A photograph of a modern, multi-story glass skyscraper at night. The building's facade is illuminated from within, creating a warm glow that contrasts with the dark sky. The glass reflects the surrounding environment, and the building's geometric lines are emphasized by the lighting. The image is set against a dark background, making the building stand out prominently.

August 2020 / Research Report

# SOUTH KOREA REAL ESTATE MARKET ANNUAL REPORT

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# 1 / Executive Summary

**Macro Economy:** Though South Korea has weathered the COVID-19 pandemic crisis relatively well, the country's real GDP is forecast to shrink by 0.7% in 2020, before rebounding to 3.2% in 2021<sup>1</sup>. Private consumption remained subdued, while the monthly export volume has continuously reported negative growth. The Bank of Korea swept into two base rate cuts of 75 basis points in total to 0.5% in May 2020, stressing its commitment to hold the current policy rate and monetary easing until the economy returns to normal.<sup>2</sup>

**Capital and Investment Market:** On the contrary to the worsening macro-economy, the country's long-muted listed REIT market made a rapid expansion of over 20 times with the IPO's of six sizeable REITs between 2018 and 2019.<sup>3</sup> In 2020, nine more REITs have already completed or are preparing their listings, which is expected to expand the market size further. Underpinned by the affluent dry power from local investors and REIT listing candidates, the transaction cap rates in Seoul remained surprisingly tight in the office and logistics sectors in the first half of 2020, while retail and hospitality sectors saw a sudden increase of cap rates<sup>4</sup>. In the second-quarter of 2020, South Korea showed the largest increase of 12 month rolling transaction volumes across the Asia Pacific region and stepped up to the fourth largest commercial real estate market in the region, following Japan, Australia and China.<sup>5</sup>

**Real Estate Market Fundamentals:** Owing to the country's success in avoiding a full-scale shutdown, the office leasing market in Seoul remained relatively resilient to the impacts of COVID-19 in the first half of 2020. Gross rents continued their steady growth, albeit concerns still loom in the near future due to the record supply planned in 2020.<sup>6</sup> Average retail vacancy rates have softened altogether in major high street retail areas in Seoul, tending to be relatively higher in the popular tourist destinations such as Myeongdong or Garosugil.<sup>7</sup> The home price in Seoul marked the rapidest one-year increase of 6.1% among global peer cities in June 2020, mainly driven by speculative condo investment demands rather than actual residential occupier demands<sup>8</sup>. Despite the record amount of logistics supply since 2018, the average vacancy rate of modern logistics in Greater Seoul is expected to remain modest on the back of strong space demand from e-commerce and 3PL industries.<sup>9</sup> The average hotel occupancy rate in Seoul plummeted from 73% in 2019 to the unprecedented level of 19% in March 2020, inching up to 27% in June, with little signal if any of a turnaround.<sup>10</sup>

\*Please refer to "Asia Pacific Real Estate Strategic Outlook July 2020" report for house-view forecast of DWS.

<sup>1</sup>Sources: Bank of Korea, Korea Statistics Information Service, Oxford Economics, DWS. As of Aug. 2020.

<sup>2</sup> Sources: Bank of Korea, DWS. As of Aug. 2020

<sup>3</sup> Sources: Korea REITs Information System, Korean Association of REITs, DWS. As of Aug. 2020

<sup>4</sup> Sources: Avison Young, Cushman & Wakefield, DTZ, Real Capital Analytics, Bloomberg, DWS. As of Aug. 2020

<sup>5</sup> Sources: Real Capital Analytics, DWS. As of Aug. 2020

<sup>6</sup> Sources: Avison Young, DWS. As of Aug. 2020

<sup>7</sup> Sources: Korea Appraisal Board, Cushman & Wakefield, DWS. As of Aug. 2020.

<sup>8</sup> Sources: Australian Bureau of Statistics, Case-Shiller, Nationwide, Rating and Valuation, URA, IPD-Recruit, KB Kookmin Bank, DWS. As of Aug. 2020

<sup>9</sup> Sources: Korea Statistical Information Service, eMarketer, DWS. As of Aug. 2020

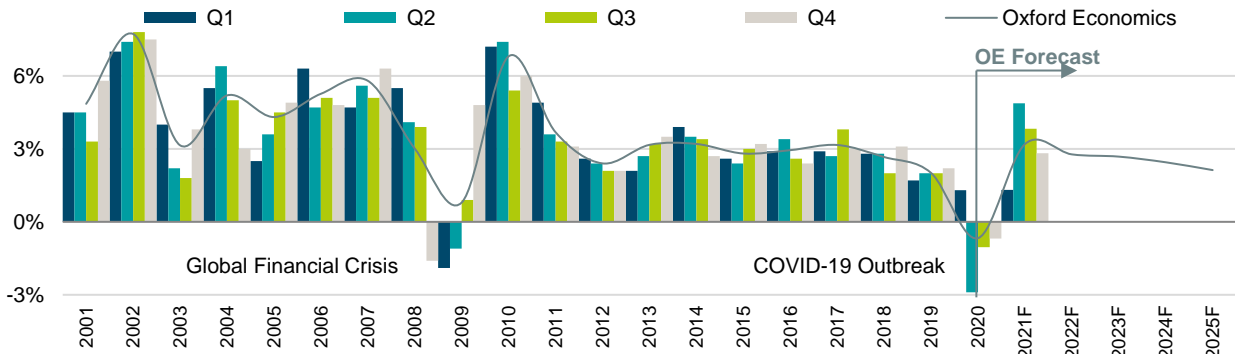
<sup>10</sup> Sources: Korea Hotel Association, DWS. As of Aug. 2020

# 2 / Country Overview

## 2.1 Macro Economy

Although South Korea has been regarded as one of the success countries in limiting the COVID-19 infection case upsurge, its economy has already entered a recessionary phase. South Korea's real GDP is forecast to shrink by 0.7% in 2020, a similar level to the global financial crisis in 2009. Private consumption remained subdued with weak consumer sentiments, while the monthly export volume has continuously seen negative growth. The domestic economy is expected to rebound to 3.2% in 2021 on the back of a strong stimulus package amounting to KRW 270 trillion, equivalent to circa 14% of the annual GDP, as well as the normalizing of Chinese industrial activities. Nevertheless, concerns still arise from the prolonged global pandemic and the renewed trade and economic tension between the United States and China.

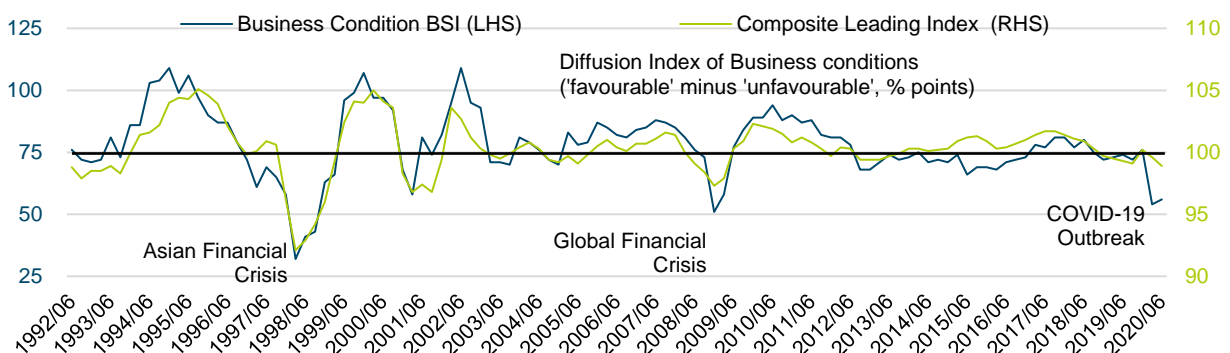
**EXHIBIT 1: SOUTH KOREA'S GDP GROWTH OUTLOOK**



Notes: F = forecast, there is no guarantee forecast growth will materialise. Please refer to Important Notes (see end of report). Past growth is not a reliable indicator of future growth. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.  
Sources: Bank of Korea, Korea Statistics Information Service, Oxford Economics, DWS. As of Aug. 2020.

The latest result of Business Condition in the Business Survey Index (BSI) conducted by the Bank of Korea, marked a reading of 56 in June 2020, close to the previous low recorded in December 2008. Manufacturing industries severely suffered from the trade slowdown and from global supply chain disruptions, while the business sentiment of non-manufacturing industries recorded the worst level since the beginning of the survey in 2003. As the easing of physical distancing in the country brought some relief to the overall industry, business sentiment is expected to recover gradually in the second half of the year. Meanwhile, the composite leading index remained resilient at 99.4 in the same month, compared to the last bottom of 97.1 in 2009, underpinned by the fast recovery of the stock market and an increase in the construction backlog.

