by South Koreans and South Korean companies’ overseas direct investments.

The investment in the United States accounted for 32 percent of the total, followed by those in the European Union (19.2 percent) and Southeast Asia (13.1 percent). The investments in the United States and the European Union increased US$63.1 billion and US$41.7 billion, respectively.

The direct investment in the United States added up to US$103.6 billion and that in Southeast Asia totaled US$88.7 billion. The securities investment in the United States was US$254.1 billion and that in the European Union was US$143.2 billion.

Last year, the EU stock market rose 24.8 percent and the U.S. stock market rose 22.3 percent. Likewise, those of Japan, Hong Kong and China rose 18.2 percent, 10.5 percent and 10.3 percent, respectively.

As of the end of last year, South Korea’s external financial liabilities totaled US$1,198.8 billion with a year-on-year increase of US$88.6 billion. In 2019, KOSPI rose 7.7 percent, leading to more investment in the country.

Southeast Asia’s investment in South Korea increased US$25.3 billion to US$218.2 billion. Those of the European Union and the United States increased US$22.2 billion and US$17.8 billion to US$306.3 billion and US$317.8 billion, respectively. Direct investment from the European Union was US$87.8 billion and securities investment from the United States was US$261 billion.

At the end of 2019, U.S. dollar, euro and yuan accounted for 56.2 percent, 9.8 percent and 7.8 percent of South Korea’s external financial assets, respectively. Won, U.S. dollar and euro represented 68.2 percent, 25.6 percent and 2.2 percent of its external financial liabilities, respectively.

Korean Investors Prefer U.S. Stocks

Foreign Securities Settlement Hit All-time High

By Yoon Young-sil

Korea Securities Depository announced on June 16 that South Korean investors’ foreign securities settlement totaled an all-time high of US$129.97 billion from Jan. 1 to June 12. For reference, the settlement was US$84.06 billion in the first half of 2019 and it rose 56 percent year on year to US$171.22 billion in 2019.

The foreign stock settlement amounted to US$60.43 billion. Previously, it rose from US$22.7 billion to US$32.6 billion in 2018 and then to US$41 billion in 2019. The foreign stock settlement in the United States accounted for 87.4 percent of the settlement, followed by those in Hong Kong (US$3.94 billion), China (US$1.47 billion) and Japan (US$1.37 billion).

In that period, South Korean investors net-bought US$530.77 million of Apple stocks, followed by Microsoft (US$434.96 million), Hasbro (US$386.16 million), Alphabet (US$354.54 million), Tesla (US$351.69 million), Boeing (US$206.34 million), Delta Airlines (US$159.91 million), Alibaba (US$153.73 million), Showa Denko (US$138.85 million) and Walt Disney (US$132.91 million).

Their preference for U.S. stocks is based on a conclusion that those surpass South Korean stocks in terms of growth potentials. “It seems that more and more South Korean investors are shunning the South Korean stock market, which has moved sideways for years,” Kiwoom Securities explained.
South Korean depository institutions’ external debts totaled 271,346.9 billion won in the first quarter of this year, up 7 percent from the previous quarter and up 11 percent from a year ago. In addition, the debts increased by approximately 20 percent compared to two years ago. In that quarter, their short-term and long-term external debts added up to 141,774.8 billion won and 129,615.7 billion won, respectively. In short, the banking sector’s external debt showed a substantial increase during the spread of COVID-19.

According to experts, this is because South Korean commercial banks increased their foreign currency borrowings for foreign currency liquidity enhancement with the pandemic adding to the instability of international financial markets.

The increased debts in the banking sector have some negative implications. Especially, its external debt burden increases when the won-dollar exchange rate continues to rise. At present, the exchange rate is rising due to rising tensions between the United States and China. External debt repayment may not be easy if the exchange rate rises and external risk factors hinder foreign money flow into the sector.

“Debts in many cases are rolled over based on a currency swap contract and foreign currency procurement at a high won-dollar exchange rate requires more local currency provided as collateral, which may affect local banks’ foreign currency liquidity,” said a banking industry source, adding, “Besides, a bank’s foreign currency procurement costs may increase if an increase in external debt leads to a decline in its credit rating.”

Still, it is also said that the situation is not that worrisome in view of local financial market conditions. “South Korea’s international reputation has improved thanks to its excellent response to the pandemic and the government is forestalling exchange rate volatilities attributable to capital outflow by means of its stock and bond market stabilization funds,” an economist explained, adding that individual investors purchasing safe assets such as the U.S. dollar and gold are also contributing to exchange rate stabilization.

The Korea Financial Investment Association announced on June 8 that the total net assets of overseas investment funds reached an all-time high of 199.07 trillion won at the end of last month and increased by more than 12 trillion won in two months. The principal at the end of May was 194,849.7 billion won and most of the funds recovered from investment losses in April or last month.

Overseas stock funds’ average rate of return from May 6 to June 5 is 9.08 percent and that of overseas bond funds is 3.14 percent. In addition, that of special asset funds for overseas investment is 33 percent a year. The net assets of the stock funds increased from 17,529.6 billion won to 20,048.5 billion won in April and May.

Likewise, the net assets of funds for overseas investment rose from 28,888.8 billion won to 32,878.7 billion won and those of the special asset funds rose from 48,311.2 billion won to 50,664.5 billion won. The special asset funds’ total assets topped 50 trillion won for the first time with investors seeking new investment opportunities amid low interest rates and slow economic growth.

At the end of May, the principal was 43 trillion won for public funds for overseas investment and 156 trillion won for private funds for the same purpose.
Concerns over Losses Mounting

Overseas Real Estate Funds at Risk

By Yoon Young-sil

Concerns over losses are mounting as to overseas real estate funds in the wake of COVID-19. Rental income is on the decline and huge losses may result from delayed asset disposal or the like. According to the Korea Financial Investment Association, the total principal of the funds was 56,744.2 billion won at the end of last month. The amount stood at 30,090.3 billion won in 2017 but almost doubled with interest rates falling.

Until recently, the funds were regarded as medium-risk and medium-return investment products. However, the perception is changing after the outbreak of the COVID-19 pandemic with those established in 2017 scheduled to mature next year. The average rate of return of the funds has dropped from 5 percent or so to about 1 percent this year and it is likely to keep dropping along with real estate asset prices.

Under the circumstances, the local financial authorities are keeping a close watch. “We recently told asset management firms to submit their investment status,” the Financial Supervisory Service explained, adding, “We will look into whether securities companies and asset management firms are handling their risks appropriately although it is not easy to conduct on-site due diligence due to the pandemic.”

To Minimize Likelihood of Contingent Liabilities Being Realized

FSS to Check Securities Companies’ Overseas Real Estate Investment

By Yoon Young-sil

The financial authorities told 20 securities companies to look into their overseas real estate investments with the COVID-19 pandemic predicted to result in rapid declines in the prices of some overseas real estate assets. The Financial Supervisory Service is likely to examine the details late this month.

The securities companies complained about the measure. “Although we are well aware that the measure is to minimize the probability of contingent liabilities being realized, the data is not subject to external disclosure,” one of them said, adding, “Regular inspections based on relevant rules are nothing to complain about, but it seems that the measure is an excessive intervention based on the Financial Supervisory Service’s arbitrary determination.”

It is also said that the authorities’ move is to add regulations in the long term. The Financial Supervisory Service remarked that the measure is to check some details on the assets that have been handled by those companies, an official announcement on the measure will be made later and nothing has been determined as to whether it will become regulations.

According to the Financial Supervisory Service, securities companies’ overseas real estate exposure totaled 11.1 trillion won at the end of September 2019, including 6.7 trillion won in real estate fund investment, 2.9 trillion won in debt guarantee and 1.3 trillion won in loans.
Mirae Asset Sued by Anbang Insurance
Mirae Asset’s 7-Tril.-Won Mega Deal on Verge of Falling Apart
By Michael Herh

Mirae Asset Financial Group has entered a legal battle with China’s Anbang Insurance over the acquisition of 15 luxury hotels in the United States totaling more than seven trillion won.

Mirae Asset has reportedly told Anbang Insurance that it would cancel the contract, claiming that the Chinese insurer has violated it. Anbang Insurance sued Mirae Asset, demanding that it pay seven trillion won in compliance with the contract.

The hotel industry in the United States has virtually collapsed due to the unexpected new coronavirus outbreak. Under these circumstances, the mega deal has become highly likely to be delayed for a long time or collapse.

According to news reports, Mirae Asset notified Anbang Insurance on April 17 that it will be entitled to cancel the contract unless the Chinese insurer address its contract violation by May 2. It pointed out that Anbang failed to respond to its request for information regarding a lawsuit between Anbang and a third party that could affect Anbang’s contract with Mirae Asset. The Korean company said it discovered the lawsuit in the process of due diligence on the 15 hotels.

Anbang Insurance responded by filing a lawsuit with a U.S. court on April 27 (local time) to complete the contract.

In September 2019, Mirae Asset Group decided to purchase the 15 hotels in the United States from Anbang Insurance for US$5.8 billion (approximately 7.7 trillion won), and made a down payment of about 700 billion won.

Bloomberg reported earlier this month that Mirae officials had asked the Beijing-based insurer for more time to close the deal because the required debt financing isn’t immediately available.

Bloomberg reported on April 28 that Anbang has alleged that Mirae is suffering from buyer’s remorse because of hotel closures caused by the pandemic and it has been unable to secure favorable terms for financing.

Demanding Refund of Down Payment
Mirae Asset Submits Counterclaim in Legal Battle with Anbang Insurance over US$5.8 Bil. Hotel Deal
By Yoon Young-sil

Mirae Asset Group announced on May 21 that it has submitted its answer and counterclaim to Anbang Insurance’s claim in a suit filed by the Chinese insurer over a US$5.8 billion hotel deal.

In the answer document submitted to the Delaware Equity Court in the United States on May 20 (local time), Mirae Asset denied all claims made by Anbang Insurance and emphasized that it could not secure full title insurance for the 15 hotels it agreed to purchase from Anbang until the transaction was completed.

In the United States where a real estate registration system does not exist, it is necessary for a property buyer to receive title insurance for the property from a professional insurer in order to verify that the seller is the owner of the property.

Mirae Asset said that Anbang Insurance failed to present full title insurance for the 15 hotels as it was sued by a third party with regard to the ownership of the hotels. Mirae Asset also claimed that Anbang Insurance failed to inform the Mirae Asset that it accepted the lawsuit. It added that its creditors found out the lawsuit and accordingly refused to finance the hotel deal.

Hence, Mirae Asset submitted a counterclaim asserting that Anbang Insurance committed fraud and violated its obligation to guarantee its pledge to secure and maintain full and unlimited ownership of the hotels until the end of the transaction. In addition, Mirae Asset claimed a refund of the US$80 million down payment from Anbang Insurance, together with a refund of the litigation expenses.

Mirae Asset and Anbang Insurance will engage in a “discovery process,” in which the two parties will release documents related to the lawsuit, in June and July before the start of the trial. The trial will begin on a full scale with a three-day pleading period from Aug. 24. The verdict of the first trial is expected to come out in late August or early September 2020.
Shinhan Investment said that the temporary short selling ban the South Korean government implemented in March this year has raised KOSPI by approximately 9 percent. “Referring to the same short selling bans implemented in 2008 and 2011, it can be said that the lack of the ban in March this year would have led to an index of approximately 2,000 points at this point in time,” it explained. On June 8, KOSPI closed at 2,184 points.

Shinhan Investment estimated the effect of the ban by using the 12-month forward PER following resumed short selling. This is because a stock market rebound following a plunge is usually led by a rise in PER and expectations for economic recovery are reflected in the course even if profit estimates fall.

“In the case of 2008, the PER rose to 12 from the trough until immediately before short selling resumption and then the PER fell to 11 and KOSPI moved sideways after the resumption,” Shinhan Investment mentioned, adding, “In 2011, the PER reached 9 and fell to 8.2 after the resumption.”

It explained that the short selling resumption in the past led to a decline in PER of approximately 9 percent and this year’s ban has contributed to KOSPI’s recent rebound. “KOSPI is likely to fall to some extent once the ban ends in September and that can be an opportunity to buy stocks on condition that fundamentals improve as in the past cases,” it said.

Financial Services Commission Chairman Eun Sung-soo said on June 11 that the temporary short selling ban scheduled to end in September this year can be extended or ended with some system improvement.

“The ban can be repealed after some system improvement although it is slated to be repealed in September and the possibility of extension is still open as well,” he remarked, adding, “Nothing has been determined yet and we will gather as many opinions as possible until the scheduled end date.”

The temporary short selling ban was implemented in March so that the stock market volatility attributable to the COVID-19 pandemic can be minimized. With the stock market stabilizing these days, some have said that the ban may be repealed earlier than scheduled.
Korean banks’ capital adequacy ratios have fallen in the wake of the new coronavirus spread.

The average BIS ratio of Korean banks stood at 14.72 percent as of the end of March, down 0.54 percentage point from the end of 2019, according to a report released by the Financial Supervisory Service on June 8. However, it exceeded the regulatory threshold of 10.5 percent.

"The growth rate of risk-weighted assets at domestic banks stood at 4.7 percent during the first quarter, far exceeding the capital growth rate of 1 percent, which led to a drop in the BIS ratio," the FSS explained. Specifically, risk-weighted assets increased 73 trillion won. Corporate loans increased 32.7 trillion won while risk-weighted assets related to over-the-counter derivatives increased by 16 trillion won. Credit risk weighted assets gained 53.2 trillion won, and market risk weighted assets by 6.6 trillion won.

By bank, Citibank Korea recorded the highest capital adequacy ratio of 18.44 percent, followed by Busan Bank with 16.13 percent, Hana Bank with 15.62 percent, Shinhan Bank with 15.54 percent, KB Kookmin Bank with 15.01 percent and Woori Bank with 14.77 percent. State-run Korea Development Bank recorded 13.33 percent, down from 14.05 percent at the end of 2019, while the Export-Import Bank of Korea saw its ratio drop from 14.48 percent to 13.73 percent.

Financial holding companies posted an average of 13.4 percent, down 0.14 percentage point from three months ago. Shinhan Financial Group showed the highest rate of 14.06 percent, followed by KB Financial Group with 14.02 percent, Hana Financial Group with 13.8 percent and Woori Financial with 11.79 percent.

Export-Import Bank of Korea has increased its funding for shipbuilders from 3.8 trillion won to 5.2 trillion won.

"We have increased financing for shipbuilding by 1.4 trillion won to support shipbuilders and their small and medium-sized partners," the bank said on May 27. The bank’s president Bang Moon-kyu visited Hyundai Heavy Industries and TSP in Ulsan the previous day and said, "We will use all our capabilities to help the shipbuilding industry overcome the crisis so that it can solidify its global market position after the COVID-19 crisis."

In particular, the bank plans to expand its win-win cooperation loans from 1.6 trillion won to 1.9 trillion won in cooperation with shipbuilders so that the funds can be used first as payments to small and medium-sized suppliers.

Han Young-seok, CEO of Hyundai Heavy Industries, said during his meeting with Bang that shipbuilders are likely to have difficulties in securing operating funds as an order drought is expected to continue for a considerable period of time due to COVID-19. "We hope that the government will expand not only shipbuilding financing but ship financing so that Korean and foreign shipping companies can place shipbuilding orders on Korean shipbuilders."

Choi Yang-hwan, CEO of Sejin Heavy Industries, requested that large shipbuilders and financial institutions provide assistance for small and medium-sized suppliers to secure work and meet funding difficulties.
Shinhan Financial Group and Hana Financial Group signed a memorandum of understanding (MOU) for global business partnership on May 25. It is the first business partnership between South Korean financial holding companies. They are the largest and third-largest financial companies in South Korea, respectively.

The global business unit of Shinhan Financial Group posted a net profit of 89 billion won in the first quarter of this year, up 13.6 percent from a year ago. That of Hana Financial Group’s global business unit jumped 117.9 percent to 113.3 billion won during the same period. The performance improvements were made based on their aggressive overseas marketing.

The MOU is based on their conclusion that they can create synergy as two leading international players. The only potential hurdle is the sizes of their assets. The overseas assets of Shinhan and Hana constitute only 10 percent or so of their total assets. The assets themselves need to be increased for more profits, and then more personnel and costs will be required. However, the number of South Korean banks’ overseas branches already topped 1,000, including 772 located in India and ASEAN member countries. An economy of scale should be realized for substantial effects, and yet the banks have flocked to the countries for more money to cause unproductive competition.

Shinhan Financial Group chairman Cho Yong-byoung (second from left) and Hana Financial Group chairman Kim Jung-tai (third from left) pose for a photo after signing their MOU for global competitiveness enhancement on May 25.

First Partnership between Financial Holding Companies
Shinhan and Hana Financial Groups to Work Together
By Yoon Young-sil

Shinhan and Hana Financial Groups to Work Together

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The MOU of Shinhan and Hana is expected to have a significant ripple effect in the industry. “They are expected to pursue an economy of scale while refraining from competing with each other in overseas markets, and then acquisition of local financial companies can be accelerated,” a local commercial bank explained, adding, “This means the foundation has been set for them to vie with Mitsubishi UFJ, Mitsui Sumitomo and Mizuho, which are currently dominating the Southeast Asian financial market.”

In the meantime, Shinhan Bank and Hana Bank have signed an agreement with the African Export-Import Bank (Afreximbank) to participate in a US$1 billion (1.2 trillion won) syndicated loan. The two banks’ joint participation in a syndicated loan is the first of cooperation between Shinhan Financial Group and Hana Financial Group since they signed a memorandum of understanding last month to promote global competitiveness.

For the syndicated loan project, Shinhan Bank lends 35 million euro (US$39 million) and Hana Bank lends 23 million euro (US$26 million) for this contract. This syndication loan is led by Shinhan Bank’s IB desk in London, with Hana Bank taking part with Shinhan’s assistance.

A syndicated loan refers to a loan provided by a group of lenders to a borrower such as a country, company, or organization, under the same conditions.

Afreximbank is a Pan-African multilateral financial institution devoted to financing and promoting intra- and extra-African trade. The bank runs trade promotion programs for central banks of its members and state-owned commercial banks and supports foreign currency liquidity for grade finance. Among the 54 African countries, 51 are members or shareholders of the bank.

Shinhan Bank has been acknowledged for its various international banking achievements such as project financing for the development of an offshore wind power plant in the United Kingdom, project financing for optical communications in the United Kingdom and Germany, and experiences in other similar syndicated loan projects. Shinhan Bank also led a syndicated loan contract for Afreximbank in September 2018.

Hana Bank has a long and stable experience in social development and renewable energy-related projects such as a gas-fired plant project in the United States and a tunnel and road construction project in the United Kingdom. Hana Bank has also participated in a syndicated loan contract for Afreximbank in 2014.
Corporate Loans Grow 16 Tril. Won in May

Corporate Lending Surging As Companies Turn to Loans to Stay Afloat

By Yoon Young-sil

Bank lending to corporations increased by 16 trillion won in May as many companies, especially small and medium-sized companies and self-employed people turn to loans to stay afloat amid the COVID-19 crisis.

The balance of corporate loans in the banking sector rose by 16 trillion won to 945.1 trillion won at the end of May, according to a report released by the Bank of Korea on June 10.

This was the third largest increase in bank corporate lending following April 2020 (27.9 trillion won) and March (18.7 trillion won) since June 2009 when such statistics began to be compiled.

By company size, loans to large companies increased by 2.7 trillion won, down from 11.2 trillion won in April, while lending to small and medium-sized enterprises gained 13.3 trillion won. The growth in loans to large companies slowed down in May, but the increase was the largest since May 2012 (3.2 trillion won).

Loans to small and medium-sized enterprises increased by the largest margin for the month of May since statistics began to be compiled.

The bill covers every financial group having total assets of at least five trillion won and engaged in two or more among investment, insurance, and depository and credit services. The bill does not cover state-run banks and financial holding companies. Specifically, the six targets of the bill are Kyobo, Mirae Asset, Samsung, Hanwha, Hyundai Motor and DB.

According to the bill, each of the six must designate a financial company to represent itself and the company must come up with a group-wide risk management policy and run a risk management arm. In addition, the company must set up a system for group-wide internal control.

The capital adequacy of each group must be assessed for its financial soundness and the company must report related data and risk factors to the commission. Also, each group must increase its capital depending on risk assessment results. The commission can tell it to submit and implement an improvement plan such as recapitalization and asset risk reduction if its capital adequacy or risk management status is substandard.

To Ensure Financial Soundness

Financial Services Commission to Monitor Financial Conglomerates More Closely

By Yoon Young-sil

The Financial Services Commission announced on June 7 that it would submit a bill to the National Assembly in September this year so that it can receive business improvement plans from the six non-bank-based financial conglomerates failing to meet capital adequacy requirements.
The combined market cap of Naver, Kakao and NCSoft totaled 91,243.3 billion won on June 24 with investors continuing to buy the stocks predicted to continue to grow in the post-COVID-19 industrial structure characterized by the lack of physical contact. For reference, the combined market cap at the end of 2019 was 55.85 trillion won.

Especially, Kakao’s stock price has soared by no less than 84 percent since the beginning of this year and the company has overtaken Hyundai Motor Co., Hyundai Mobis and POSCO to come in eighth in the market cap rankings. Likewise, NCSoft, ranking 12th, is only 1.3 trillion won short of Hyundai Motor Co., which is in the 10th place.

This year, the three companies have led the South Korean stock market’s recovery by successfully increasing their operating profits in spite of COVID-19. NCSoft’s operating profit is estimated to increase 119.27 percent this year and the estimates are 102.37 percent and 39.29 percent for Kakao and Naver, respectively. This is in stark contrast to most manufacturers’ profit estimates.

The three companies’ rallies in the stock market and revaluation are expected to continue for a while with both enterprise and consumption activities substantially changing based on information and network platform technology in the wake of COVID-19.

SK Biopharm’s stock subscription on June 23 and 24 attracted a deposit of 30,988.9 billion won and ended with a competition rate of 323.02:1. A total of 1,264.85 million applications were made for 3,915,662 general subscription shares. The deposit is an all-time high. The previous high is Cheil Industries’ 30,063.5 billion won recorded in 2014.

The successful subscription is because of the company’s excellent technological strength. SK Biopharm is the first South Korean pharmaceutical company that obtained an NDA approval from the U.S. FDA. It is the only South Korean pharmaceutical company that owns two new FDA-approved drugs.

The company is planning to use the fund derived from the IPO for new drug development and commercialization. The stock allocation result will be announced on June 26 and listing is scheduled for July 2.

Before the subscription, SK Group fixed SK Biopharm’s corporate value at 3.8 trillion won. On the other hand, market participants estimated the value at somewhere between five trillion won and six trillion won. Although it was said that the group underestimated SK Biopharm’s corporate value in having it listed, the group maintained its conservative approach based on a conclusion that technical achievement is one thing and capital market debut is another.

In addition, SK Biopharm neither raised its initial offering price nor increased its initial offering volume after demand forecasting. This means the company opted to grow in the form of a public-oriented company giving chances to as many investors as possible.

Institutional investors more than welcomed this stance. The demand forecasting competition amounted to 835.66:1 and 869 out of 1,076 applications came with bid prices exceeding the offer price range. In addition, 81.15 percent of the applications came with a promise that the shares would not be sold for a certain period after listing.
Insurers' Interest Sensitivity on the Rise
FSC and Insurers Confused by Postponed IFRS17
By Yoon Young-sil

The Financial Services Commission remarked on June 18 that some details and schedules related to insurance companies’ mandatory reserves may have to be adjusted with the introduction of IFRS17 postponed from 2022 to 2023.

The introduction has been postponed from 2021 to 2022 and then to 2023. Under the circumstances, the commission has had to slow down the strengthening of its liability adequacy test (LAT). Instead, the commission came up with financial solvency-related reserves requirements so that a certain amount of money must be added to insurers’ legal reserves. After the recent postponement, the commission has yet to determine specifics as to the requirements.

The LAT is the commission’s liability valuation methodology very similar to IFRS17 and conducted twice a year. Insurance companies are very perplexed with the delayed IFRS17 introduction as a continuous decline in market interest rate is leading to more interest sensitivity. On their part, even a slight decrease in discount rate as a policy reserves valuation standard can result in a substantial change in liabilities. As such, they are very sensitive to the commission’s criteria adjustment.

Policy Reserves Increase 1.53 Tril. Won in Q1
Life Insurers’ Burden Mounting Regarding Policy Reserves
By Yoon Young-sil

Life insurance companies’ burden related to policy reserves is on the increase due to falling interest rates. The burden is mounting in major life insurers with more fixed-interest products in particular and the interest sensitivity is rapidly increasing in some foreign insurers as well.

According to industry sources, South Korean life insurers’ increase in policy reserves totaled 5,635.7 billion won in the first quarter of this year, up 1,529.9 billion won from a year earlier. This has to do with the key rate cuts in March and May and declines in their stock prices. Samsung Life Insurance’s increment topped two trillion won and Kyobo and Hanwha increased theirs by 1,039.5 billion won and 947.1 billion won, respectively. Likewise, Metlife and Prudential increased their policy reserves by 335.6 billion won and 235.1 billion won, respectively.

The Financial Supervisory Service evaluates the adequacy of insurers’ policy reserves twice each year. This is to handle an increase in liabilities before the introduction of IFRS 17 scheduled for 2023. The evaluation reflects various factors such as current market interest rates and mortality rates. With the insurance liabilities discount rate falling year after year, the burden of insurers with higher interest sensitivity is continuing to increase.

Late last year, Samsung Life Insurance posted a premium deficiency of 21 trillion won in relation to with-profit and fixed-interest insurance. In addition, the deficiencies of Hanwha and Kyobo increased to eight trillion won and six trillion won, respectively. After last year’s assessment, the Financial Supervisory Service told Hanwha to correct its policy reserves valuation and risk management systems.

Their burden is likely to continue until an alternative comes out. Some point out that coinsurance can be the alternative. However, it is also said that foreign reinsurers are unlikely to underwrite their fixed-interest insurance as of now.
SK Group has invested 150 million yuan (25.6 billion won) in a semiconductor subsidiary of BYD, China's largest electric vehicle (EV) company. The investment is aimed at gaining a technological advantage in EV batteries, automotive semiconductors and autonomous vehicles in the global market as well as in China.

A total of 30 companies including SK China, Xiaomi, Lenovo, and BAIC Investment invested 800 million yuan to secure 7.84 percent of BYD Semiconductor shares on June 15. SK China invested 150 million yuan, the largest amount among the 30 investors, securing a 1.47 percent stake. BYD Semiconductor has raised 2.7 billion yuan through two rounds of investment.

BYD is seeking to transform BYD Semiconductor into a future mobility company. BYD has secured the No. 1 position in China's EV market and No. 2 position in China's EV battery market. Now, it is seeking to achieve a vertical integration of its operations from EV batteries to semiconductors and finished vehicles.

Industry insiders believe that BYD Semiconductor has strengths in electric vehicles and other electronic devices. BYD Semiconductor has already completed the development of SiC semiconductors that endure high temperatures. BYD Semiconductor is also mass-producing insulated-gate bipolar transistors (IGBTs), a high-performance semiconductor, and its market share in China stood at about 18 percent as of 2019.

SK Group hopes that its equity investment in BYD Semiconductor creates synergies with its affiliates, including SK Innovation, which is rapidly increasing its market share in the electric vehicle battery market, SK Hynix which is the world's second-largest DRAM manufacturer, and SK Telecom, Korea's number one mobile carrier.

SK Innovation plans to expand its market share in China's EV battery market through its plants in Changzhou and Yancheng, China, and SK Hynix needs to strengthen its position in China as the country accounts for more than 40 percent of its sales. SK Telecom is expected to cooperate with BYD because it is interested in self-driving cars based on 5G telecommunication and artificial intelligence (AI) technology. Above all, China is classified as a market that cannot be ignored by SK Group because it is the world's largest market accounting for about half of the global EV market.
As the conflict between the United States and China has spread to Hong Kong, Korean semiconductor companies are facing repercussions.

Samsung Electronics and SK Hynix are paying keen attention to future developments as the United States is threatening to deprive Hong Kong of its special status.

Hong Kong is one of the four major importers of Korean semiconductors. In 2019, US$22.287 billion worth of Korean semiconductors were exported to Hong Kong, with more than 90 percent of them re-exported to China. Most Chinese smartphone makers including Huawei, Oppo, and Vivo are major customers of Korean memory semiconductor supplied via Hong Kong.

Korean semiconductor companies have long relied on the indirect export route because of convenience in transactions and tax benefits.

Semiconductor prices are sensitive to demand and supply, so they are traded based on U.S. dollars, which are relatively stable. However, the Chinese Foreign Exchange Control Act compels companies to obtain approval from the Chinese government if trade volume hits more than US$50,000, which is a burden to exporters and importers. Due to this reason, the semiconductor spot market has developed in Hong Kong, where U.S. dollars can be used in trade. Hong Kong also has better air transportation infrastructure than Shenzhen or Guangzhou, which have high demand for semiconductors. Korean semiconductors are thus shipped to Hong Kong by air and then are sold throughout China by Chinese dealers through Shenzhen, an IT industry hub.

Not only the convenience in settlement but also Chinese customers’ will to lower unit prices of semiconductors have made Hong Kong a semiconductor trade hub. In China, value-added taxes are more burdensome than tariffs. For Chinese companies, refunds of value added taxes are quickly made, but it is not so for foreign companies. If tax refunds are delayed or not made, it will affect prices, increasing cost burdens on Chinese importers. If Chinese dealers receive semiconductors in Hong Kong, they can take them to mainland China through their own networks and reduce value-added taxes.

However, if the United States imposes sanctions on Hong Kong, changes will be inevitably made in the current export system. Korean semiconductor companies such as Samsung Electronics and SK Hynix are looking for ways to ensure that supply is not disrupted. "If the Hong Kong sanctions become a reality, we can use a direct export route to China without passing through Hong Kong," a semiconductor industry insider said. "If we change the supply method, logistics costs may increase, but we expect that there will be no disruption in supply."

The semiconductor industry is very concerned that direct exports could lead to stronger U.S. surveillance. With Samsung Electronics and SK Hynix under pressure to invest in both the United States and China, the growing volume of direct exports to China could add to political burden rather than economic burden.
Samsung Partners with Gemini, LG Joins Hedera Hashgraph

Samsung Electronics and LG Electronics to Focus More on Blockchain Business Opportunities

By Kim Eun-jin

Samsung Electronics and LG Electronics are increasing their participation in the blockchain and virtual asset industries.