**EXHIBIT 2: DIFFUSION INDEX OF BUSINESS CONDITIONS**

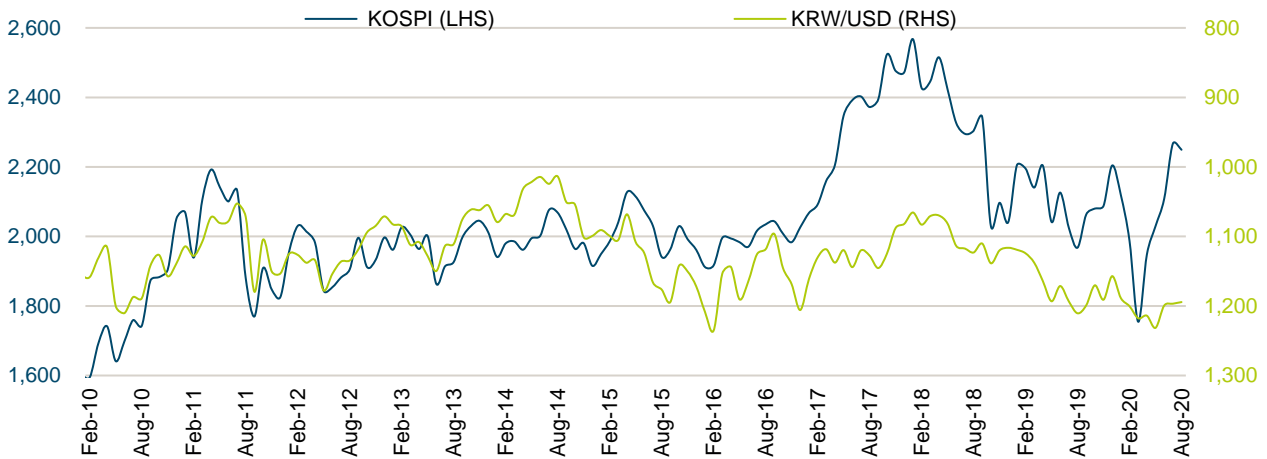


Notes: Past performance is not a reliable indicator of future performance.  
Sources: Bank of Korea, Korea Statistical Information Service, DWS. As of Aug. 2020.

Past performance is not indicative of future results. The comments, opinions and estimates contained herein are for informational purposes only and set forth our views as of this date. The underlying assumptions and these views are subject to change without notice. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

The KOSPI stock price started 2020 by continuing its modestly bearish trend from the previous year, before suddenly plunging to 1,458 on the nineteenth of March with a record one-month decrease rate of 34% along with the global stock market meltdown caused by the COVID-19 pandemic. On the back of the central bank’s quick and massive monetary easing, it has gradually recovered to the Pre-COVID level above 2,200 in mid-August, while market volatility remained elevated. The Korea won traded at 1,193 per U.S. dollar in August 2020, almost flat from a year earlier.

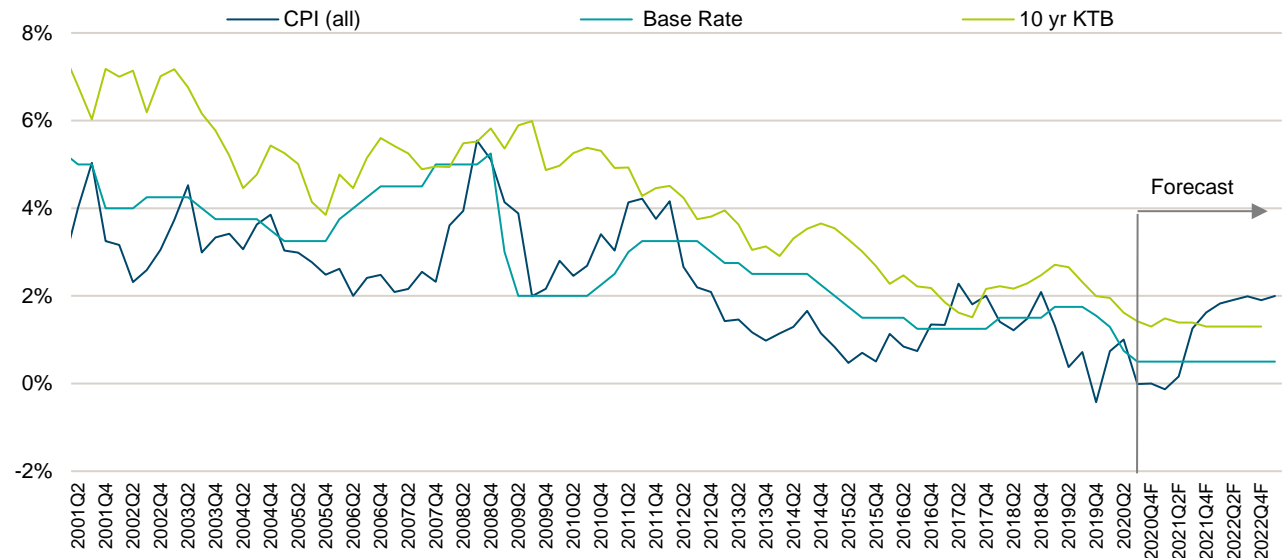
**EXHIBIT 3: STOCK (KOSPI) AND FOREX**



Notes: Past performance is not a reliable indicator of future performance.  
Sources: Bank of Korea. Bloomberg, DWS. As of Aug. 2020.

Faced with a rapid deterioration of the economic outlook, the Bank of Korea swept into two base rate cuts of 75 basis points in total to 0.5% in May 2020 and initiated a bond purchasing program in order to stabilize the financial market. The central bank stressed its commitment to hold the current policy rate and to introduce additional measures until the economy returns to normal. The 10-year Korea Treasury Bond also declined to 1.4% in August 2020. CPI also decreased from 1.5% in January 2020 to 0% in June 2020 and is expected to remain under downward pressure given current weakened consumer sentiments.

**EXHIBIT 4: FORECAST OF INTEREST RATE AND CPI**

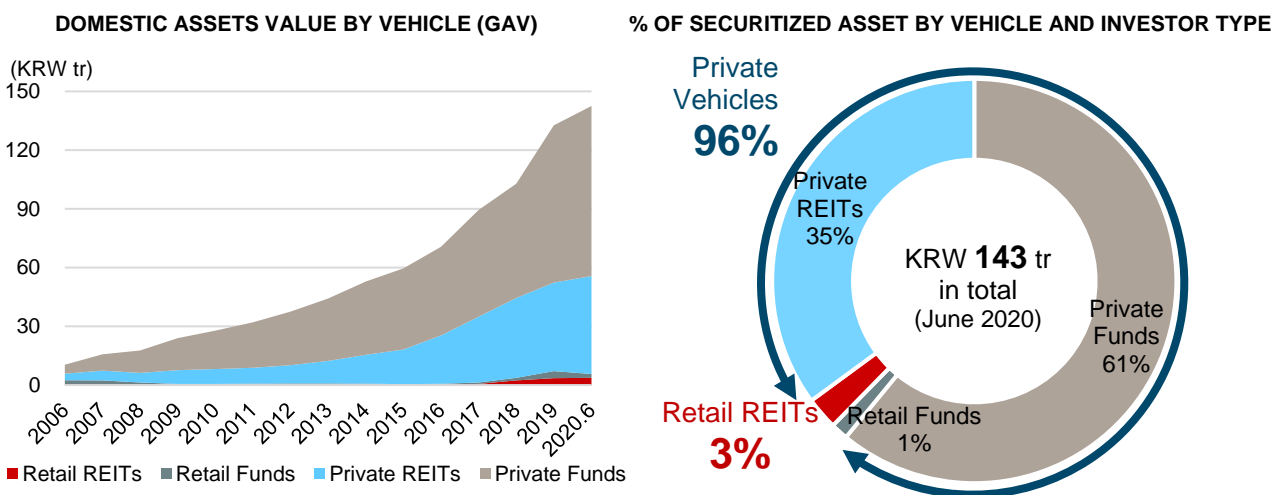


Notes: F = forecast, there is no guarantee rates forecasted will materialise. CPI = Consumer Price Index. KTB = Korea Treasury Bond. Please refer to Important Notes (see end of report) Past performance is not a reliable indicator of future performance.  
Sources: Bank of Korea, DWS. As of Aug. 2020

## 2.2 Funds and REITs

Exhibit 5 shows the aggregate size of real estate assets held by REITs and real estate funds in South Korea. More than quadrupling over the last 10 years, the total size of securitized assets was KRW 143 trillion in June 2020, a 39% increase from the end of 2018. The rapid development of the real estate securitization sector played a major role in driving the growth of the South Korean real estate market, though the vast majority of these vehicles\* are still only accessible to large institutions and not by retail investors. More specifically, 96% of these are non-listed, closed-end private vehicles accessible to institutional investors only. Listed REITs account for only 3% of these assets, while retail distribution funds account for the remaining 1%.

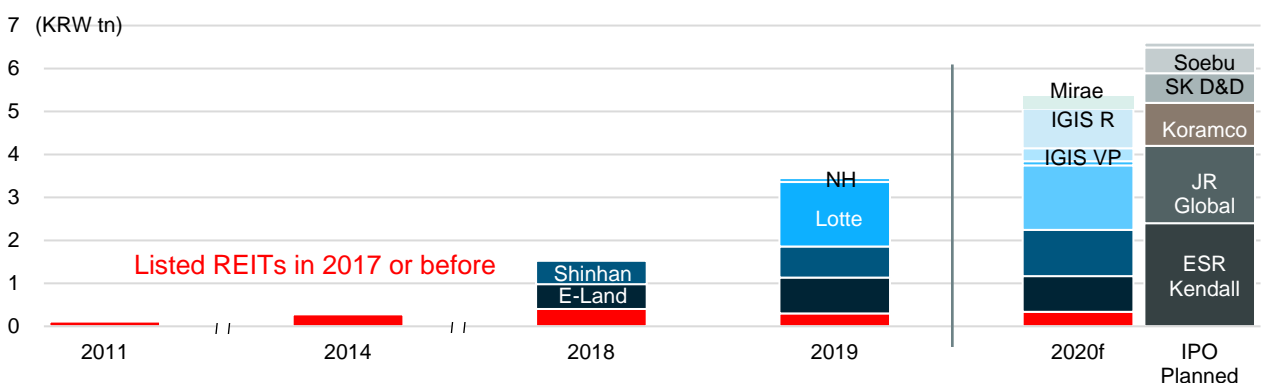
**EXHIBIT 5: DOMESTIC ASSET VALUE HELD BY REF AND REITS**



\*Private REITs accounts for unlisted closed-end private investment vehicle owned by a handful of institutional investors  
 Notes: Past performance is not a reliable indicator of future performance.  
 Sources: Korea Financial Investment Association, REITs Information System, DWS. As of Aug. 2020

Since its inception in 2002, the country's listed REIT market had been relatively muted with only a handful of small-scale REIT listings until 2017, following multiple bankruptcies and liquidations of listed REITs during the global financial crisis. However, the tide has recently changed with loosening of strict regulatory requirements as well as endogenous demand rising for listed REITs among real estate owners and investors. IPOs of six sizeable REITs between 2018 and 2019 were warmly welcomed by both retail and institutional investors, increasing the size of the Korean listed REIT market over 20 times in just two years. In 2020 alone, three new REITs have already completed their listings in July and August, while at least six more REITs are planning IPOs in the remainder of the year. The current REIT listings are expected not only to expand the market size overall, but also to contribute to the sectoral diversification, higher market transparency and further capital value growth in the long-term.

**EXHIBIT 6: GROSS ASSET VALUE OF LISTED REITS IN SOUTH KOREA**



Sources: Korea REITs Information System, Korean Association of REITs, DWS. As of Aug. 2020

**EXHIBIT 7: NEW IPOs OF REITS BETWEEN 2018 AND 2020**

	Sponsor	IPO Date	Sector	Market Cap (KRW bn)	GAV (KRW bn)	Remark
E-KoCREF	E-Land Retail	Jun-2018	Retail	432	833	75% of equity owned by the sponsor*
Shinhan Alpha REIT	Shinhan Financial Group	Aug-2018	Office	460	724	-
Lotte REIT	Lotte Shopping	Oct-2019	Retail	1,071	1,488	50% of equity owned by the sponsor
NH Prime REIT	NH Financial Group	Oct-2018	Office	69	-	10% hold of each underlying asset
IGIS Value Plus	IGIS AM	Jul-2020	Office	113	303	1 office in Seoul
IGIS Residential	IGIS AM	Jul;-2020	Residential	164	884	3,578 condo units in Incheon
Mirae Asset MAPS REIT	Mirae Asset	Jun-20	Retail	104	299	1 shopping mall in Greater Seoul

**EXHIBIT 8: IPOs PLANNED**

(KRW bn)	Sponsor	Target Date	Sector	Est. Equity (KRW bn)	Est. GAV (KRW bn)	Seed Asset
ESR Kendall Square REIT	ESR	2H 2020	Logistics	1,420	2,410	12 logistics nationwide
Meritz-JR REIT	JR AMC / Meritz Securities	Aug-20	Overseas Office	780	1,980	1 office in Belgium
Koramco Energy Plus REIT	Koramco	Aug-20	Gas Station	363	1,063	187 gas stations nationwide
SK D&D Multi Asset REIT	SK D&D / NH Securities	Oct-20	Office, Logistics	-	690	1 office in Seoul, 1 logistics in Japan
Shinhan Seobu T&D REIT	Seobu T&D	Sep-20	Retail, Hotel	-	600	1 shopping mall and 1 hotel (20%) in Greater Seoul
Mastern Premier 1	Mastern Inv.	2H 2020	Office	-	111.4	1 offices in France

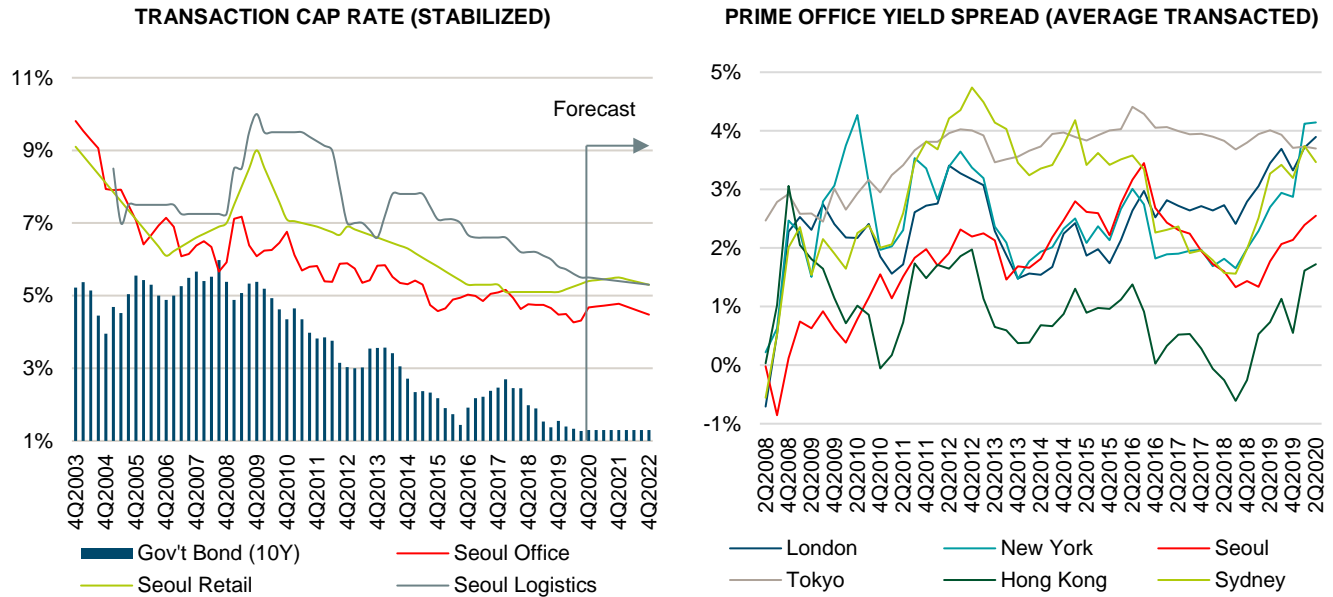
\* It is allowed for E-KoCREF to let a single shareholder have over 50% of equity as the REIT, as it is created for the corporation restructuring of the sponsor company. Past performance is not indicative of future results.

Note: This table is prepared solely for information purposes and not intended to recommend or endorse any specific company's shares or other products. Although information in this document has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness, and it should not be relied upon as such. Sources: Korea REITs Information System, Korean Association of REITs, DWS. As of Aug. 2020.

**2.3 Cap rate and Performance**

Despite capital market disruptions from COVID-19, transaction cap rates in Seoul remained surprisingly tight in the first half of 2020, underpinned by the affluent dry powder of local institutional investors and potential REIT listing candidates. Among sectors, Grade A office was transacted at 4.3% gross market cap in the second quarter of 2020 and logistics was at 5.6% gross market cap, 20 basis points down from the end of 2019 respectively. On the other hand, the retail and the hospitality sectors saw a sudden increase of cap rates, due to the pessimistic performance outlook and the deteriorating lending conditions. The average office yield spread – the difference between cap rates and the 10-year sovereign bond yield – was circa 260 basis points in the second quarter of 2020, tighter than other global peer markets by 90-160 basis points.