Samsung Electronics recently formed a partnership with virtual asset exchange Gemini in order to provide Galaxy smartphone-based virtual asset trading services in the United States and Canada. Samsung Electronics launched the Galaxy S10 in March last year and the phone and those released later come with the Samsung Blockchain Wallet, which supports remittance and payment based on virtual assets such as Bitcoin and Ethereum. The partnership with Gemini means that Samsung Electronics’ service has expanded to cover virtual asset trading and custody.

LG Electronics, in the meantime, has become a member of the governing council of Hedera Hashgraph. The company and the global blockchain platform are planning to conduct joint research on blockchain technology and create new business opportunities together.

Last year, LG Electronics participated in the governing council of Klaytn run by Ground X, which is a blockchain subsidiary of Kakao. LG Electronics is the only consumer electronics company in the governing council of Hedera Hashgraph, whose members include Boeing, Deutsche Telekom, Google, IBM and Nomura Holdings.

Blockchain Development Group Officially Launched

Samsung Electronics to Promote Blockchain Business as Future Growth Engine

By Michael Herh

Samsung Electronics has chosen blockchain technology as one of its future growth engines. The tech giant has officially launched the Blockchain Development Group by putting together researchers who have been working on blockchain development at various departments of its wireless business division.

The first major project of the Blockchain Development Group involved the 5G mobile phone “Galaxy A Quantum,” which has recently been released in cooperation with SK Telecom, and the “Galaxy S20.” In particular, the company said a blockchain key played an essential part in strengthening the security of the Galaxy S20.

Samsung Electronics has loaded “Samsung Blockchain Keystore” and “Samsung Blockchain Wallet” on its strategic Smartphone Galaxy series. Samsung Blockchain Keystore is a space where private keys for using DApps are safely stored. Samsung Blockchain Wallet supports remittances and payments of virtual assets such as Bitcoin (BTC) through biometric recognition such as fingerprints.

The company is expected to apply blockchain technologies based on Samsung Blockchain Keystore and Samsung Blockchain Wallet to key applications for Galaxy smartphones such as Samsung Pay and Samsung Health. Examples include blockchain-based overseas remittances and mobile healthcare.

In addition, the company has expanded the scope of support for Software Development Kit (SDK) for Samsung Blockchain Keystore not only to Bitcoin and Ethereum but also to Klaytn, a blockchain platform developed by Kakao Ground X, in an attempt to expand Galaxy smartphone-based blockchain services. The company is highly likely to take the lead in developing mobile electronic certification (decentralized identification or DID), which is needed for blockchain-based finance and games, through Galaxy smartphones. Previously, Samsung Electronics received temporary permission for a mobile driver’s license verification service based on its own authentication service called “Samsung Pass.”
Funding for Science & Technology Research Projects

Samsung to Provide 38.85 Bil. Won to 28 Future Technology Research Projects

By Michael Herh

SAMSUNG ELECTRONICS announced on June 4 that it has chosen 28 external R&D projects for financial support in the first half of 2020 under the Samsung Future Technology Development Project.

The project was launched in 2013 to foster science and technology. Samsung Electronics will invest 1.5 trillion won over 10 years from 2013 in the project. The project is implemented through the Samsung Future Technology Promotion Foundation and the Samsung Electronics’ Future Technology Promotion Center.

The newly selected tasks include 14 in basic science, eight in materials and six in information and communication technology (ICT). Samsung Electronics will provide 38.85 billion won in research funds.

A total of 14 projects were selected in basic science including five in life science, four in mathematics, three in physics and two in chemistry, Samsung Electronics said.

Kim Sung-yeon, a chemistry professor at Seoul National University, will conduct a study on feeling full after eating. Satiety is known to be caused by chemical stimuli generated when food stimulates the digestive system and physical stimuli created when food expands the digestive system. The researchers will find factors related to neural circuitry responsible for physical stimulation. The study is expected to provide a breakthrough in treating obesity and diabetes through appetite control.

In the field of materials, it supports eight projects such as next-generation light sources, battery materials, and biocombination technology. Oh Seung-soo, a professor of new materials engineering at POSTECH, studies next-generation anti-cancer drug technology using molecular recognition-based high-efficiency biocombination technology. It is high technology that delivers drugs to specific cells by effectively combining antibodies and drugs. If the research becomes a success, it will allow the development of new drugs with up to 1,000 times the therapeutic effect of others.

In the ICT sector, where six projects have been selected, Choi Young-bin, a medical science professor at Seoul National University, will make an attempt to develop technologies that can minimize the negative side effects of brain cancer treatment. Usually, surgical surgery to resect skulls is popular in treating brain tumors, but the surgery accompanies negative side effects where the complete cut-off of a tumor is difficult or normal cells are also resected.

The researchers plan to study and develop new treatment technologies such as brain tumor treatment liquid, an electric device that transfers a brain tumor treatment liquid to a tumor, and a deep learning algorithm that controls the speed and amount of the treatment liquid, to minimize cranial resection in the future, and create new technology that reduce negative side effects and normal cell damage after surgery.

Hwang Sung-woo, vice president of Samsung Advanced Institute of Technology, speaks at the 2019 Annual Forum held at Samsung Electronics R&D campus in Seoul on Nov. 29, 2019.
Samsung Electronics has appointed Sebastian Seung, a professor at Princeton University who is regarded as one of the world’s most renowned experts in artificial intelligence, as the head of Samsung Research, an integrated research organization of Samsung Electronics.

Samsung Research consists of 15 R&D centers in three countries including Korea, and seven global AI research centers in five countries — Korea, the United States, Britain, Russia and Canada. Seung will oversee research on future technology development and technology convergence carried out by these institutes.

Seung is known as a world-class scholar who pioneered brain-based AI research. Described as “the cartographer of the brain,” he has been since 2014 a professor in computer science and neuroscience at Princeton University’s Neuroscience Institute at the Jeff Bezos Center in Neural Dynamics, where he directs the Seung Labs. Before, he worked at the Massachusetts Institute of Technology as a full professor in computational neuroscience in the Department of Brain and Cognitive Sciences and as a professor in physics. He has also worked as a research scientist at the Bell Labs.

In 2018, Samsung Electronics appointed Seung as a chief research scientist (CRS), a vice president level position at Samsung Research. Later Seung worked as a consultant on establishing Samsung Electronics’ AI strategy, helping the company establish global AI centers and recruit excellent AI researchers.

Samsung Electronics has set up global AI research centers in seven regions in five countries — Korea, the United States, Britain, Russia and Canada — and is expanding open innovation with global scholars, including Prof. Yoshua Bengio. Lee recruited Daniel Lee, a professor at the University of Pennsylvania, in June 2018, and hired Harvard University Prof. Gu-Yeon Wei as a fellow in 2019.

In November 2019, he met with Seung to discuss future directions of AI development and Samsung Electronics’ AI strategies. In addition, Lee has continued to interact with global business leaders, including Softbank chairman Masayoshi Son and Microsoft CEO Satya Nadella, to discuss ways to cooperate in the AI field.

Samsung Electronics has been promoting AI, 5G telecommunications and automotive semiconductors as future growth drivers. The company’s vice chairman Lee Jae-yong has been particularly interested in AI. Lee visited Europe and North America in 2018 and interacted with global scholars in the AI field. In November 2019, he met with Seung to discuss future directions of AI development and Samsung Electronics’ AI strategies.

However, the influence of Korea as a whole, including Samsung Electronics, on the global AI market has yet to reach the global level. According to global market research firm CB Insights’ analysis, global AI startup investment in the first quarter of 2020 reached US$8.4 billion, up 42 percent on year. By country, the United States ranked first with 41 percent, followed by China with 10.5 percent, Britain with 7.9 percent and Japan with 5.5 percent. In fact, the United States and China have formed a two-runner race.

Against this backdrop, some predict that Samsung Electronics may seek to jumpstart its AI technology development via large-scale M&As. IT industry insiders expect that the amount of investment in AI startups and partners by the five U.S. IT giants (Microsoft, Amazon, Alphabet, Apple, and Facebook) will hit an all-time high in the second quarter of 2020.
In 2012, Samsung Electronics and Apple had a big patent battle over the “slide to unlock” smartphone technology. Now eight years later, the two smartphone giants are both facing a patent infringement suit over the slide-to-unlock function filed by Neonode, a Swedish display company that acquired a patent for the technology first.

Neonode filed the suit against Samsung Electronics and Apple with the Western District Court of Texas on June 8.

The story involving Neonode and the two companies dates back to eight years ago. In 2012, Apple filed a complaint against the Android group including Samsung Electronics, claiming that the group infringed on its slide-to-unlock patent. The table was turned with the emergence of Neonode, which released the "N1m" smartphone with a slide-to-unlock function before Apple applied for a patent on the touchscreen technology.

At the time, Samsung claimed that Apple's patent was invalid because Neonode already had a similar technology. As a result, Apple's patent was nullified in a German court. Neonode became an eyesore for Apple and a benefactor for Samsung Electronics.

Now, Neonode is attacking both companies, forcing them to unite. Neonode took issue with certain functions of Samsung and Apple smartphones based on two patents related to the slide to unlock function.

Neonode claims that Samsung phones’ features such as slide to unlock on the initial screen and push icons to receive or reject a call are in infringement of its patents.

Neonode also claims Apple phones’ features like QuickPath typing and slide-to-unlock infringe on its patents.

The problem is that neither Samsung nor Apple is free from the litigation eight years ago. Samsung Electronics actively promoted Neonode’s advanced technology to nullify Apple's patent at the time. It cannot swallow its words easily. Neonode remembers what Samsung said eight years ago. It noted in its complaint that "Samsung Electronics has acknowledged the patent since 2012."

Apple is facing an even more embarrassing position. If it refuses to recognize Neonode's patent, it amounts to denying its own patent. If Apple loses its patent suit against Neonode, it will be put into Samsung Electronics' position in 2012.

"The Apple iPhone X series, the iPhone 11 series, and the iPad Pro 3rd and 4th Generations directly and indirectly infringed on our patent," Neonode said in the complaint.

Steve Jobs use the “slide to unlock” function during a presentation about the iPhone in 2007.
The Korea Fair Trade Commission announced on June 18 that it decided to initiate consent resolution in relation to Apple and its suspicion that it abused its market position in doing business with three local mobile carriers.

The initiation means that the case can be closed, without any legal compliance-related disputes, based on a conclusion that Apple's corrective measures are adequate. Previously, the commission turned down measures Apple submitted in September 2019 and May this year for the lack of concreteness.

The commission's investigation dates back to 2016. According to the commission, Apple at that time shifted iPhone advertising costs and after-sales service costs to the mobile carriers, set lopsided terms with regard to patent rights and contract cancelation, and interfered with the mobile carrier's subsidy provision and advertisement. In April 2018, the commission sent an investigation report to Apple on how it violated the Fair Trade Act.

The latest corrective measures of Apple include cost burden reduction for the mobile carriers and discussion-based cost sharing. In addition, the measures include ways to eliminate the lopsided terms, stop the interference, and prepare some fund for a constructive relationship with small businesses, program developers and consumers.

With the procedure initiated, Apple must submit detailed corrective measures to the commission within one month. Then, interested parties will look into the measures for a couple of months and vote on them. Depending on the voting result, Apple can avoid prosecution and a penalty of tens of billions of won. Many in the local industry are seeing this as impunity.

Restrictions on Apple in South Korea are impossible once the commission finalizes the consent resolution. Apple, meanwhile, is denying the allegation that it violated the Fair Trade Act. Of course, Apple's measures may not be accepted in the end. “The current status is not consent resolution confirmation and the procedure will start only when the measures are finalized through a plenary meeting,” the commission explained, adding, “Although there are some mentions that we are going easy on Apple, legal considerations and requirements applied to the consent resolution are very strict.”

Apple to Release First 5G iPhone in 2nd Half

9 out of 10 5G Phones Sold in U.S. Are Samsung Galaxy S20

Nine out of 10 5G smartphones sold in the United States in the first quarter of 2020 were the Galaxy S20 series from Samsung Electronics.

U.S. 5G phone shipments in the first quarter of 2020 stood at 3.4 million units, accounting for 12 percent of the total smartphone shipments in the United States, said market research firm Strategic Analytics (SA) on May 20 (local time).

Among them, the Samsung Galaxy S20 series stood out. The top three most popular 5G phones all belonged to the Galaxy S20 series.

The Galaxy S20 Plus topped the 5G phone sales rankings in the United States with a 40 percent share, followed by the Galaxy S20 Ultra with 30 percent and the Galaxy S20 with 24 percent.

Apple's first 5G iPhone to be released in the second half is expected to be the biggest threat to Samsung Electronics' market share expansion.
SK Telecom announced on June 17 that its proposal for open 5G base stations has been approved as a standard by the Telecommunications Technology Association (TTA), the leading IT standardization institution in Korea.

SK Telecom presented the proposal jointly with the Electronics and Telecommunications Research Institute (ETRI) and other organizations.

The proposal concerns the standardization of fronthaul, which refers to the fiber-based connection in radio access network (RAN) infrastructure between the baseband unit (BBU) and remote radio head (RRH).

Currently, fronthaul equipment uses different protocols depending on the producer. SK Telecom is expecting that standardization will contribute to the vitalization of the base station equipment industry ecosystem.

5G networks require a denser deployment of antenna devices and distributed base station equipment that LTE networks, which increases the importance of fronthaul. Standardization of fronthaul equipment will increase the participation of new manufacturers, which in turn will speed up network construction in the future.

SK Telecom has been working to establish standards on open-type fronthaul. In June 2018, it joined the Open Radio Access Network (O-RAN) Alliance, an alliance of global 5G mobile carriers to set up open base stations.

At the same time, SK Telecom has been at the forefront of standardization in Korea. In December 2018, it submitted a Korean fronthaul standard based on the O-RAN standard to the TTA for the first time in Korea. It has since consulted with other mobile network providers to establish the standard.

In addition, SK Telecom secured fronthaul interconnection technology in March based on the standard established this time in cooperation with Korean relay company Solid and global measuring equipment company Keysight. It has successfully completed the demonstration of small power antenna devices and distributed base station equipment in the 3.5GHz and 28GHz bands that were developed by Solid.

KT SAT, a subsidiary of KT in charge of the satellite business, plans to launch its next satellite, Mugunghwa 6A, at the same orbit as Mugunghwa 6 in 2024. Mugunghwa 6A is the successor to Mugunghwa 6.

KT SAT, which marks its 50th anniversary this year, presented its new vision at the Geumsan Satellite Center on June 18 that will lead it for the next 50 years. KT SAT has thus far focused on providing relay services with satellite communication as a supplement to ground network communications. But it aims to become a platform operator through satellite networks that can connect to blind spots of telecommunication — oceans and space.

The rapidly changing telecommunications market and the emergence of new technologies shaping the Fourth Industrial Revolution are accelerating the transition from the old space era...
Korean ICT companies are forging “artificial intelligence (AI) alliances” to challenge global companies such as Google and Apple in the AI market.

KT, LG Electronics, and LG Uplus are pushing for an MOU on AI collaboration and joint AI technology development. The three companies are considering sharing AI technologies and human resources and applying AI services to their respective product lines. They are discussing ways to enable LG Uplus customers to use KT’s AI platform “Giga Genie” or load GiGA Genie on products of LG Electronics.

Cooperation among the three companies was first discussed in a recent meeting between KT CEO Koo Hyun-mo and LG Uplus vice chairman Ha Hyun-hoe. “Although details and schedules have not been decided yet, we are considering AI cooperation,” a KT official said. Other industry officials also said that an official announcement will be made soon.