**EXHIBIT 9: CAP RATE AND YIELD SPREAD**

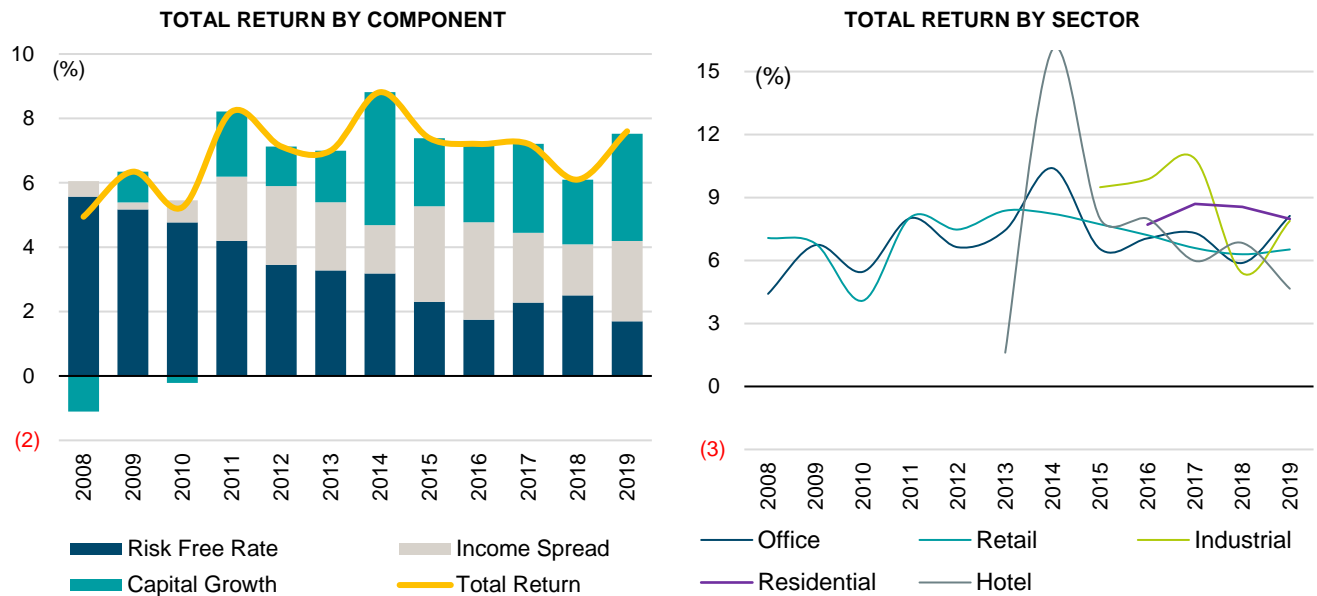


\* Please refer to "Asia Pacific Real Estate Strategic Outlook July 2020" report for house-view forecast of DWS.  
 Notes: Past performance is not a reliable indicator of future performance.

Sources: Avison Young, Cushman & Wakefield, DTZ, Real Capital Analytics, Bloomberg, DWS. As of Aug. 2020

The latest return data for the year 2019 has not yet captured the impact of the COVID-19 pandemic in South Korea. The average unlevered total returns of commercial real estate investments in the country rebounded to 7.6% in 2019, a 1.5 point increase from the previous year, mainly led by capital growth incurred by the transaction cap rate compression. Among sectors, office, industrial and residential sectors kept at attractive returns level of around 8%, while retail provided lower total returns of over 6%. The hotel sector saw the largest decline from 6.8% in 2018 to 4.7% in 2019, due to weak performances in the hotel and tourism industry even before the COVID-19 outbreak.

**EXHIBIT 10: REAL ESTATE TOTAL RETURNS IN KOREA (UNLEVERED)**



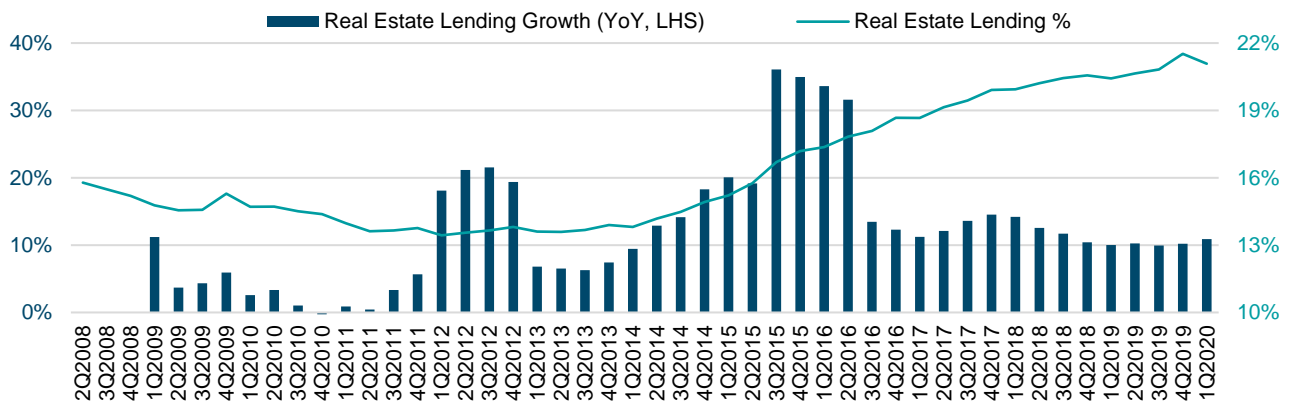
Notes: Total returns are calculated on the same stores basis. Past performance is not indicative of future results.  
 Sources: MSCI Real Estate -IPD, DWS. As of Aug. 2020.



## 2.4 Lending & Transactions

Commercial real estate lending by major Korean lenders\* amounted to KRW 236 trillion in the first quarter of 2020, an 11% increase from a year before, continuing the double digit growth for 24 consecutive quarters. Under the current low interest rate environment, lenders have continued to depend on commercial real estate lending to secure a stable income source, raising its share of the total lending amount from 18% in 2015 to 21% in the first quarter of 2020. The COVID-19 pandemic situation has not slowed the momentum with most lenders still showing a strong willingness to provide more favorable lending conditions even compared to Pre-COVID 19. Despite the momentum, a growing reluctance over specific sectors such as retail or hospitality could polarize these lending attitudes by asset type.

**EXHIBIT 11: COMMERCIAL REAL ESTATE LENDING BY KOREAN LENDERS**

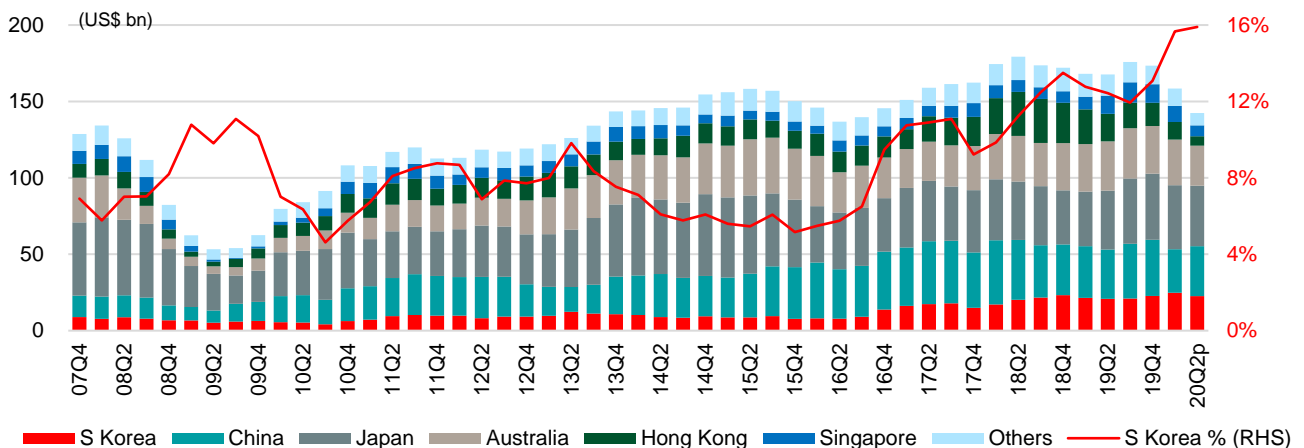


\*Banks, insurance companies and fire & marine insurance companies.  
 Notes: Past performance is not a reliable indicator of future performance  
 Sources: Bank of Korea, Financial Statistics Information System, DWS. As of Aug. 2020.

Commercial real estate transaction activities significantly contracted across the Asia Pacific region in the first half of 2020, with semi-annual transaction volumes dropping by 36% compared to a year before. As a result, the 12 month rolling transaction volumes ended in the second quarter of 2020 also dropped to US\$ 142 billion, a 15% decrease compared to a year earlier. The decrease was more pronounced in Hong Kong (-66%), Singapore (-40%) and Australia (-19%).

With a transaction volume of US \$22.6 billion in the same period, South Korea showed the largest volume increase at 9% and stepped up to the fourth largest commercial real estate market in the region, following Japan, Australia and China and beating Hong Kong for the first time. Its share increased from 6.1% in the fourth quarter of 2014 to 15.9% in the second quarter of 2020, the highest level in the last 13 years or so.