This is not the first AI alliance among Korean companies. SK Telecom (SKT), Samsung Electronics and Kakao are already working together. In October 2019, SKT and Kakao signed a partnership to exchange shares worth 300 billion won. SKT president Park Jung-ho also said at CES 2020 in Las Vegas in January that the company is seeking an AI alliance. "I met with Samsung Electronics CEO Ko Dong-jin at CES and had a good conversation with him. During the meeting, we talked about combining AI capabilities and developing different brands or applications befitting each company," Park said at the time. "We have not discussed specific details," an SK Telecom official said, adding, "We are building a common ground for cooperation."

In the case of Naver, it chose to join hands with Japan’s SoftBank instead of a Korean company. In November 2019, Naver’s Japanese subsidiary LINE and SoftBank’s subsidiary Yahoo Japan announced management integration, declaring that they will be reborn as a global AI company. "We aim to create an AI technology company that leads Asia and the rest of the world through a revolutionary model," the agreement said. The integrated company will pump 100 billion yen into the AI sector per year.

Alliances among Korean ICT companies aim to challenge the dominance of the AI market by two groups — GAFA (Google, Amazon, Facebook and Apple) of the United States and BATH (Baidu, Alibaba, Tencent, and Huawei) of China. With service boundary among countries disappearing, companies with different capabilities feel the need to join hands to expand into the global market.
Introducing Progress in Computer Vision, Deep Learning and AI

Samsung Research Centers From Around the World Present Studies at CVPR 2020

By Kim Eun-jin

Samsung Electronics’ global R&D centers have presented their studies to Computer Vision and Pattern Recognition (CVPR) 2020, the world’s biggest conference on computer engineering and artificial intelligence, introducing progress in new computer vision, deep learning and AI related technical research.

At this year’s CVPR conference, held online from June 14 to 19, Samsung Research, an advanced R&D hub within Samsung Electronics’ SET Business, and its advanced R&D centers gave presentations on a total of 11 thesis papers. Researchers from Samsung Moscow AI center and Samsung Toronto AI center were invited to oral presentations, an opportunity given to only 5% of the entire attendees.

At the oral presentation, Pavel Solovev of Samsung Moscow AI Center introduced ‘High Resolution Daytime Translation without Domain Labels,’ which is a technology that allows a user to simply click an object in a photograph to precisely select and separate it.

‘High Resolution Daytime Translation without Domain Labels’

Joining from the Toronto AI Center, researcher Michael Brown and his team introduced the paper titled ‘Deep White-Balance Editing,’ which was also selected for an oral presentation. This AI technology corrects white-balance mistakes made in a captured photograph much more accurately than existing photo editing programs. This technology also allows users to accurately adjust the photo’s white-balance color temperature.

Researchers from Samsung Research America also presented interesting findings at the conference. Eric Luo’s study titled ‘Wavelet Synthesis Net: An Efficient Architecture for Disparity Estimation to Synthesize DSLR Calibre Bokeh Effect on Smartphones’ focused on key enablers to narrow the gap between DSLR and smartphone camera in terms of bokeh, the narrow depth of field (DoF).

Yilin Shen from Samsung Research America’s AI Center introduced a study on out-of-distribution (OoD) benchmarks for deep neural networks research. Shen’s study titled ‘Learning out-of-Distribution Detection without Out-of-Distribution Data’ proposed the key machine learning algorithm of drastically improving the detection rate, one of major challenges in AI technology.

Additionally, the studies proposed by researchers from the Samsung Research’s Visual Technology team and Samsung R&D Institute India-Bangalore were also selected by CVPR.

"High Resolution Daytime Translation without Domain Labels"
U.S.-China conflicts are escalating over the Hong Kong Security Law.

The Korea CXO Research Institute announced on June 7 that the top 10 conglomerates of South Korea are running 2,652 subsidiaries in 101 countries and the number of such subsidiaries increased by 72 in one year.

The subsidiaries include 608 of Samsung Group, followed by 402 of Hanwha, 358 of LG, 354 of Hyundai Motor, 352 of SK, 233 of Lotte, 137 of POSCO and 125 of GS. 462 are located in China, 83 in Hong Kong, and 462 in the United States. The total increased by 22.1 percent in one year.

In short, the United States, Hong Kong and China are the most important markets for the 10 conglomerates. "The future impact of the lopsidedness is something to wait and see with U.S.-China conflicts escalating over the Hong Kong Security Law," the research institute said.

In the United States, Hanwha is currently running 142 subsidiaries and many of them are engaged in photovoltaic generation. The number is 79, 71, 66 and 37 for Samsung, Hyundai Motor, SK and LG Groups, respectively. In China, SK’s number is 99, followed by LG’s 82, Samsung’s 77, Hyundai Motor’s 70 and Lotte’s 39. In Hong Kong, SK Group’s 44 subsidiaries are currently doing business with Lotte’s 18 and Samsung’s 13.

In addition, the 10 conglomerates currently have 98 subsidiaries in Vietnam and 95 in Japan. A total of 1,240 subsidiaries are located in Asia.

A boycott of Chinese goods and services has erupted in India, following an armed clash between Indian and Chinese troops in the northern Indian region of Ladakh on June 15. This may benefit Korean companies operating in India.

China is India’s largest source of imports. According to data from India's Ministry of Commerce and Industry, India's trade deficit with China in fiscal year 2018-2019 amounted to US$53.6 billion. In particular, Chinese electronic products and active pharmaceutical ingredients (APIs) account for 39.6 percent and 38.4 percent of India's total imports, respectively.

The Indian government has been unhappy with this trade imbalance. Now it is moving to restrict imports from China in earnest after a bloody clash broke out at the India-China border.

The increased animosity toward China is expected to directly affect the mobile sector where Korean and Chinese companies are competing quite fiercely. Samsung Electronics had been the top ranker in the Indian smartphone market for about six years until 2017. Yet it was relegated to second place in the fourth quarter of 2017. Chinese smartphone makers have greatly expanded their market shares by waging a price war. Xiaomi ranks first, and Vivo and Oppo are also among high rankers.

The clash is also expected to cause a stir in the auto market. Chinese automakers still have a small market share in India, but they have been seeking to expand their presence by launching a large-scale sales campaign. At least six Chinese carmakers including Shanghai Automotive Industry Corp. (SAIC) and GWM planned to invest US$5 billion in the Indian market over the next three to five years. But their plans are expected to suffer a setback.

In 2019, Hyundai Motor Co. ranked second with a 17.3 percent share after Maruti-Suzuki (50.3 percent) in the Indian auto market. Kia Motors entered the Indian market in 2019 and has since been seeking to penetrate it.

India’s solar energy-related markets are expected to give more opportunities to Korean companies. Late last year, India banned Chinese companies from participating in government solar energy projects. The market share of Chinese solar energy equipment exceeded 80 percent in 2019.

Some experts assert that the emerging China boycott will not lead to a significant decrease in India’s reliance on Chinese goods. India’s weak manufacturing base is already heavily dependent on China, and most Indian consumers tend to be more sensitive to prices than to the origin of products.
LG Electronics to Relocate 2 TV Production Lines in Gumi to Indonesia

By Kim Eun-jin

LG Electronics announced on May 20 that it will relocate two of its six TV production lines in Gumi, South Korea, to Indonesia within this year to improve management efficiency.

The company’s move goes against the recent trend towards reshoring, but the company says the decision is inevitable to increase profits in its TV business. LG Electronics’ Gumi factory currently produces OLED TVs, LCD TVs, and monitors for computers among others. LG Electronics is planning to move two of these lines to its plant in Cibitung, Indonesia and increase the overseas plant’s production capacity by 50 percent, making it a key TV production base in Asia.

The Cibitung factory was completed in 1995 and currently produces TVs, monitors, and signage products. LG Electronics plans to automate the plant’s production processes from assembly to quality inspection and packaging.

The Gumi factory, which will be reduced to four lines, will focus on mass production of high-tech premium TVs such as rollable and wallpaper TVs.

"The relocation of the production lines is aimed at strengthening the company’s regional TV production system with the Gumi plant playing the role of a mother factory,” an LG Electronics official said. “We will supply TVs to Asia from Cibitung, Indonesia, to Europe from Mlawa, Poland and to North America from Reynosa, Mexico.”

Meanwhile, LG Electronics moved its smartphone production line from its Pyeongtaek plant in Gyeonggi Province to the Haiphong plant in northern Vietnam in 2019.

The relocation of the production lines is expected to help LG Electronics maintain its gap with Chinese follow- ers to some extent. Chinese producers, including HiSense, TCL and Xiaomi, are rapidly increasing their shares in the global TV market based on low labor costs and subsidies from the Chinese government. Although LG Electronics held 18.7 percent of the TV market in the first quarter of 2020, up 2.2 percentage points from a year earlier, it was largely attributable to Chinese companies’ production disruptions kindled by the spread of COVID-19.

As the normal operation of LG Display’s production line for OLEDs in Guangzhou, China, has been delayed due to the impact of the pandemic, it is essential for LG Electronics to secure cost competitiveness. Analysts say that it was necessary to relocate the plant to narrow its gap with Samsung Electronics, which will launch products such as QD display and micro LED TV models in 2021.
A Move to Keep Korean Display Makers in Check

JOLED Files Patent Infringement Lawsuit against Samsung Electronics

By Michael Herh

JOLED, an OLED manufacturer in Japan, filed a patent infringement lawsuit against Samsung Electronics, Samsung Display, and Samsung Electronics’ U.S. subsidiary with the U.S. District Court for the Western District of Texas on June 22, the company announced on its website.

A company jointly set up by Sony, Panasonic and other Japanese companies, JOLED also filed a similar complaint against Samsung Electronics Co. and its German subsidiary with the District Court of Mannheim in Germany.

JOLED claims that Samsung Electronics and others used its OLED panel technology without permission for Galaxy smartphones sold in the United States. Industry sources believe that the patent was related to OLED material technology. JOLED holds about 4,000 patents related to organic matters.

On June 19, JOLED announced mass production of OLED panels for TVs, declaring war against LG Display, which has strengths in large OLED panels.

JOLED had technologies related to OLEDs but lacked the funds needed to develop large OLEDs. It received investments worth 20 billion yen from CSOT, a Chinese display company. Chinese and Japanese display manufacturers are stepping up efforts to catch up with Korean companies in OLED technologies through the joint development of large OLEDs.

China Predicted to Overtake Korea in OLED Market in 5 Years

Chinese OLED Markers Closely Trailing Korean Rivals

By Jung Suk-ye

Chinese display makers are stepping up their efforts to tap into the OLED market after establishing dominance in the global LCD panel market. In particular, they are eyeing the large OLED market, which is dominated by Korean companies, through cooperation with Japanese companies.

According to foreign media reports, JOLED, a Japanese display company, has recently formed a business partnership with China's TCL CSOT and started joint development of large OLED panels for TVs.

TCL CSOT will take over new shares that JOLED will issue to raise funds. The amount of funding will reach 20 billion yen and TCL CSOT will secure a 10.76 percent stake in JOLED.

Under this partnership, they are planning to produce large OLED panels for TVs through the inkjet printing method, a next-generation production technology. The reason why display companies representing Japan and China have joined forces is that they have strong will to overtake Korea, which has been maintaining its leading position in the OLED market.

Currently, LG Display is monopolizing the large OLED market. Chinese companies have already carved out a niche in the small and medium-sized OLED market and are seeking to overtake Korean companies in the large OLED market.

However, experts say that Chinese companies cannot take over the position of South Korean companies right away as there are still technical limitations in producing large OLED panels directly through the inkjet printing method.

Chinese companies are revving up their large OLED business by making aggressive investments with strong support from the Chinese government. BOE aims to mass-produce OLEDs for TVs by 2024 by investing one billion yuan in developing technologies for large OLEDs. HKC is planning to mass-produce large OLEDs by building production lines in Hunan Province, China from 2021. CSOT is also working on large OLED test lines and ponder when to make large-scale investments.

Korean companies are worried as they have already lost some of their shares in the small and medium-sized OLED market to Chinese companies. Market researcher DSCC expects China's OLED market share to hit 50 percent in 2024, in excess of Korea's 45 percent. Last year, the market share was Korea's 76 percent versus China's 22 percent. According to the prediction, Chinese companies will turn the tide against their Korean competitors in just five years.
Online Booth Introduces Samsung’s Lighting Solutions

Samsung Opens Virtual Booth to Showcase LED Technologies and Products

By Kim Eun-jin

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amsung Electronics announced on June 4 that it has opened a virtual lighting exhibition where a range of up-to-date news about Samsung lighting solutions will be available to manufacturers, supply chain partners and end users, 24 hours a day, seven days a week.

The new online booth provides a platform where virtual visitors can access the most current Samsung LED technologies and products in a matter of seconds.

“Under the current circumstances, it is very difficult to continue face-to-face communications throughout our industry, and this is exactly why we have come up with a new approach to digital communications,” said Choi Yoon-joon, vice president of Samsung LED Business at Samsung Electronics.

“Samsung’s Virtual Lighting Exhibition 2020 will serve as an important business showcase where the latest LED component solutions can be displayed without the need for physical meetings.”

At Samsung Virtual Lighting Exhibition 2020, virtual visitors will find segmented product lineups grouped according to application. These easy-to-peruse offerings include:

Horticulture Lighting Solutions — featuring full-spectrum-based technology that improves crop quality and increases yields by boosting photosynthesis, inhibiting disease and promoting better nutrition

Human-centric Lighting Solutions — establishing a melatonin control effect through optimized melanopic ratios that help our bodies adjust the melatonin levels, allowing people to operate in a heightened state during active periods and feel more relaxed while resting

Retail Lighting Solutions — helping businesses thrive by promoting longer stays in stores and encouraging more targeted purchasing considerations

Light Engine Solutions — embracing an extensive range of products that cover every type of LED application, highlighting superior performance, design flexibility and top-notch efficacy

Outdoor & Industrial Lighting Solutions — providing robust performance backed by advanced technology and proven reliability in areas where the highest standards are required

The virtual booth features highly realistic showcases of Samsung lighting solutions which are accompanied by narrated videos that serve to minimize the communication limitations brought about by the current climate. A range of media operators will offer virtual visitors a series of first-class online exhibitions during which the benefits of Samsung’s LED component solutions can be conveniently assessed.

Shifting Focus to OLED

LG Chem to Sell LCD Polarizer Business to Chinese Company for US$1.1 Bil.

By Kim Eun-jin

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G Chem announced on June 10 that it has recently signed a conditional contract with China’s chemical materials company Sansan to transfer its LCD polarizer business for US$1.1 billion.

LG Chem said that some product groups such as LCD polarizers for automobiles will be excluded from this sale as they are still lucrative.

A polarizer is a film that is attached to the front and back of an LCD panel to pass or block light. LG Chem’s polarizer business once posted 2 trillion won in annual sales and enjoyed a 27 percent share in the global market. However, the company has decided to withdraw from the business as its profitability deteriorated due to a price war started by Chinese companies.

In February, LG Chem sold its LCD color photoresist materials business to Siyang International, a subsidiary of China’s Yoke Technology, for 58 billion won. It also withdrew from its LCD glass substrate business, for which no potential buyer showed up.

LG Chem is revamping its business portfolio with the focus on future growth engine items such as OLEDs.
Domestic Sales Increase by About 10%

Korea’s Auto Exports Plunge 57% on Year in May

By Jung Min-hee

In the wake of the novel coronavirus crisis, South Korea’s automobile exports were halved in May compared to the previous year. Car exports fell below 100,000 units for the first time in 17 years.

According to the data released by the Ministry of Trade, Industry and Energy on June 11, automobile exports totaled 95,400 units in May, down 57.6 percent from a year ago. It was the first time since July 2003 (86,074 units) that the monthly export volume fell below 100,000 units. At the time, Hyundai Motor's labor union went on a partial strike, demanding a five-day workweek and the elimination of discriminations against non-regular workers.

With a plunge in car exports, automakers are only looking to the Korean market. Domestic sales rose 9.7 percent to 168,778 units in May. Domestic sales increased for three consecutive months thanks to new model effects, special discounts, and installment sales including a bigger cut in the individual consumption tax.

Automobile production totaled 231,099 units in May, down 36.9 percent from the same period 2019. The drop was attributed to the three-day decrease in the number of working days and production disruption due to the unstable supply of wiring harnesses for cars.

Exports of auto parts contracted 66.7 percent to US$650 million due to an extended shutdown of major overseas carmakers.

Expanding on Hyundai’s Smart Mobility Vision

Hyundai Motor Group and RISD Collaborate to Study Future Mobility Innovations

By Jung Min-hee

Hyundai Motor Group and Rhode Island School of Design (RISD) announced on June 23 a research collaboration to examine relationships among natural and built environments in order to propose new directions for the future of mobility.

The study expands on the smart mobility vision announced by Hyundai Motor Group at CES 2020. Hyundai’s vision, which aims to help vitalize human-centered future cities, focuses on three mobility solutions: Urban Air Mobility (UAM), Purpose Built Vehicle (PBV) and Hub. The joint research with RISD will help infuse these solutions with insights from RISD’s pioneering faculty and students. Through RISD’s Research & Strategic Partnerships program, the partnership with Hyundai elevates expertise of faculty with the experimental creativity of students to conceive our future realities.

For the research, Hyundai established a task force, including four designers from the Design Innovation Group. In turn, RISD developed a new collaborative research platform created solely for Hyundai. Four faculty members at the world-renowned design school leveraged their expertise to explore study areas supported by 16 students. Hyundai and RISD kept the participant size small, allowing for close collaboration, resulting in a distinctive study on the future of mobility.

Based on this vision, the study examined four distinctive areas of future mobility, including graphic design, industrial design, sound design, and textile design.

Graphic Design – Posthuman Mobility: From Molecule to Machine

Responding to the evolving pandemic, this group explored the future of mobility in a microbe centric world by addressing the relationship between humans and microbes and our need to respond and adapt with agility to the new world around us. The research team developed models for collaboration with nature as an alternative to models inspired by nature. They focused on interspecies collaboration, cyborg nature, and designed nature, such as future mobility hubs and human identification methods utilizing augmented reality, virtual reality and machine-learning technologies.
Industrial Design – From Anthropocene to Aerocene through Biocene

In response to the increasing need for sustainable options, this research group explored alternative trajectories for the future of mobility guided by artistic, scientific, and philosophical provocations. In particular, this group utilized negative speculative narratives to explore the topic of future cities and environment in the era of UAM. Scenarios such as privacy intrusion and bird strikes were considered.

Sound Design for Mobility

Drawing from the fields of bioacoustics and soundscape ecology, and experimentation in RISD’s Spatial Audio Studio, this group worked toward developing novel auditory displays and sonic experiences with embeddable computing platforms and procedural audio techniques under a common theme of “Making the Un-heard Heard” in response to the current COVID-19 environment. For example, the group studied alternative “noise” for soundless electric vehicles.

Textile Design for Mobility

This research group drew from the fields of bionics and biomimicry in developing innovative textile solutions through speculative approaches and solutions gathered from a case study of the cockroach. The structure of cockroach provided insights into the safety of future mobility. Hyundai plans to further incorporate biomimicry methods into its study.

The partnership kicked off with a workshop at RISD’s Edna W. Lawrence Nature Lab in February 2020, with students and faculty who came together with a shared understanding that the real-world mobility challenges Hyundai faces present unique opportunities at the same time. Students were selected through a highly competitive pool of 108 applicants across 10 departments at RISD: Architecture, Digital + Media, Film/Animation/Video, Graphic Design, Industrial Design, Jewelry + Metalsmithing, Liberal Arts, Painting, Printmaking and Textiles.

The collaborative study moved forward despite the COVID-19 pandemic, thanks to Hyundai’s unwavering commitment to explore the future and RISD’s technological resources that allow students and faculty members to collaborate in the virtual space.

Hyundai and RISD will continue their partnership starting with a six-week summer research program focusing on lightweight structures and hygiene, inspired by nature. The partners plan to deepen their collaboration and form a longer-term partnership with RISD’s Nature Lab providing a foundation for living systems research.

“Hyundai Motor Group’s work with RISD is providing deep insights that will help us advance innovations in technology and design, paving the way for next-generation mobility solutions,” said Chi Young-cho, Hyundai Motor Group’s president and chief innovation officer. “Through the collaboration, we’ve discovered that we have a similar vision for the future, and we’re able to develop a common language and working methods that will provide a solid foundation for a more fruitful collaboration going forward.”

“The post-COVID-19 era will require us to come up with new ways of thinking for our mobility ecosystem to evolve,” said Lee Sang-yup, senior vice president and head of Hyundai Global Design Center. “By conducting in-depth studies with RISD about how nature copes with change, we expect to gain fresh inspiration that can lead to the development of sustainable processes, next-generation technologies and innovative designs for the future of mobility.”

“Our broader institutional vision—as set forth in RISD’s strategic plan, NEXT: RISD 2020-27—commits to contributing to new knowledge through innovative curricula and increasing our overall research capacity to support interdisciplinary inquiry and exchange,” said RISD President Rosanne Somerson. “This first-of-its-kind research collaborative between RISD and Hyundai brings this commitment to life and supports the notion that, when we combine different bodies of knowledge together in the right environment, true innovation flourishes.”

Somerson added, “I am grateful that Hyundai provided this opportunity and has shown so much openness in embracing the role of artists and designers in contributing key insight to mobility research. The early outcomes of this unique partnership are impressive, and have activated new ideas about a just and climate-smart future.”

“RISD’s partnership with Hyundai opens an inspiring new chapter in the space of design, art and creation. Hyundai has a keen interest in the unknown—as does RISD—and we thank them very much for making this research possible,” notes RISD Provost Kent Kleinman. “The Edna W. Lawrence Nature Lab, one of RISD’s innovative centers for research and teaching, played a key role in almost all the students’ projects, demonstrating the blurring of boundaries between nature and artifice, and the profound lessons that natural systems offer to artists and designers. Here too, our partnership with Hyundai rests on common ground, on which we plan to build in the future.”

Hyundai Motor Group has been actively studying nature through various projects, including the recent Hyundai Nature Observation Project by Design Innovation Group.
Discussion Begins on Workforce Redeployment

Labor and Management of Hyundai Motor Cooperating in Transition to Future Mobility

By Michael Herh

The labor and management of Hyundai Motor Co. will discuss workforce redeployment and retraining to adapt to the era of future mobility.

The company’s Labor-Management Advisory Committee concluded in 2019 that the automaker will have to reduce its workforce by 20 percent as the automobile industry will be reorganized towards electric vehicles.

Accordingly, the company’s labor and management will draw up a concrete action plan for the transition this year. The labor union began to work with the management to prepare for the coming era of future cars.

The two sides held a ceremony on May 19 to appoint advisors to the Employment Stabilization Committee at the main building of Hyundai Motor’s Ulsan Plant. The committee will seek solutions to employment problems and act as a mediator between the labor and management. In 2019, the two sides invited five external experts as advisors and held many seminars with them. A new group of external experts were invited as advisors for 2020.

In 2019, the advisory committee concluded that Hyundai Motor should increase the proportion of electric vehicles and reduce manufacturing workers by 20 percent by 2025. At the time, the labor and management agreed to reduce the workforce through natural reductions such as retirements. A debate on employee redeployment and retraining is expected to begin in earnest in 2020.

Auto industry insiders expect that a concrete plan to redeploy Hyundai’s production manpower will come out in 2020 as the government’s will to support the automobile industry is coupled with the labor union’s cooperation.

Mercedes-Benz Fined for Manipulating Emission Programs

Diesel Cars’ Share in Korea’s Auto Imports Likely to Fall below 30%

By Michael Herh

Sales of imported diesel cars have been on a steady decline since Audi Volkswagen’s Dieselgate in 2015. Consumer distrust about imported diesel cars is explosively growing as a new dieselgate involving Mercedes-Benz recently broke out.

Sales of imported diesel cars reached 29,036 units in the first five months of this year, accounting for 28.8 percent of the total imported car sales in Korea, said the Korea Automobile Importers and Distributors Association (KADA) on June 10. Gasoline vehicles accounted for 59.3 percent with 59,848 units, hybrids 10.5 percent with 10,631 units and electric cars 1.4 percent with 1,317 units.

If this trend holds, the proportion of diesel cars in imported car sales will
Nissan Motor has finally decided to withdraw from the South Korean market due to weak sales resulting from lingering anti-Japan sentiment and the COVID-19 outbreak.

Nissan Motor President Makoto Uchida said in a press conference on May 28 that the company will withdraw from the Korean market by December as part of its global business reorganization, according to Kyodo News Agency. The Japanese carmaker entered the Korean market in 2004.

Nissan has decided to reduce its business in some parts of Southeast Asia as well. In Europe, it will operate its business on an appropriate scale based on its alliance with Renault Group of France. Nissan has decided to shut down its plant in Indonesia and will consider closing down its plant in Barcelona, Spain. However, it is planning to maintain its business in the Chinese and North American markets, which are the largest markets in the world.

Due to Weak Sales
Nissan to Withdraw from Korean Market after 16 Years of Operation

By Michael Herh

A massive deficit compelled Nissan to make the decision. In the aftermath of the new coronavirus spread, the company posted a net loss of 671.2 billion yen (approximately 7.72 trillion won) in its consolidated financial statements for fiscal 2019 (April 2019-March 2020). This means that the Japanese automaker switched to a massive deficit from 319.1 billion yen (approximately 3.67 trillion won) in net profit in fiscal 2018. It was the first time in 11 years since 2008 that Nissan suffered a net loss.

Nissan Korea will close down all its business in Korea, including its premium brand Infiniti, by the end of December 2020. Nissan Korea's sales performance in 2019 is believed to be much worse than in 2018 due to the Japanese car boycott by Korean consumers. Excluding the Infiniti brand, sales fell from 5,053 units in 2018 to 3,049 units in 2019. The company sold 813 units in the January-April period of 2020. Nissan's luxury brand Infiniti sold only 56 units nationwide in April this year.

Nissan Motor currently has 43 employees and 27 service centers, including 13 for the Infiniti brand. Nissan Korea said it will provide after-sales services such as vehicle quality assurance and parts management over the next eight years. However, it remains to be seen whether the current level of service centers will be maintained as dealers are expected to give up Nissan cars in the future. Prices of used Nissan cars are also expected to plunge as the value of the brand decreases due to Nissan's withdrawal from the Korean market.
Nine out of 10 Korean auto parts makers say they are suffering liquidity shortages due to the new coronavirus (COVID-19) crisis.

The Korea Automotive Industry Association conducted a survey of 96 auto parts companies to see the impact of COVID-19. It found that 93.8 percent of the respondents had liquidity problems.

The main culprit behind their liquidity crisis was a drop in sales (69.5 percent) due to shrinking demand. The survey found that half of the companies suffered a 20 percent drop in sales in the first quarter compared to a year before. Other factors included unstable operation funds due to labor costs (41.1 percent), unstable operations of overseas factories (33.7 percent), reduced export volume (15.8 percent), and difficulties in financing (14.7 percent).

However, more than half of the auto parts makers in a temporary liquidity shortage said they needed less than five billion won, which is not a very large amount.

Hyundai Mobis liquidated its Hungarian subsidiary, which was established in 2018, early this year, industry sources said on May 23.

Hungary is seen as a forward base for global carmakers to make inroads into Europe. The country is home to battery production bases of SK Innovation and Samsung SDI, which are seeking to penetrate the European electric vehicle market.

Hyundai Mobis also planned to supply parts to global carmakers by setting up the Hungarian subsidiary. In fact, a contract to supply parts for electric vehicles to Daimler, the parent company of Mercedes-Benz, once reached the final stage. However, as the supply contract broke down during a detailed negotiation process, Hyundai Mobis eventually decided to liquidate the Hungarian subsidiary and withdraw from the country.

Hyundai Mobis has been making efforts to diversify its sales outlets. Company president Park Jung-kook said, “The 2020 goal is to break away from sales dependence on Hyundai Motor Group.” In 2020, Hyundai Mobis has set the goal of recording US$2.73 billion in sales to non-Hyundai customers, up 55 percent from 2019. The figure accounts for about 8.8 percent of its sales in 2019. However, it has become difficult for Hyundai Mobis to meet the target due to the COVID-19 outbreak. In 2019, 5.7 percent of its sales came from non-Hyundai customers.

However, Hyundai Mobis plans to continue its sales activities for global automakers from a long-term perspective. It believes that expanding “non-captive” sales is essential to maintaining its status of the world’s seventh-largest parts maker.

Although an advancement into the European market is not easy, Hyundai Mobis’ diversification efforts are paying off in the United States and China. It supplies such auto parts as head lamps, rear lamps, display modules, and central control devices to major companies such as GM and FCA. It is planning to supply not only existing parts but also newly developed devices such as head-up displays to local brands in China.
Hydrogen vehicles, which have been one of the three new industries the Moon Jae-in administration has promised to nurture, have been left out in the Green New Deal. Government subsidies for eco-friendly vehicles that were originally included in the third supplementary budget have been limited to electric vehicles only. While the government has been extremely keen on expanding support for electric freight vehicles, which have been very much in demand recently, it has left out hydrogen vehicles in its subsidy scheme despite a steep rise in demand.

The third supplementary budget plan submitted to the National Assembly included an additional 101.5 billion won (US$83 million) for an expanded supply of electric freight vehicles and two-wheeled electric vehicles. In the main 2020 budget proposal, the government planned to supply 5,500 electric freight vehicles and 11,000 two-wheeled electric vehicles, respectively. According to the latest supplementary budget, 5,500 electric freight vehicles and 10,000 two-wheeled vehicles will be supplied additionally.

Demand for electric freight vehicles has seen a sharp increase in the domestic market. The number of the Hyundai Porter III EV and Kia Bongo III EV sold in the domestic market up until this May totals 4,458, which is already close to the goal set in the main 2020 budget proposal.

An official from the Ministry of Environment said, “The target number for the electric freight vehicles including the number indicated in the latest budget plan is 11,000. Assuming from the number of provisional contracts made by individual proprietors and small business owners, it is very likely that the market will meet the target set by the government.” An automotive industry insider said, “It is not that difficult for carmakers to manufacture several thousands more electric vehicles if there is demand.”

Demand for hydrogen vehicles is growing as well. Sales of hydrogen vehicles until this May recorded 2,995, about three times the 1,068 units sold in the same period of last year. Some point out that if demand for the vehicles becomes the base for drawing up additional budget, just as the Ministry of Environment asserted, additional budget for hydrogen vehicles should have been allotted as well. The government also believes that the market will meet the target for hydrogen vehicle supply. An official from the Ministry of Environment said, “Judging from the number of provisional contracts and the current trend in automotive purchase, there is no concern that the government’s target of supplying 11,000 hydrogen vehicles will be met by the end of this year.”