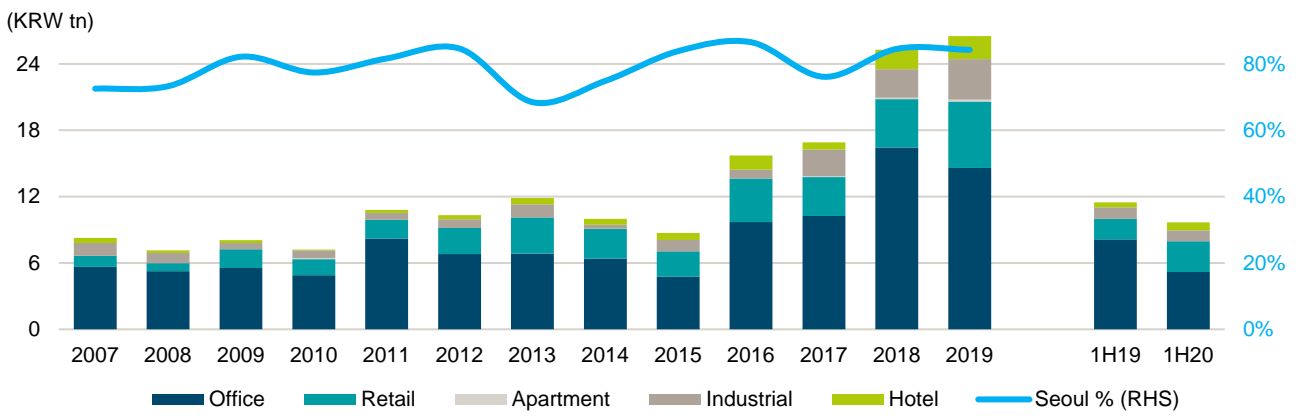
**EXHIBIT 12: APAC TRANSACTION VOLUME AND SHARE OF SOUTH KOREA (12 MONTHS ROLLING)**



Notes: Past performance is not a reliable indicator of future performance.  
 Sources: Real Capital Analytics, DWS. As of Aug. 2020.

The commercial real estate transaction volume of South Korea in 2019 was KRW 26.5 trillion, breaking the volume record for four consecutive years since 2016. Institutional investors have increasingly turned back to the domestic market from already pricey overseas markets, while the number of new REIT IPO candidates are actively acquiring their seed assets to heat up the acquisition competition. Among sectors, office investments accounted for the largest share at circa 55% followed by retail at 23%, industrial at 14% and hotel at 8%, while only a few transactions were found in the residential sector. As the country could avoid a full-scale lockdown situation even at the peak of the local pandemic, the transaction volume in the first half of 2020 decreased modestly by 15% on a year-on-year basis, while it is expected to recover gradually throughout the year with strong investment demands especially from local investors.

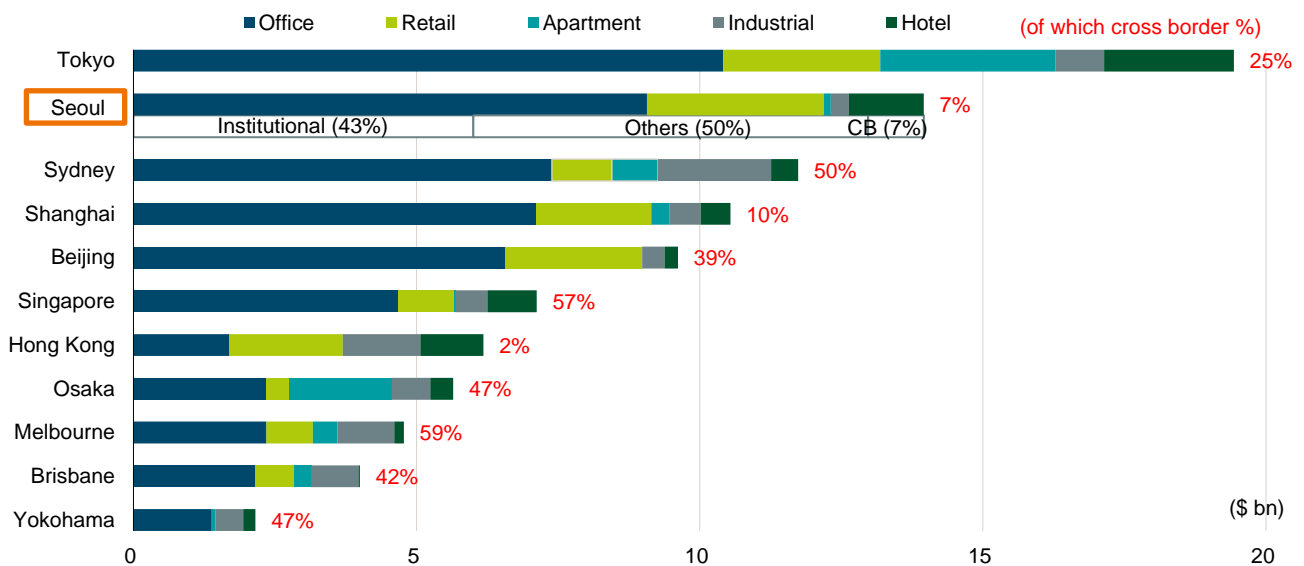
**EXHIBIT 13: REAL ESTATE TRANSACTION VOLUME BY SECTOR IN KOREA AND SHARE OF SEOUL**



Notes: Past performance is not indicative of future results.  
Sources: Real Capital Analytics, DWS. As of Aug. 2020

Seoul's commercial real estate transaction volume for the 12 rolling months ended in June 2020 was US\$ 14.0 billion on a preliminary basis, decreasing by circa 16% on a year-on-year basis. It ranked second amongst Asia Pacific cities after Tokyo and was followed by Sydney and Shanghai. The acquisition activity of cross-border investors contracted to a 7% share in the total volume in Seoul, comparable to the average share of 19% in the last ten years, showing the increasing investment demands from local institutions and REIT listing candidates in the domestic market.

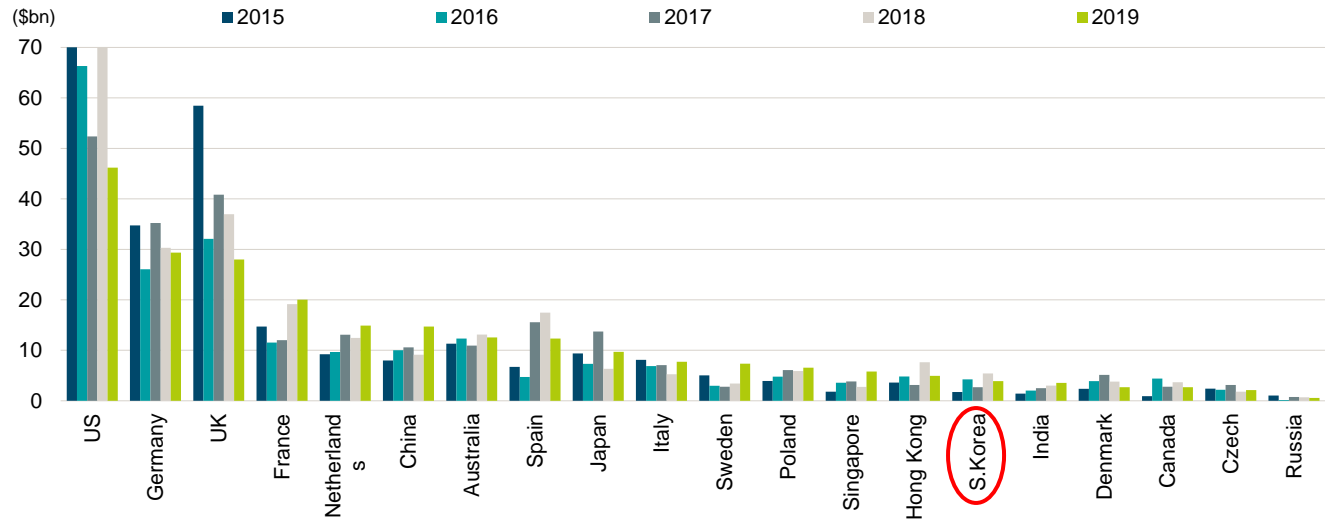
**EXHIBIT 14: REAL ESTATE TRANSACTION VOLUME BY CITY (12 MONTHS ROLLING TILL JUNE.2020)**



Notes: Commercial real estate transactions exclude non-income producing assets, such as development site transactions. Past performance is not indicative of future results.  
Sources: Real Capital Analytics, DWS. As of Aug. 2020.

In 2019, the United States became the largest investment destination for cross-border investors with US\$ 46.0 billion in inbound transaction volumes, followed by Germany and the United Kingdom. South Korea ranked in fifteenth position globally with US\$ 7.7 billion of inflows, stepping down from twelfth position in 2018.

**EXHIBIT 15: CROSS-BORDER REAL ESTATE INVESTMENTS BY DESTINATION**



Notes: Commercial real estate transactions exclude non-income producing assets, such as development site transactions. Past performance is not indicative of future results.

Sources: Real Capital Analytics, DWS. As of Aug. 2020.

Exhibit 16 shows major real estate transactions announced in 2019 and the first half of 2020. The largest deal was the acquisition of SG Tower for KRW 1.04 trillion by Pine tree AMC on behalf of two local institutional investors, followed by the Seoul Square building purchased by NH investment and securities for KRW 984 billion and the nationwide portfolio of thirteen E-Mart shopping malls purchased by Mastern investment for KRW 982 billion.