Meanwhile, the government is under fire for channeling subsidies for electric passenger cars to subsidies for electric freight vehicles. This change in budget spending means that the government failed to accurately forecast the market demand in the first place.

The government originally planned to supply 65,000 electric passenger cars and 7,500 electric freight vehicles. However, only about 8,000 electric passenger cars were sold just until this May. Compared to the same period of last year (14,141 vehicles), sales have plummeted by half. The government’s change in its budget spending can be attributed to the depressed sales in electric passenger vehicles.
Securing the liquefied natural gas (LNG) vessel construction order from Qatar Petroleum (QP) has been the deal of this year in the shipbuilding industry around the world. Although the first agreement for the LNG vessel construction deal (16 vessels) was signed last month with a Chinese shipbuilding company, Hudong-Zhonghua Shipbuilding Group Co., the largest portion of QP’s LNG ship construction project went to South Korea’s “Big 3” shipyards – Daewoo Shipbuilding & Marine Engineering Co., Hyundai Heavy Industries Co. and Samsung Heavy Industries Co.

This deal could not have been more perfectly timed as the shipbuilding industry is struggling to survive through the COVID-19 pandemic and the plummeting oil prices. Amid such bleak circumstances, the three shipyards have provided a lifeline for the ailing shipbuilding industry by securing the blockbuster deal. QP’s chief executive officer and Qatar’s energy minister, Saad Al-Kaabi, and officials of the three shipyards signed the agreement in a virtual ceremony on June 1.

Under the US$20 billion worth agreement, QP has secured LNG vessel construction slots from the three South Korean shipyards until 2027. Considering that one LNG vessel is worth approximately US$180 million, this agreement amounts to construction of about 103 vessels.
The exact number of vessels ordered per shipyard has not been revealed by QP nor the three shipyards. Qatar, the world’s number one producer of LNG, has not made any investments related to LNG since 2004. This mega-deal signed between QP and the South Korean shipyards come with the increased demand for LNG due to reinforced environmental policies in many countries around the world including China and Europe. High LNG demand precipitated the need for production facilities as well as vessels to carry LNG.

The security bar was especially high for the signing ceremony. QP, concerned about the largest LNG ship contract in history falling through, requested the details of the deal to remain strictly confidential until the deal was signed and sealed. The Korean Ministry of Trade, Industry and Energy (MOTIE) did not even disclose the movements of Minister of Trade, Industry and Energy Sung Yun-mo during the signing ceremony.

South Korean shipyards’ superb LNG vessel construction capacity is what helped the shipyards to score a major portion of the LNG vessel construction order. Up until the 1980s, Japan led the LNG vessel construction industry. However, the details of the South Korean ships’ design and capacity that no other shipyards could emulate became the game changer. It was the cargo containment system, to be more specific, that helped South Korea to surpass Japan. While Japan dominated the LNG shipbuilding industry in the 1980s with Moss-type vessels equipped with multiple spherical cargo tanks, Korea developed membrane-type vessels where a cargo tank is integrated with the hull of the vessel. Membrane-type vessels were preferred over Moss-type vessels as cargo capacity of membrane-type vessels is 40 percent higher than that of Moss-type vessels. Starting from the late 1990s, South Korean shipyards started boxing out Japanese rivals, eventually to dominate the world’s LNG shipbuilding industry. Full re-liquefaction system (FRS), which fully re-liquidates the evaporating gas and pumps back the liquid form to the cargo tank, is also another growth engine that contributes incrementally to South Korea’s LNG shipbuilding industry.

Backed by the Qatar deal, South Korean shipbuilding industry is hoping to chase off its Chinese rivals who are rapidly expanding their presence in the industry. Although China’s shipbuilding capacity may not come close to that of South Korea’s yet, Chinese shipbuilders have been largely supported by shipping finance. China’s shipping finance is what helped China’s Hudong-Zhonghua Shipbuilding Co. land its largest deal with Qatar last month. This deal came as a surprise even to the industry insiders. Chinese banks offer financial support that amounts to 60 percent of the ship cost for ships built in their own country and covers 80 percent of the construction cost for offshore plants. One official in the shipbuilding industry said, “It is very likely that the Export-Import Bank of China promised financial support for Qatar’s LNG vessel order. This level of financial support would have been extremely advantageous amid financial challenges brought on by the COVID-19 pandemic and the overall economic recession.”

While the Qatar deal may be interpreted as signs of optimism for the domestic shipbuilding industry, some point out that it may be too early to say that the industry has turned a corner. Bae Jae-sun, a researcher at Hyundai Motor Securities, said, “What really matters is whether the LNG vessel order cycle will continue after 2022. This will be largely up to the United States that occupy 88 percent of LNG-related projects with high feasibility.”

**The Largest LNG Ship Construction Project in History**

**S. Korea’s Big 3 Shipbuilders Land 23-Tril.-Won LNG Carrier Order from Qatar**

By Michael Herh

The big three Korean shipbuilding companies — Daewoo Shipbuilding & Marine Engineering (DSME), Hyundai Heavy Industries and Samsung Heavy Industries — have signed an LNG carrier construction deal worth 23.6 trillion won with Qatar Petroleum (QP), a state-run oil company of Qatar, Reuters reported on June 1 (local time).

QP said in a press release, posted on its website, that it has entered into the agreements with the three Korean shipbuilders to reserve their LNG ship construction capacity to be utilized for QP’s future LNG carrier fleet requirements, including those for the ongoing expansion project in the North Field and in the United States.

QP said it has signed the largest LNG shipbuilding project in history to secure more than 100 ships from the three Korean shipbuilders. In general, for a large-scale shipbuilding project, a contract is made to reserve ship construction capacity before an official order is awarded. On hand in the signing ceremony held via a teleconferencing system were Saad Sherida al-Kaabi, minister of energy in Qatar and president of Qatar Petroleum (QP); Korean Minister of Trade, Industry and Energy Sung Yun-mo; Lee Sung-keun, president of DSME; Ka Sam-hyun, president of Korea Shipbuilding & Offshore Engineering; and Nam Joon-ou, president of Samsung Heavy Industries.

“Saad Sherida al-Kaabi, minister of energy in Qatar and president of Qatar Petroleum (QP), signs an LNG carrier contract with Korea’s big three shipbuilders in a teleconference on June 1.

“The signing of today’s agreements with the three esteemed Korean companies reflects our commitment to the North Field expansion projects, even during these extraordinary times.” Minister Al-Kaabi said. “We are moving full steam ahead with the North Field expansion projects to raise Qatar’s LNG production capacity from 77 million tons today to 126 million tons per annum by 2027.”
The profitability of paraxylene (PX) significantly deteriorated last month, adding concerns to South Korean chemical companies. They are already undergoing demand-side difficulties in the wake of COVID-19 and the rapid decline in the sales margin of PX, their major export item, is compounding the matter.

The Korea Petrochemical Industry Association announced on June 7 that the price difference between PX and raw material naphtha dropped to an average of US$220 per ton last month. Especially, the average spread hit an all-time low of US$176 on May 29. For reference, the spread was at least US$300 until August last year and fell below US$300 in September last year.

The ongoing decline in PX sales margin is because of the sluggish demand caused by COVID-19 and new facility operation in China that started in 2018. The PX price, which moves in line with the international oil price, dropped from US$800 to US$400 per ton from May 2019 to April this year. Although the naphtha price also dropped to about US$200 and at least some margin was maintained, the spread plummeted last month with the naphtha price rising. According to the industry, the break-even PX spread is US$200 to US$250 per ton.

Last year, SK, Hanwha Total, S-Oil and GS Caltex produced 3.33 million, two million, 1.9 million and 1.35 million tons of PX, respectively. The combined amount is almost equal to China’s PX production increment in 2019.

The South Korean companies’ exports are falling with China’s PX production on the increase. Specifically, their PX exports totaled US$6,192.73 million last year, down 18.7 percent from a year ago. For the first four months of this year, the exports dropped 43.6 percent year on year to US$1,408.29 million.

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**HDC Uncomfortable with Recapitalization**

Asiana Airlines Putting Pressure on HDC by Recapitalization

Asiana Airlines is planning to increase its capital before support from creditors in order to improve its financial structure. According to industry experts, the airline’s recapitalization is likely to result in the creditors’ more influence and HDC Hyundai Development Company’s more difficulties in their takeover negotiations.

Asiana Airlines held an extraordinary shareholding meeting on June 15 and decided to change its articles of association to increase its convertible bond issuance limit and the number of issued stocks. Specifically, those will be adjusted from 700 billion won to 1.6 trillion won and from 800 million shares to 1.3 billion shares, respectively.

The recapitalization is to improve its financial structure deteriorated by COVID-19. Korea Development Bank and the Export-Import Bank of Korea decided to provide 1.3 trillion won and 1.7 trillion won last year and in April this year, respectively.

HDC Hyundai Development Co. is not comfortable with the recapitalization. “Asiana Airlines decided to borrow more money and carried out follow-up procedures regardless of our explicit disapproval,” HDC said on June 9. This is because the recapitalization can lead to more influence on the creditors’ part and its takeover can be made more difficult.

In the meantime, Korean Air and Asiana Airlines are planning to resume some international flights next month. For example, Korean Air’s flights to Dallas, Vienna, Hanoi and Ho Chi Minh
Korea Asset Management Corp. (KAMCO) may purchase Korean Air's aircraft as well as real estate as a means of providing liquidity to the ailing airline.

KAMCO will hold a board meeting this week to discuss issuing bonds to raise funds needed to finance the planned corporate asset purchase program. The government plans to raise 2 trillion won by issuing KAMCO bonds and launch the program sometime in July. The goal of the program is intended to help companies struggling with the COVID-19 crisis sell their assets at appropriate prices.

Korean Air is one of the companies that can benefit from the asset purchase program as it has been hit hard by the COVID-19 crisis.

Korean Air will receive 1.2 trillion won from a state-run bank and plans to expand its capital by 2 trillion won by the end of 2021. The KAMCO program may acquire the company’s property in Songhyeon-dong, downtown Seoul. The Seoul Metropolitan Government is intent on acquiring the land parcel and turning it into a park. Yet it is offering a price that is far lower than its market price. Given the city government’s influence, Korean Air will eventually be unable to sell the site in the market and have to use the KAMCO program.

Korean Air's planes are also targets of the asset purchase program. Korean Air directly owns 80 percent of its fleet and operates the remaining 20 percent in a lease system. "LCCs do not have their own aircraft, so they cannot benefit from the KAMCO program. Large airlines such as Korean Air and Asiana Airlines are eligible for the support program," a government official said.

However, Asiana Airlines is likely to be excluded from the program for now as it is in an M&A process.

So far, there have been no cases of aircraft purchases through KAMCO's asset acquisition program. For KAMCO, this would be the first case of purchasing a Korean Air airplane.
With the ongoing spread of the COVID-19 pandemic, venture capital (VC) investments in the biotech and medical sectors have seen a sharp increase.

The Korea Venture Capital Association (KVCA) announced on June 7 that fresh VC investments in the first quarter of this year totaled US$620 million (746.3 billion won), with a large portion of the investments concentrated on the biotech and medical sectors. US$186 million (224.4 billion won), which accounts for 30 percent of the total, flowed into these sectors.

What should be noted is that despite the decrease in the amount of new VC investments compared to the same period of the previous year, VC investments in the biotech and medical sectors saw a sharp increase.

The total amount of new VC investments in the first quarter dropped by 4.3 percent from US$647 million (778.9 billion won) posted last year. On the contrary, VC investments in the biotech and medical sectors increased by approximately 32.0 percent, from US$141 million (170 billion won) to US$186 million (224.4 billion won).

The proportion of VC investments in the biotech and medical sectors also greatly increased by 8.3 percentage points, from 21.8 percent in Q1 of last year to 30.1 percent in Q1 of this year.

Compared to the figures posted in Q4 of 2019, right before the outbreak of COVID-19, new VC investments in the two sectors increased by US$11 million (13.9 billion won), or 7 percent.

The steep growth in new VC investments in the biotech and medical sectors is greatly highlighted when compared with the 46.5 percent drop in new VC investments in the ICT manufacturing industry. New VC investments in the ICT manufacturing sector in the last quarter of 2019 totaled US$45 million (54.8 billion won). What attracted large investments in the biotech and medical sectors was the high growth potential of the companies that possess diagnostics technologies and abilities to develop vaccines and treatments for the coronavirus.

Especially as the world continues to struggle amid the pandemic without vaccines, South Korean-made diagnostic kits are demanded by countries all over the world. Nine diagnostic kit developers including Osang Healthcare, Seegene, SD Biosensor, SEASUN BIOMATERIALS, LabGenomics, 1drop, Genematrix, BioCore, and SolGent have received emergency use authorization (EUA) from U.S. FDA.

Development of vaccine and treatments against the virus is also underway. As of now, clinical trials are being conducted for approximately 10 drugs as treatments for the virus. Among the 10 drugs currently being tested, five, including Remdesivir, are foreign drugs and five are South Korean. South Korean drugs include Bukwang’s hepatitis B treatment Levovir, Enzychem Lifesciences’ EC-18, Shinpoong’s Pyramax, Young Poong’s Ferodil, and Hanlim’s Haloxin.

As South Korean companies are being highly acclaimed by international society amid the pandemic, the number of small and mid-sized venture companies seeking to obtain international certification to enter the overseas markets is growing. Backed by the high demand for South Korean medical supplies and hygiene products in the American distribution market, many companies are hoping to receive approval from U.S. FDA to enter the American market.

The Korea Testing & Research Institute (KTR), which performs international certification works for small and mid-sized venture companies, said on June 4 that among all 2,880 products submitted up until last month for certification, 297 products were medical-related products such as hand sanitizers, masks, test kits, and protective medical gear. Compared to the 3,405 products submitted during the same period last year, the figure dropped by 15 percent. However, the number of medical-related products increased by almost 30 percent from 229 products last year. While the total number of products submitted for international certification decreased due to sluggish exports, number of medical-related products increased. The proportion of medical-related products also increased from 6.7 percent last year to 10.3 percent this year.
A group of 10 Korean pharmaceutical and biotech companies have moved into the Cambridge Innovation Center (CIC) in Boston.

According to the Korea Pharmaceutical and Bio-Pharma Manufacturers Association, the 10 companies share an office in the CIC in Boston. The 10 companies are Chong Kun Dang, Daewoong Pharmaceutical, Dongsung Pharmaceutical, Dong-A ST, Boryung Pharmaceutical, Samil Pharmaceutical, Amyloid Solution, Ildong Pharmaceutical, Hyundai Pharmaceutical and Huons.

The CIC is a shared office set up in 1999 and has a center in seven cities including Boston and Miami. As the center facilitates exchanges among tenants and cooperation between tenants and local research institutes, the Korean companies are expected to be able to expand R&D cooperation and set up joint ventures (JV) more easily.

In particular, Boston is known as the largest bio cluster in the United States. Boston is home to major universities and venture companies, including global pharmaceutical and biotech companies and research institutes, the Massachusetts Institute of Technology (MIT) and Harvard University.

Amway Korea announced on June 18 that it attracted the East Beauty Center of Excellence into South Korea in line with the company’s A70 growth strategy. According to the strategy, the West Beauty Center of Excellence located in the United States and the East Beauty Center of Excellence in South Korea are to lead beauty product development in the Americas and Europe and Asia, respectively.