The transactions in key office districts have been active throughout the period, mainly driven by the strong investment demand of local institutional investors and REIT listing candidates, while cross-border investors have shown their competitiveness in the logistics sector which is still new to many Korean investors. It is also noteworthy that the number of large sized retail portfolio transactions increased as the country's major retailers have strategically liquidated their bricks-and-mortar stores to shift their business focus to e-commerce.

**EXHIBIT 16: MAJOR TRANSACTIONS SINCE 2019**

Type	Asset	Price (KRW bn)	Unit price (KRW m /GFA py* or unit)	Est. Cap rate*	Location	Month	Asset Manager / Investor	Invest. Origin
Office	SG Tower	1,040	27.5	-	CBD	Jul-20	Pine tree AMC, KTCU, POBA	Korea
	Seoul Square Building	984	24.5	6.0%	CBD	Mar-19	NH Inv. & Securities	Korea
	Parc One Tower 2	950	18.8	-	YBD	In Progress	NH Inv. & Securities	Korea
	Booyoung Group Building	901	-	-	CBD	Aug-19	Booyoung Group	Korea
	Doosan Tower building	750	21.5	-	Seoul Others	In Progress	Mastern Investment	Korea
	Centerpoint Donuimun	650	24.9	-	CBD	Jul-20	Mastern Investment	Korea
	Samsung SDS Tower West campus	628	20.9	-	Seoul Others	Jan-19	Ryukyung PSG AM AIP AM, NH Inv. & Securities	Korea

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Type	Asset	Price (KRW bn)	Unit price (KRW m /GFA py* or unit)	Est. Cap rate*	Location	Month	Asset Manager / Investor	Invest. Origin
	State Tower Namsan	589	29.1	-	CBD	Apr-19	Mirae Asset, Korea Post	Korea
	Young City	546	18.8	-	Seoul Others	Apr-19	SK D&D	Korea
	Pine Avenue B	540	30.0	-	CBD	Jun-20	Koramco AMC	Korea
	Namsan Square	505	22.1	-	Seoul Others	May-19	IGIS, SK D&D, KKR	Korea
	Eulji Twin Tower (West)	483	18.5	-	CBD	Jun-19	KT AMC, KTCU	Korea
	Jongno Tower	464	25.3	-	CBD	Jun-19	KB AM	Korea
	Booyoung Eulji Building	450	27.2	-	CBD	Sep-19	DWS Investments, Douzone Bizon	Germany/ Korea
Retail	E-Mart South Korea Retail Portfolio 2019 (13 props)	952	8.9	5.1%	Nationwide	Nov-19	Mastern Investment	Korea
	Homeplus Portfolio (4 props)	800	-	-	Nationwide	In Progress	Hana Alternatives Investment	Korea
	17% of Starfield Hanam	362	8.3	-	Greater Seoul	Sep-19	Blackstone	Korea
	HomePlus Portfolio (3 props)	315	-	-	Nationwide	Aug-19	IGIS, Mastern Investment	Korea
	Ryukyung Lotte Mart Portfolio (3 props)	300	5.4	-	Nationwide	Nov-19	Lotte Shopping, KB Asset	Korea
	Galleria Centum City	300	9.0	-	Cheonan	Mar-20	Koramco	Korea
	Lotte Outlet Gwanggyo	279	10.7	-	Greater Seoul	Mar-20	Mirae Asset	Korea
	D-Cube City Hyundai Department Store	257	7.3	-	Seoul	Nov-19	Shinhan Financial Group	Korea
Logistics	LogisValley Ansan	374	5.3	-	Greater Seoul	Jul-19	CBRE Global Investors	US
	Lotte Global Logistics Center	318	5.2	-	Greater Seoul	Dec-19	Kendall Square	Korea
	BLK Pyeongtaek	198	5.3	-	Greater Seoul	Jan-20	POBA, PMAA, Pebble Stone AM	Korea
	Yongin Baegam Logistics Centre	155	5.2	-	Greater Seoul	Oct-19	Mastern Investment, M&G Real Estate,	UK
	Gonjam Logistics Center	155	5.2	-	Greater Seoul	Aug-20	DWS Investments	Germany
Residential	Welltz Tower	641	-	-	Seoul	Oct-19	SK D&D , MPlus AM	Korea
Hotel	Grand Hyatt Seoul	568	924/rm	-	Seoul	Dec-19	Pine Street Assets, PAG	Korea
	Haeundae Grand Hotel	239	743/rm-	-	Busan	Mar-20	MDM Real Estate	Korea
	Daiwa Roynet Hotel	198	580/rm	-	Seoul	Jan-19	KB Asset Mgmt	Korea
	IBIS Ambassador	159	568/rm	-	Seoul	Aug-19	SK D&D	Korea

py\* (=Pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet).

Estimated cap rate\*: Even though all the cap rates are based on an estimated basis and obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness, and it should not be relied upon as such.

Notes: Acquisitions by foreign managers are highlighted in grey and listed REIT-related acquisitions in Green This table is prepared solely for information purposes and not intended to recommend or endorse any specific company's shares or other products.

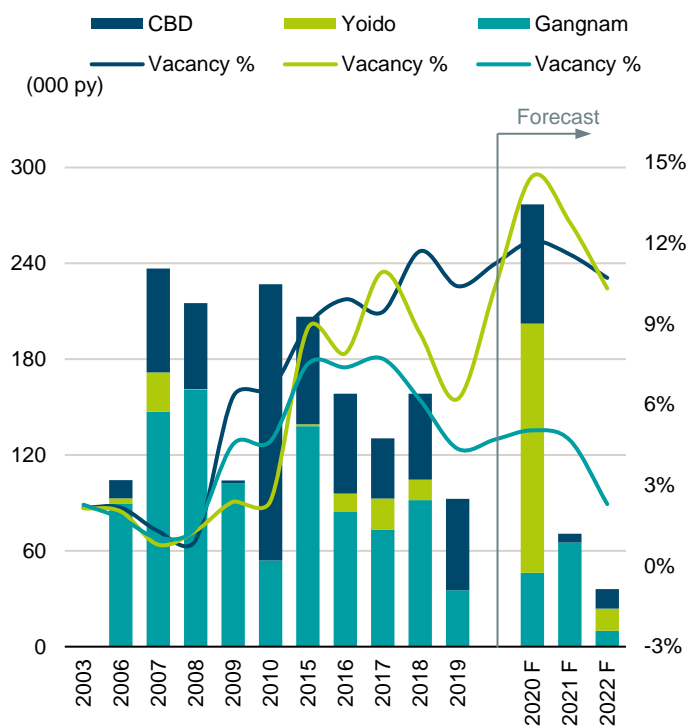
Source: Avison Young, Real Capital Analytics, DWS. As of Aug. 2020

# 3 / Real Estate Market Fundamentals

## 3.1 Office

Owing to the country’s success in avoiding a full-scale shutdown and keeping workers in the office even at the peak of the local pandemic, the office leasing market in Seoul remained relatively resilient to the impacts of COVID-19 in the first half of 2020. The vacancy rates in Gangnam and Yoido remained tight at 5.0% and 5.3% in the second quarter of 2020, while vacancy in the CBD area also slightly tightened to 10.8% from 12.3% a year before. However, a record supply in 2020 raises concerns in the near future amid the economic recession. Some of the new prime offices in CBD and YBD were completed or are to be completed in 2020 without any outstanding pre-commitments, while Gangnam is expected to maintain relatively stable office leasing demand backed by healthy IT and tech industries.

**EXHIBIT 17: OFFICE VACANCY RATE AND SUPPLY IN SEOUL BY SUB MARKET**



Key Supply Pipeline in Seoul			
Area	Building	Date	GFA (sqm)
CBD	Eulji Twin Tower	2Q19	146,399
CBD	Apex Tower	2Q19	38,188
Others	Yongsan Trade Center	4Q19	62,747
Others	Joongang media network HQ	4Q19	36,898
CBD	SG Tower	2Q20	125,153
CBD	Centre Point Donuimun	2Q20	86,073
Yoido	Parc 1 Tower 1&2	3Q20	354,610
Yoido	KB Finance Town	3Q20	67,565
Others	Hyosung Harrington Square Central Park	3Q20	58,094
CBD	Samil Bldg.	4Q20	34,949
GBD	Hyeonjung Bldg.	4Q20	41,633
Yoido	K-Post Yoido Building	4Q20	68,982
Others	G Valley G Square	4Q20	128,173
Others	Seoul Forest D Tower	4Q20	95,870
Gangnam	Renaissance Hotel PJ	1Q21	170,590
Gangnam	Suaviss Redevelopment	1Q21	34,890
Others	Sampyo Group Building	4Q21	44,692
Yoido	MBC Redevelopment	4Q22	45,715
CBD	Bongrae District	4Q22	40,339

<sup>1</sup> py (=pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet).