The strategy has to do with South Korea’s excellence in the beauty care industry. The East Beauty Center will cover every stage of product development and production, ranging from concept design to efficacy confirmation. In addition, the center is expected to launch a series of projects on behalf of the global headquarters down the road. In fact, the center is already working on skincare brand Studio Skin along with various body and hair care products and devices, which are planned to debut in the second half of this year.

Amway Korea’s competitiveness has already been acknowledged by the HQ having founded its Asia Innovation Center in South Korea in 2013. The company has worked with a number of non-large companies in the country and the cooperation has resulted in 16 beauty products and nine beauty devices launched in 15 and 14 countries, respectively.
Lee Jae-yong Hobbled by Prosecution Investigation

Samsung Group Facing Multiple Challenges

By Jung Min-hee

The Investigation Deliberation Committee of the Supreme Prosecutors’ Office gave a non-prosecution opinion on Samsung Electronics vice chairman Lee Jae-yong with regard to the merger between Samsung C&T and Cheil Industries and his succession of corporate control.

Although this is good news for Samsung Group, it is still facing multiple challenges. For example, the COVID-19 pandemic is showing no signs of disappearing and Samsung Electronics’ consumer electronics, smartphone and semiconductor business units are continuing to be affected by the pandemic.

Another challenge is the ongoing trade disputes between the United States and China. The United States is about to implement regulations so that semiconductor products manufactured based on U.S. facilities cannot be supplied to Huawei, which is one of the biggest clients for Samsung Electronics. The United States is home to the world’s top semiconductor equipment suppliers such as Applied Materials and Lam Research, which means Samsung Electronics cannot be free from U.S. pressure. Besides, TSMC announced last month that it would invest US$12 billion to build a foundry in the United States.

China’s rise in the global IT sector is another threat to Samsung Electronics. It already lost the global LCD display market to BOE and CSOT and Chinese companies are about to overtake Samsung Electronics in the OLED display market. When it comes to the TV market, TCL, Hisense and Xiaomi are nipping at the heels of Samsung Electronics. The combined smartphone market share of Xiaomi, Huawei, Oppo and Vivo is much higher than that of Samsung Electronics and Huawei is outperforming Samsung Electronics in the 5G communications equipment market.

In the DRAM market, CXMT is planning to start manufacturing 17-nm chips within this year and YMTC’s 128-layer NAND flash manufacturing is scheduled to start within this year as well. Foundry company SMIC’s capital expenditures for this year are estimated to reach US$4.3 billion so that its main process technology is shifted from 14-nm to 7-nm. Unisoc, a subsidiary of Tsinghua Unigroup, is ready to take the place of Huawei in China’s system-on-chip industry growth roadmap.

It is said that judicial risks surrounding Samsung Group are another crisis factor. The vice chairman has undergone prosecutorial investigations for years. Under the circumstances, Samsung Electronics has failed to come up with a new corporate vision to replace that released in 2008 and Chinese competitors are increasingly imitating its business strategies.

Samsung Electronics is predicted to make a breakthrough by cross-border M&A, which has been on hold since its acquisition of Harman. The company currently has sufficient financial resources to do so. As of the end of the first quarter of this year, its cash and net cash in hand amounted to over 113 trillion won and 98 trillion won, respectively. Especially, system-on-chip companies are likely to be its targets in that it is aiming to dominate the market within 10 years.
280 Mil. Won Donated to 114 Students
S-Oil Cheers Orphaned Teenagers to Help Them Achieve Dreams
By Choi Moon-hee

S-OIL has delivered S-OIL Dream Scholarship for 2020 to a total of 114 students in need. A donation ceremony was held on June 24 at S-Oil’s head Office in Mapo, central Seoul, with officials from the Korea Child Welfare Association attending. Beneficiary students did not participate in the ceremony due to COVID-19.

The scholarship is aimed to help teenagers living in orphanages pursue studies and stand on their own feet. S-OIL donated a total of 280 million won to the students, who included 44 two-year college students and 70 high school students, and to Sundok Choir composed of teenagers living in Sundukwon.

S-OIL provided 2.5 million won to each of the college students, who are majoring in chemical, mechanical, electric or electronic engineering. These students were raised in orphanage and S-Oil will provide them with scholarship until they finish school so that they can focus on schooling.

The refiner also donated 2.0 million won in technical training expense to each of the high school students, who are working hard to gain technical skills or a license in heavy equipment, computer, hairdressing or bakery.

S-Oil launched the Dream Scholarship in 2016 and has since donated 1.48 billion won to 600 students. The scholarship is not a simple one-off donation but one aimed at providing emotional well-being to teenagers from child welfare facilities. It is intended to give them the chance to learn and eventually grow into a healthy member of society.

S-Oil CEO Hussain Al-Qahtani said, “Education is the platform on which students can unlock their potential, capture opportunities and turn their dreams into reality. S-Oil will keep cheering the students to arm themselves with knowledge and skills and get closer to their dreams.”

Business Conditions Deteriorating
SK Group at Risk in Terms of Cash Flow and Credit Rating
By Choi Moon-hee

SK Group’s business conditions are deteriorating due to COVID-19 and downturns in industries such as oil refining, chemical, energy, telecom and semiconductor.

The group’s consolidated cash flow from operating activities totaled 994.8 billion won in the first quarter of this year whereas it amounted to 2,050.2 billion won a year ago. SK Innovation took a direct hit from lower international oil prices and SK Hynix still remains under the influence of U.S.-China disputes.

Meanwhile, its aggressive investment plans set during the past boom are becoming increasingly burdensome. Two trillion won to three trillion won is going to its oil refining and chemical business units each year and the same applies to its semiconductor business unit. In the telecom sector, its investment for 5G network improvement is indispensable. In short, its large investments and cash flow deterioration are likely to affect its financial structure.

In 2017, SK’s interest coverage ratio amounted to 7.33 with its operating profit and interest cost at 5,545 billion won and 783.5 billion won, respectively. However, the ratio fell to 4.39 in 2018, to 2.86 in 2019 and below zero in the first quarter of this year. Under the circumstances, SK Group subsidiaries’ credit ratings are at risk. Moody’s lowered those of SK Innovation and SK Global Chemical from Baa1 to Baa2 in February this year and lowered their credit rating outlooks from stable to negative in April this year after having downgraded the outlook of SK Hynix last year.

This is leading to financing difficulties. SK Energy is now issuing six-month as well as four-day commercial papers and SK Incheon Petrochem’s bonds worth 120 billion won in total are scheduled to mature at the end of July. SK Innovation recently faced a default judgment by the U.S. ITC in its litigation against LG Chem and large contingent liabilities may arise after the final ruling scheduled for October.
The Late Lotte Group Founder’s Will Disclosed
Shin Dong-joo’s Proposal for Removal of Shin Dong-bin from Lotte Holdings Board Rejected

By Jung Min-hee

Lotte Holdings of Japan has rejected a shareholder proposal for dismissal of Shin Dong-bin, chairman of Korea’s Lotte Group, from the company’s board. The proposal was submitted by Shin Dong-joo, the embittered elder brother of the Lotte Group chairman and a former vice chairman of Lotte Holdings in Japan.

Lotte Group said the proposal was voted down at a regular shareholders’ meeting of Lotte Holdings in Tokyo on June 24. "Proposals submitted by the company’s management were all approved. But the proposals presented by Shin Dong-joo for the dismissal of Shin Dong-bin and for revision of the articles of association were rejected," Lotte Group said in a press release.

In April, Shin Dong-joo, who is currently chairman of SDJ Corp., submitted the proposal for amendment of the articles of association, asserting that a convicted person should not be allowed to take office as a director of Lotte Holdings. Shin Dong-bin was convicted in 2018 for giving money to a confidante of former President of South Korea Park Geun-hye.

Shin Dong-joo has thus far lost a total of six votes at Lotte Holdings in Japan since 2015. Although Shin Dong-joo holds a 28.1 percent stake in Kojunsha Corp., the largest shareholder of Lotte Holdings in Japan, he has been unable to win the votes because major shareholders such as the employee stock ownership association (27.8 percent) and related companies (6.0 percent) support Shin Dong-bin. Shin Dong-bin holds a 4.0 percent stake in Lotte Holdings and Shin Dong-joo a 1.6 percent stake.

Meanwhile, Lotte Group said that Shin Dong-bin has recently found the late Lotte Group honorary chairman Shin Kyuk-ho’s will in the latter’s office in Tokyo, and disclosed it to executives of Lotte Group in Korea and Japan. According to the group, the late honorary chairman stated in the will that he would make Shin Dong-bin his successor.

"I found the will written by the honorary chairman in his own handwriting while checking articles left by him at his office in Tokyo," Shin Dong-bin was quoted as saying. "I feel a great sense of responsibility because the will says that the successor of Lotte Group in Korea, Japan, and other parts of the world after his death will be Shin Dong-bin." The late Shin Kyuk-ho wrote and signed the will in his own handwriting in March 2000 and kept it in a safe in his Tokyo office, Lotte Group said.

Under a Practical-minded Leader

Hyundai Motor Labor Union Put Company’s Survival before Labor Struggle

By Michael Herh

The labor union of Hyundai Motor Co. appears to be putting job security before a fight against management.

Hyundai Motor’s labor union leaders recently visited, together with Hyundai Motor CEO Ha Eon-tae, the shipment center of Chilgok Factory in North Gyeongsang Province and a service center in southern Seoul to check product quality. At the meeting, the labor and management issued a joint statement after resolving to enhance product quality and overcome the novel coronavirus crisis. In the statement, they pledged to share the recognition that the survival of the company and the job security of employees depend on customers, recognize the economic importance of the auto industry, and produce as many high-quality cars as possible to meet market demand, and fulfill social responsibilities.

Until now, the labor union has tended to demand higher wages even when Hyundai Motor’s output fell due to declining popularity of its cars and refuse to increase output of popular models that sold well. The declaration, however, shows that the labor union has come to recognize that the job security of its members depends on the market and national economic situation.

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Lee Sang-soo speaks after being elected as head of Hyundai Motor’s labor union on Dec. 4, 2019.

"The election of Lee Sang-soo as head of the labor union and the COVID-19 crisis have changed the atmosphere, making many union members embrace the idea of working together with management to overcome the crisis,” said Lee Hang-ku, a senior researcher at the Korea Institute for Industrial Economics and Trade. “Unionists are going for a notion that instead of a struggle-oriented labor-management culture, they take the lead in improving quality and take profits from it.”

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NPS Likely to Remain Neutral at Shareholders' Meeting in 2021

NPS Moving to Distance Itself from Sibling Feud at Hanjin KAL

By Jung Min-hee

The National Pension Service (NPS) has begun a discussion on excluding Hanjin KAL from the targets of its management participation. The move appears to be aimed at distancing itself from the feud between the Hanjin Group chairman and his elder sister over the control of Hanjin KAL, the holding company of Hanjin Group. Analysts say that the NPS is likely to remain neutral at next year’s regular general shareholders’ meeting where a vote showdown between the two sides will take place.

Members of the Trustee Responsibilities Committee of the NPS held a closed-door meeting on June 22 and discussed a plan to change the purpose of holding Hanjin KAL shares from "management participation" to "simple investment" or "general investment."

The meeting was reportedly held due to concerns that if the NPS holds a stake for the purpose of participating in the management of Hanjin KAL, it could be embroiled in the sibling feud over control of Hanjin Group.

If the NPS changes its purpose of holding Hanjin KAL shares, Hanjin KAL will be excluded from the targets of NPS’ stewardship code. The NPS Fund Management Committee demanded at the company’s shareholders’ meeting in 2019 that the late Hanjin Group chairman Cho Yang-ho be removed from its board of directors.

This has raised the possibility that the NPS will cast a blank ballot at the regular general shareholders' meeting in 2021 where a proxy battle will take place over management control. The NPS voted in favor of Hanjin Group chairman Cho Won-tae's plan to serve a second term as an in-house director at the 2020 general shareholders' meeting in March, helping Cho keep his managerial rights.

Currently, an alliance formed by the group chairman’s elder sister holds 44.85 percent of Hanjin KAL, which eclipses 41.40 percent held by the pro-Cho Won-tae side. Some predict that the third-party alliance may convene an extraordinary meeting of shareholders in September. In other words, if the NPS sits on the fence, it may become difficult for the pro-Cho Won-tae side to keep the management rights.

However, some experts say that exercising voting rights at a general shareholders' meeting and management participation are separate issues, suggesting that the NPS may decide to support chairman Cho in next year’s shareholders’ meeting as it did in March this year. As of the end of 2019, the NPS held a 2.9 percent stake in Hanjin KAL.

IR & MANAGEMENT

HDC's Takeover Contract Expiring on June 27

Countdown Starts for Abortion of Asiana Acquisition by HDC Hyundai Development

By Choi Moon-hee

HDC Hyundai Development chairman Chung Mong-kyu is garnering attention as the June 27 deadline for the acquisition of Asiana Airlines is approaching.

HDC Hyundai Development signed a stock purchase agreement (SPA) with Kumho Industrial Co. in December 2019 to take over the ailing airline. This contract expires on June 27. The contract states that either party may terminate it if they fail to finalize a deal within six months.

At the moment, there is a growing possibility of the contract being canceled. Asiana’s capital erosion rate exceeded 50 percent in Q1 of this year, making it a candidate for designation as a stock under supervision. Asiana’s full capital erosion is expected in Q2. For HDC Hyundai Development, letting deadline lapse and the contract fall apart is a good way to get out of the "winner's curse."

HDC Hyundai Development may be able to get a refund of the 280 billion won paid in down payment. The contract clearly states, “If the transaction is not closed within the deadline due to the non-fulfillment of the agreed conditions, HDC Hyundai Development will not be held responsible for the collapse of the deal.” In April, HDC Hyundai Development indefinitely postponed participation in a 1.46 trillion won paid-in capital increase for Asiana Airlines, saying Kumho Industrial did not fulfill prerequisites for the sale of the airline.

In the end, whether the acquisition will be completed or not depends on HDC Hyundai Development chairman Chung's final decision. Despite deteriorating business conditions, Chung's will to take over Asiana Airlines is said to remain strong.
Holding Companies Likely to Be Allowed to Own CVCs

Rules on Venture Investment by Large Corporations Expected to Be Eased

By Jung Min-hee

The South Korean government announced on June 1 that it would facilitate large companies’ investment in venture firms by deregulation on the establishment of venture holding companies and their shareholdings in subsidiaries. In addition, the government is considering allowing general holding companies to own corporate venture capitals (CVCs) in a limited way.

A CVC can be defined as a firm investing in a starting company and helping it set the stage for future growth by making use of resources of the firm’s parent company.

The deregulation is to maximize the use of large corporations’ capital for venture investment so that the venture and startup ecosystem can become even more dynamic.

Specifically, the minimum asset requirement is going to be adjusted from 500 billion won to 30 billion won regarding venture holding company foundation. Limitations on non-subsidiary share acquisition by such holding companies will be abolished and requirements for subsidiary shareholding will be relaxed. In addition, the grace period will be lengthened from seven years to 10 years as to CVCs’ incorporation into large business groups.

Holding Companies Likely to Be Allowed to Own CVCs

To Create Another Investment Boom

Conglomerate Holding Companies’ Limited xCVC Ownership Likely to be Permitted

By Jung Min-hee

The South Korean government is considering allowing conglomerate holding companies to own corporate venture capitals (CVCs) on certain conditions. Related measures are likely to be announced next month.