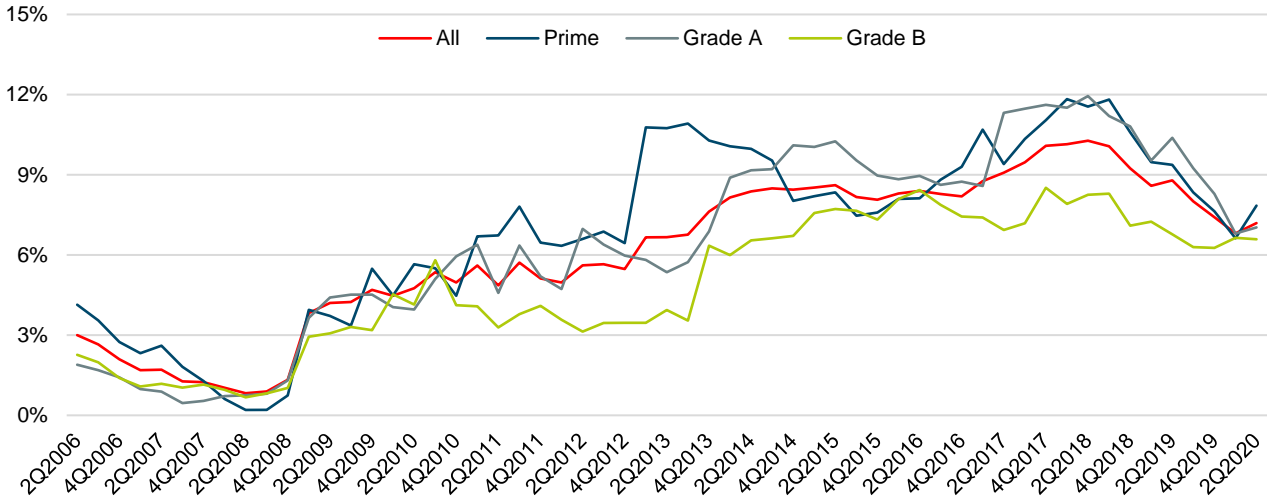
<sup>2</sup> Please refer to “Asia Pacific Real Estate Strategic Outlook July 2020” report for house-view forecast of DWS.

Notes: GFA = gross floor area. sqm = square metres. Past performance is not indicative of future results. There is no guarantee the supply pipeline will materialize. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.

Sources: Avison Young, DWS. As of Aug. 2020

The average office vacancy rate in Seoul had elevated between 2008 and 2018, in line with large amounts of prime and Grade A office supplies, backed by the urban redevelopment plan of the Seoul city government to enliven the deteriorating old city centers. Although the vacancy rates turned to a modest recovery in the last two years, they are expected to rise again in coming years, due to the record supply in 2020 and weakening leasing demand. The average blended office vacancy rate in Seoul rose from 6.8% in the first quarter of 2020 to 7.8% in the following quarter, driven by an increase in the prime office vacancy rate from 6.6% to 7.8% in the same period.

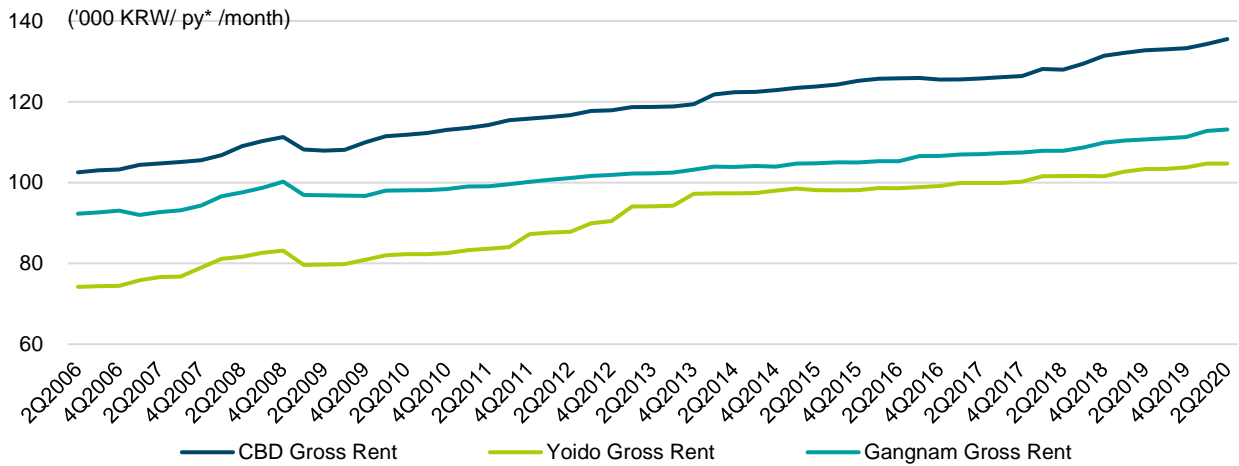
**EXHIBIT 18: OFFICE VACANCY RATES BY BUILDING GRADE IN SEOUL**



Notes: Past performance is not indicative of future results.  
Sources: Avison Young, DWS. As of Aug. 2020

In Seoul, face office rents have grown by 1-3% per annum over the last ten years, regardless of fluctuations in the vacancy rates. Average monthly gross rent in CBD rose to KRW 136,000 per pyeong in the second quarter of 2020, a 2.1% increase on a year-on-year basis, followed by KRW 113,000 in GBD and 105,000 in YBD, a 2.2% and 1.3% increase respectively in the same period.

**EXHIBIT 19: OFFICE FACE RENT IN SEOUL (INCLUDING CAM)**

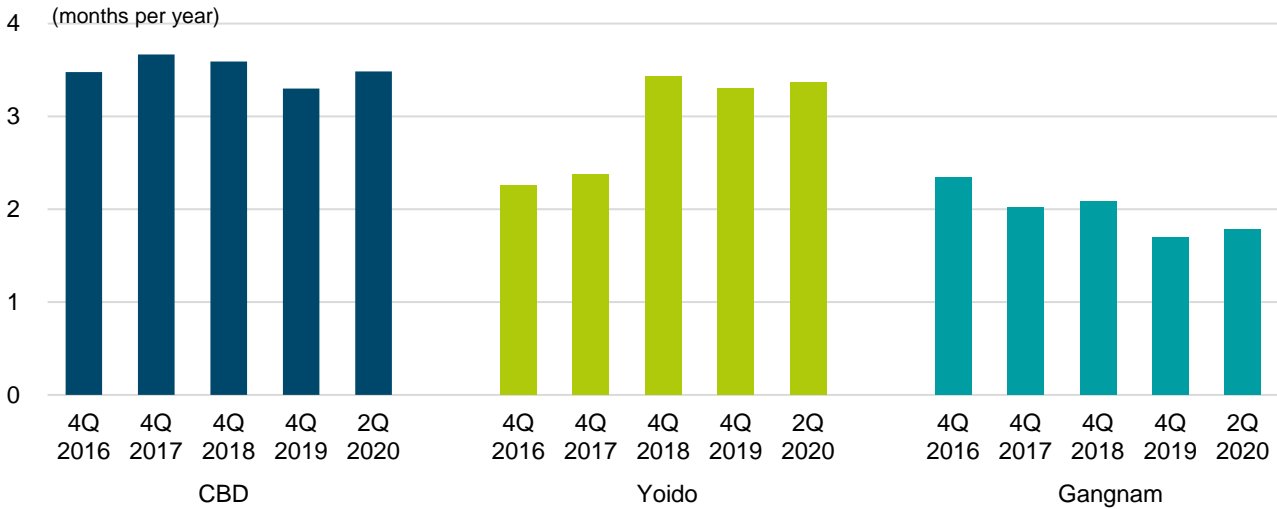


py\* (=pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet).  
Notes: Past performance is not indicative of future results.  
Sources: Avison Young, DWS. As of Aug. 2020

In contrast to the steady growth of face office rents, the growth of effective rents has been limited along with expanding concessions since 2008. The trend was more obvious among newly completed Grade A office buildings, due to their profound needs to quickly secure office tenants without lowering the face rent. The average rent free period granted to tenants in CBD and Yoido in the second quarter of 2020 were almost flat at around 3.4~3.5 months per year, while Gangnam stayed at the comparably low level of 1.8 months per year. It is also worth noting the common practice for landlords to provide additional concessions such as tenant improvements or free fit-out periods in addition to rent-free periods for those buildings with large vacant spaces, and the aggregate concessions could amount to more than 6 months per year.