Early this month, the government said that it would contemplate the approval so that the venture and startup ecosystem can become more dynamic and another investment boom can be created in the ecosystem. However, it was pointed out that the approval of the ownership is against the principle of separation of industrial and financial capital and the government has worked on measures for compliance with the principle.

At present, different government organizations have different opinions on the issue. For example, the Ministry of Economy and Finance is in favor, claiming that it can lead to more venture investment. On the other hand, the Korea Fair Trade Commission is against it, saying that existing deregulation for venture holding companies is already sufficient. Even so, the government is likely to permit the limited ownership and what matters now is how much it will reflect the commission’s opinions.

The government has examined specific issues such as CVCs’ financing methods, investment destinations and shareholdings. It is likely to adopt non-participation of external capital in order to prevent conglomerates’ excessive business diversification. The CVCs of Google and Intel are making venture investments solely from the parent companies’ money, too.

Other potential measures include a relatively higher shareholding ratio requirement and a ban on conglomerate owners’ CVC ownership. According to the current Fair Trade Act, a holding company must own at least 20 percent of a listed subsidiary and at least 40 percent of a non-listed subsidiary.
The Korea Federation of SMEs conducted a survey from June 12 to 22 with 200 non-large South Korean companies doing business in China and Vietnam. In that survey, only 8 percent of the respondents answered that they were considering reshoring whereas 76 percent gave the opposite answer. 16 percent answered that they would consider the option if local conditions deteriorated.

Half of the 8 percent companies mentioned an increase in local production cost as their reason. The other reasons include declines in product quality and labor productivity (37.5 percent), consumers’ preference for products made in South Korea (31.3 percent) and local supply risks (25 percent).

The 76 percent companies’ reasons include high production costs in South Korea (63.1 percent), local market accessibility (25 percent), partner relationship with local contractors (23 percent) and various labor and environmental regulations in South Korea (9.9 percent). This means reshoring expansion the South Korean government is planning on will be impossible without production cost reduction in South Korea. 32.5 percent and 26 percent of the survey respondents called for more tax reduction and more subsidies as ways of reshoring expansion, respectively.

Global Acceleration Program Expanded for Korean Venture Firms

Yozma Group Expands Investment in South Korean Biotech Startups

The Yozma Group Korea announced on June 7 that it would expand its global acceleration program for venture firms in South Korea. Specifically, The Yozma Group Korea is planning to provide mentoring with global experts and make use of its global networks so that their cooperation with older and larger companies can be further promoted.

Established in 2014, The Yozma Group Korea has carried out tens of programs for startup acceleration. In addition, it set up a Yozma Bio-ICT Campus in Pangyo in order to make investments in South Korean biotech companies. Its investments have gone to new drug developer Bisichem, bio-AI technology company Syntekabio, biomarker developer Wellmarker Bio, SCM Lifescience, TCM Life Science, and many more. In addition, it carried out investment and technology transfer to the Weizmann Institute of Science in BioLeaders.

At present, The Yozma Group is providing extensive support so that promising biotechnologies can be popularized based on its global biopharmaceutical networks. For example, it is working with multiple hospitals in Israel for global business expansion of Sonist, which provides digital therapies for those with lung diseases.
An Innovative Way to Produce Hydrogen
Korean Researchers Develop New Technology to Produce High-purity Hydrogen Using City LNG Pipeline

By Jung Min-hee

Korean researchers have developed technology that can produce and supply high-purity hydrogen stably and economically by utilizing current urban LNG supply networks.

The Korea Institute of Energy Research (KIER) announced on June 10 that it has developed a high-purity hydrogen production unit that can produce and supply high-purity (99.999 percent or more) hydrogen at an affordable price.

The hydrogen production unit is the key in building hydrogen infrastructure. It consists of a cultivation module that extracts hydrogen by reacting natural gas and water vapor, and a refining module that produces hydrogen by adsorbing and separating impurities such as carbon monoxide, carbon dioxide and methane.

This technology produces hydrogen from natural gas rather than water. Once connected to a city LNG pipeline, it can produce and supply high-purity hydrogen which is 99.999 percent or purer cheaply in urban areas or near demand areas.

The research team increased efficiency of hydrogen production by designing a heat-exchanger-integrated convection heat transfer reformer and improved efficiency of hydrogen refining by developing a vacuum pressure swing adsorption (VPSA) on its own. The research team explained that the new technology can maintain hydrogen purity above 99.999 percent and carbon dioxide concentration below 0.2ppm.

In addition, the new technology boosts the efficiency of hydrogen production to 81 percent, which exceeds the 75 percent to 80 percent levels in the United States and Japan, and can produce and supply hydrogen without making additional investment by utilizing current LNG supply networks.

Patient's Own Cells Reprogrammed
A Korean Scientist Discovers Breakthrough Treatment for Parkinson’s Disease

By Choi Moon-hee

A novel breakthrough treatment for Parkinson’s disease has been discovered by a Korean American scientist, Kim Kwang-soo. Professor Kim and his team have successfully found a way to treat Parkinson’s disease, which has been known to be incurable, by reprogramming a patient’s own cells.

The Korea Advanced Institute of Science and Technology (KAIST) announced on June 2 the results of the historic stem cell treatment developed by Kim, professor at Harvard Medical School and director of Molecular Neurobiology Laboratory at McLean Hospital and his team. Kim received both his Ph.D. and M.S. from KAIST in biological science and engineering. He is currently a chair-professor at KAIST and a member of an advisory committee for the president of KAIST.

Parkinson’s disease occurs when nerve cells that produce brain chemical known as dopamine break down or die. Professor Kim and his team used the technique of reprogramming the patient’s own skin cells to become stem cells that are lost during the course of the disease. This process is called differentiation. These stem cells, then, can mature into different types of body cells. Kim’s team differentiated the stem cells to take on the characteristics of dopamine-producing nerve cells and surgically implanted them into the patient’s brain.

Professor Kim conducted two surgeries in 2017 and 2018, requested by the U.S. Food and Drug Administration (FDA) to transplant replaced dopamine-producing nerve cells into a 69-year-old man suffering from Parkinson’s disease. This was the first-ever transplant surgery of dopamine-producing nerve cells that did not require drugs to suppress the immune response. The patient who received the transplant reported improvements in his motor abilities which allowed him to tie his shoes, swim and even ride a bicycle.

The stunning achievement of Professor Kim and his team was reported in The New England Journal of Medicine, the most prestigious medical journal in the world, on May 14.
A Study on Biodegradation of Plastic

DGIST Undergraduates Discover Bacteria that Decompose Plastic from Insects

By Choi Moon-hee

A research team of undergraduates of Daegu Gyeonbuk Institute of Science & Technology (DGIST) has discovered bacteria that can biodegrade plastic within the bodies of insects. This discovery is anticipated to trigger studies related to biodegradation of plastic that can contribute greatly to environmental initiatives.

DGIST announced on June 3 that Professor Kim Dae-hwan and his team discovered bacteria that biodegrade polyphenylene sulfide (PPS) within the bodies of super mealworms, the larva of Zophobasatratus. Professor of brain and cognitivesciences at DGIST, Lee Suk-kyoo and professor of chemistry at Gwangju Institute of Science and Technology (GIST), Li Jiaojie also participated in this study.

The research team focused on super mealworms, not normally known for their ability to digest plastic. The team first cultured the worm’s intestinal secretion inside an incubator that did not have any nutritional sources other than plastic, then selected a group of bacteria that can decompose plastic.

The team observed the propagation and chemical changes of the bacteria and successfully discovered Pseudomonas, bacteria that can decompose plastic. Pseudomonas bacteria was seen to decompose PPS, plastic that is extremely difficult to break down. The study found for the first time that Serine hydrolase, a type of enzyme within Pseudomonas, is closely associated with biodegradation of plastic. To prove this, different levels of enzyme inhibitor concentration was used. The results showed that the more concentrated the enzyme inhibitor was, bacteria propagated at a slower speed and the efficacy of plastic degradation was reduced. To identify and analyze the metabolic pathway of the metabolite of the digested plastic, various spectroscopic approaches were adopted.

Professor Kim said, “If we continue our studies on enzymes that decompose plastic and further improve our studies, we will make it one step closer to solving the plastic waste issue. Since studies regarding biodegradation of plastic are still in their early stages, we hope that this study will trigger other follow-up studies.”

The achievement of Professor Kim and his DGIST undergraduate team was published in the online version of the Journal of the IEST (Institute of Environmental Science and Technology) and in the Weekly PressPac of American Chemical Society (ACS).
Hong Kong has been chosen as the world’s most expensive city for expats to live and work for three consecutive years. Seoul was ranked 11th in this year’s survey, seven notches down from fourth in 2019.

The survey was conducted by Mercer, a consulting company, for 209 cities around the world in March, according to a report by U.S. economic media outlet CNBC on June 10 (local time).

Ashgabat, the capital of Turkmenistan which was ranked seventh in 2019, jumped to the second place due to the currency’s appreciation, while Tokyo, which was second in 2019, dropped one notch to third place.

Singapore (5th), Shanghai (7th), and Beijing (10th) were among the top 10, indicating that the cost of living for expats is relatively high in major Asian cities.

European cities among the top 10 were Zurich (4th), Bern (8th) and Geneva (9th), while New York (6th) was the only one in the U.S.

Tunis, the capital of Tunisia, was chosen as the city with the lowest cost of living for foreigners for two consecutive years.

The survey was based on a comparison of prices of more than 200 goods and services, including housing, transportation, food, household goods and entertainment, in major cities around the world.

Netflix has established dominance of the Korean OTT market. The company has invested a large sum of money in content creation for some time and has become the biggest beneficiary of the COVID-19 outbreak, which is forcing most of the population to stay home.

According to Wiseapp, a retail market analysis company, on May 26, Netflix posted 43.9 billion won in subscription income (both by credit and debit card) last month, a 137.2% increase from 18.5 billion won a year ago. In April 2018, its subscription income was 3.5 billion won. The number of paid subscribers in Korea also surged from 280,000 in April 2018 to 3.28 million two years later.

Netflix’s subscribers were found to have spent 13,385 won on average in April. People in their 20s make up 37%
of its subscribers, those in their 30s 25%, people in their 40s 19% and people in their 50s and older another 19%. Some Korean subscribers choose to be charged on their phone bills or on App Store accounts. When these figures are included, the total number of subscribers and the total amount of subscription income would go up.

Netflix’s market share in Korea increased sharply during March and April when the spread of COVID-19 reached its peak. Netflix has continuously invested in its original content, including dramas and movies, while the global media and film markets have shrunk. The company also poured an astronomical amount of money into marketing to entice new subscribers both locally and globally after the COVID-19 outbreak led many people to stay home.

Indeed, Netflix invested US$15 billion (18 trillion won) in content creation last year and is planning to invest US$17.3 billion (20 trillion won) this year. The company is taking an all-in strategy, investing most of its earnings in content creation. Many experts say that Netflix is literally dominating the global media industry. The enterprise is considered a big player in the Korea market as well ever since it has begun to work on developing Korean content. Netflix achieved a dominant position in the Korean market due to the rising popularity of Netflix original series “Kingdom,” tvN’s “Crash Landing on You” and “Mr. Sunshine” around the world.

One media industry insider said, “More and more people binge-watch these days since they spend more time at home than before,” adding, “Netflix is cementing its dominance of the domestic broadcasting and film markets with its own content.”

The Korean Institute of Advanced Science and Technology (KAIST) is developing advanced COVID-19 quarantine products that meet the demands of healthcare practitioners and doctors. KAIST formed a task force (TF) led by engineering professors at the suggestion of KAIST president Shin Sung-chul in early April, when the virus was relentlessly spreading worldwide. The TF collected technical items that can be used to block and respond to the spread of COVID-19. More than 50 technologies have been discovered, and among them, 10 element technologies and two platform technologies were selected, including innovative technologies that can be commercialized the fastest by improving current technologies or within three years.

Representative technical items include reusable antiviral face masks, plasma virus sterilizers, breathable smart protective suits, diagnostic modules for virus infections, virus alarm devices, and switchable negative pressure ambulance modules.

Among them, reusable antiviral masks, plasma virus sterilizers and breathable smart protective suits are expected to be commercialized within six months if KAIST improves technologies it already possesses or combines them with new technologies. The government provided financial support to this project through the third extra budget. It has decided to provide 22.2 billion won in support funds via the Korean-Style Quarantine Package Project.

When KAIST develops the targeted items, doctors and nurses combating the novel coronavirus will be assisted by the so-called “anti-virus fitting system” before treating infected patients. As soon as a doctor or a nurse enters the fitting system, a robot will put breathable and lightweight smart protective clothing made of nano textiles on the person. Smart protective clothing is sterilized using plasma and can be worn again after one week.

The smart protective suit will be light and have good internal air circulation, so doctors and nurses can treat patients without fighting heat in the hot summer. It will also have a built-in wireless communication modul, which helps them give customized treatment to patients through communication without come into direct contact with the patients.
Offering to Delete Lowest Price Guarantee Clauses in Contracts

OTAs Including Booking.Com and Agoda Submit Corrective Measures to FTC

By Choi Moon-hee

Global online travel agencies (OTAs), including Booking.Com, Agoda, Expedia and Trip.Com, have submitted to the Korea Fair Trade Commission (FTC) corrective measures for the abuse of their superior position in the market against Korean lodging companies.

These companies were investigated by the FTC for demanding lowest price guarantees from Korean lodging companies. In the corrective measures presented to the FTC, they offered to delete the "lowest guarantee" clauses in their contracts with lodging companies.

When a hotel signs a lowest price guarantee contract with an OTA, it is required not to post prices lower than the ones offered to the OTA on its website or not to offer lower prices to other OTAs.

The level of the FTC’s sanctions against the OTAs is expected to be somewhat lowered as they have submitted corrective measures before the FTC requests the prosecution to indict them.

Behind the FTC’s investigation of the OTAs lies FTC Chairman Cho Sung-wook’s interest in monitoring “untact” and non-face-to-face industries. Cho launched a task force dedicated to the ICT sector in November 2019. It consists of three divisions — online platforms, mobile, and intellectual property rights. Cho is determined to level the playing field in digital industries.

The FTC will launch a research project on June 1 to establish a separate screening guideline for the online platform sector. Based on the research outcome, the commission will draw up a new guideline by 2021 that defines competition-limiting activities among platform operators, which include Naver, Woowa Brothers and global OTAs.

The task force in charge of the guideline establishment will focus on three unfair practices that are the characteristics of the online platform sector. The first unfair practice involves portal operators that tend to put their own services at more conspicuous places than those of their competitors. In November 2019, the FTC started a punishment process against Naver, the nation’s largest portal site, as it earned unfair gains by putting its own online shopping and video services at more attention-grabbing places.

The second practice concerns demands for lowest price guarantees. This practice leads to price fixing, depriving consumers of opportunities to buy cheaper products or services.

Moreover, the FTC will create a specific regulatory guideline to crack down on "multi-homing," a practice that gives disadvantages to customers if they use other platforms.

The FTC has launched such an extensive oversight of online platforms because it believes that the current fair trade law alone has limitations in regulating various unfair practices as related markets are growing rapidly. Global OTAs have emerged as the tourism and lodging industries were reorganized based on web and mobile platforms. They quickly dominated the market based on their strong capital power and data. The FTC plans to determine the level of punishments based on the OTA companies’ corrective measures.