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**EXHIBIT 20: TYPICAL OFFICE RENT FREE PERIOD BY SUB MARKET IN SEOUL**

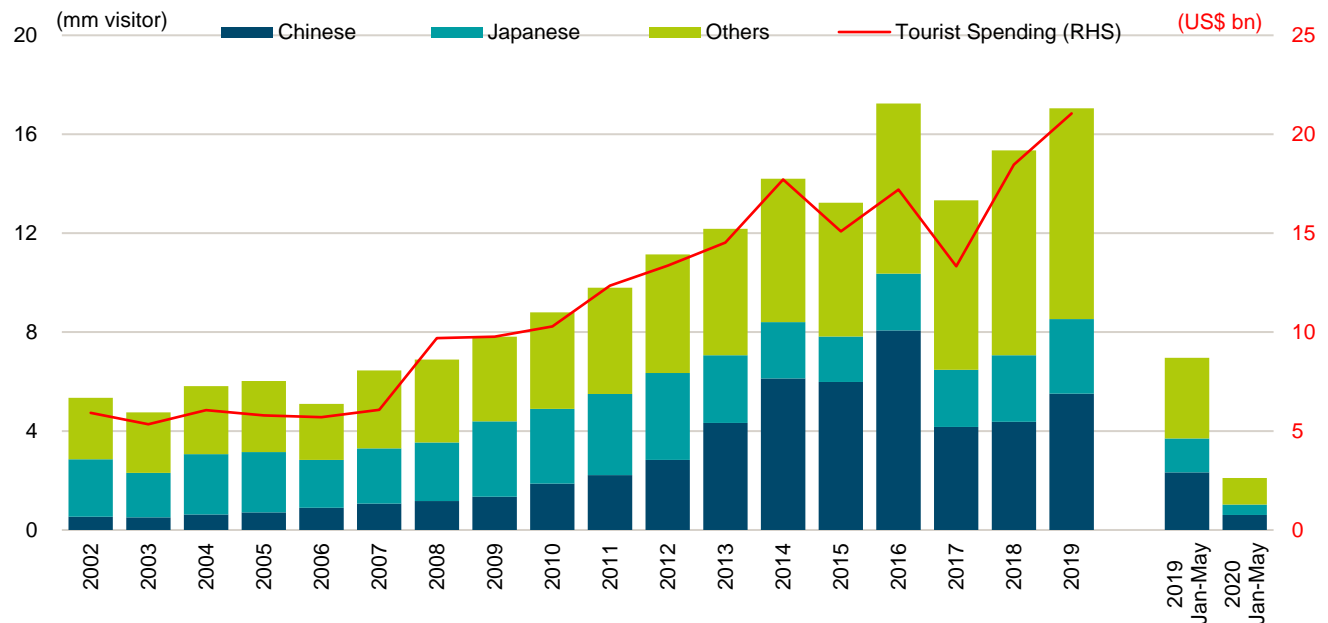


Notes: Past performance is not indicative of future results.  
Sources: Avison Young, DWS. As of Aug. 2020

**3.2 Retail**

With the COVID-19 incurred international travel restrictions in and out of the country, the number of overseas tourist arrivals to South Korea marked 2.1 million in the first half of 2020, a huge drop of 70% compared to the same period of the previous year. Though the country has not closed its border to overseas tourists, the mandatory two-week-long quarantine period has been imposed. The Korean government is considering the introduction of a so-called “travel bubble” with countries successfully containing the epidemic such as Taiwan or Vietnam to be exempt from the mandatory quarantine and resume international tourism but it is still uncertain whether this will be realized in the near future.

**EXHIBIT 21: GROWTH OF OVERSEAS VISITOR ARRIVALS TO KOREA AND TOURIST SPENDING**

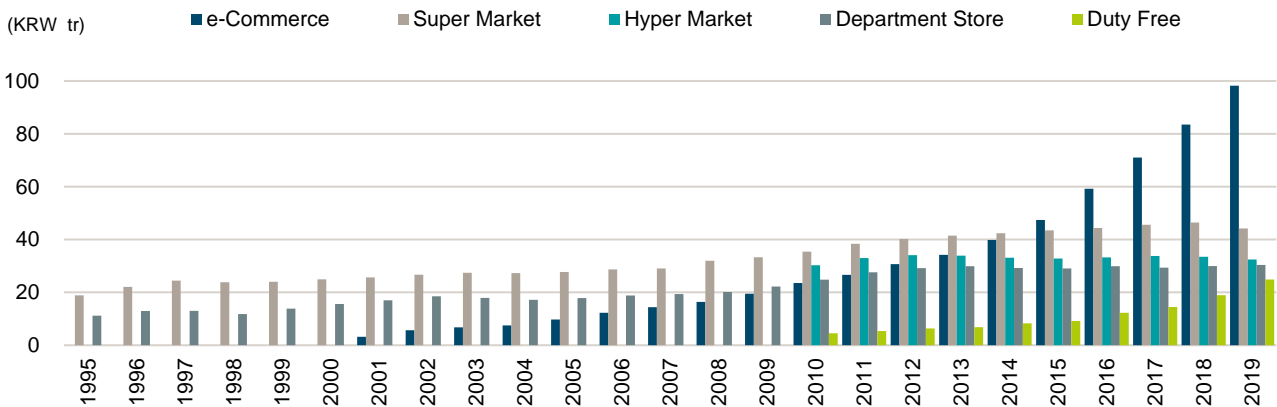


Notes: Past performance is not indicative of future results.  
Sources: Korea Tourism Organization, DWS. As of Aug. 2020.

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Retail sales in South Korea grew by 1.8% in 2019 on a year-on-year basis, underpinned by the fast growth of e-commerce and healthy tourist consumption at the time. Sales growth was stronger for discretionary retail types, such as duty free (31%), e-commerce (28%) and, to a lesser extent, convenience stores (5.3%), while it was dull or even negative for traditional retail types such as department store (2.3%), supermarkets (1.4%) and hyper markets (-1.0%). Faced with the economic fallout from COVID-19, the country’s largest retailers unveiled their strategic focus shift to e-commerce accompanied by the shutdown of hundreds of bricks-and-mortar retail stores in the next three to five years, posing an imminent threat to both discretionary and the non-discretionary retail in the country.

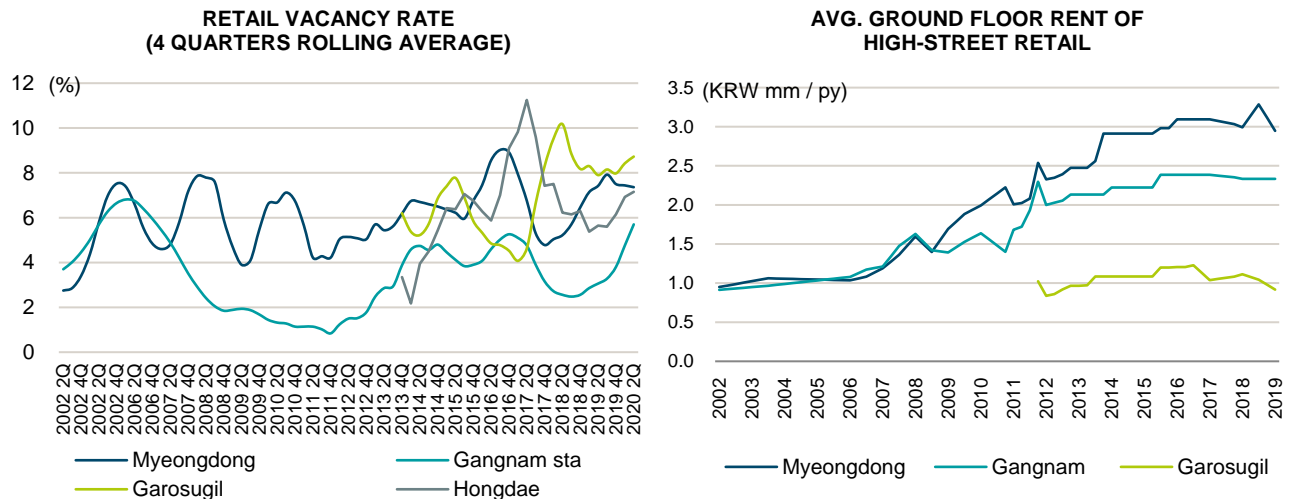
**EXHIBIT 22: RETAIL SALES BY CATEGORY**



Notes: Past performance is not indicative of future results.  
Source: Korea Statistical Information Service, DWS, As of Aug. 2020

Entering 2020, average retail vacancy rates have softened altogether in most major high street retail areas of Seoul, though they were relatively higher in the areas highly exposed to overseas tourist consumption. The retail vacancy rates in Gangnam and Hongdae, the retail hubs for domestic shoppers, rose to 5.7% and 7.2% in the second quarter of 2020, and stood even higher at 7.4% and 8.7% in the popular tourist areas of Myeongdong and Garosugil respectively. . With soaring fears over possible infections, the foot traffic in these areas suddenly dropped to 30-40% of the previous year in March 2020, while it has gradually recovered to 70-80% in June 2020 as the fear has waned. The average retail ground floor rents in 2019 were KRW 2.9 million per pyeong in Myeongdong and KRW 2.3 million per pyeong in Gangnam, and are expected to decrease significantly in 2020 along with a slow recovery in foot traffic in these areas.

**EXHIBIT 23: VACANCY RATE AND AVERAGE RENT OF GROUND FLOOR BY RETAIL AREA**



\*py (=Pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet).  
Notes: Past performance is not indicative of future results.  
Sources: Korea Appraisal Board, Cushman & Wakefield, DWS. As of Aug. 2020.

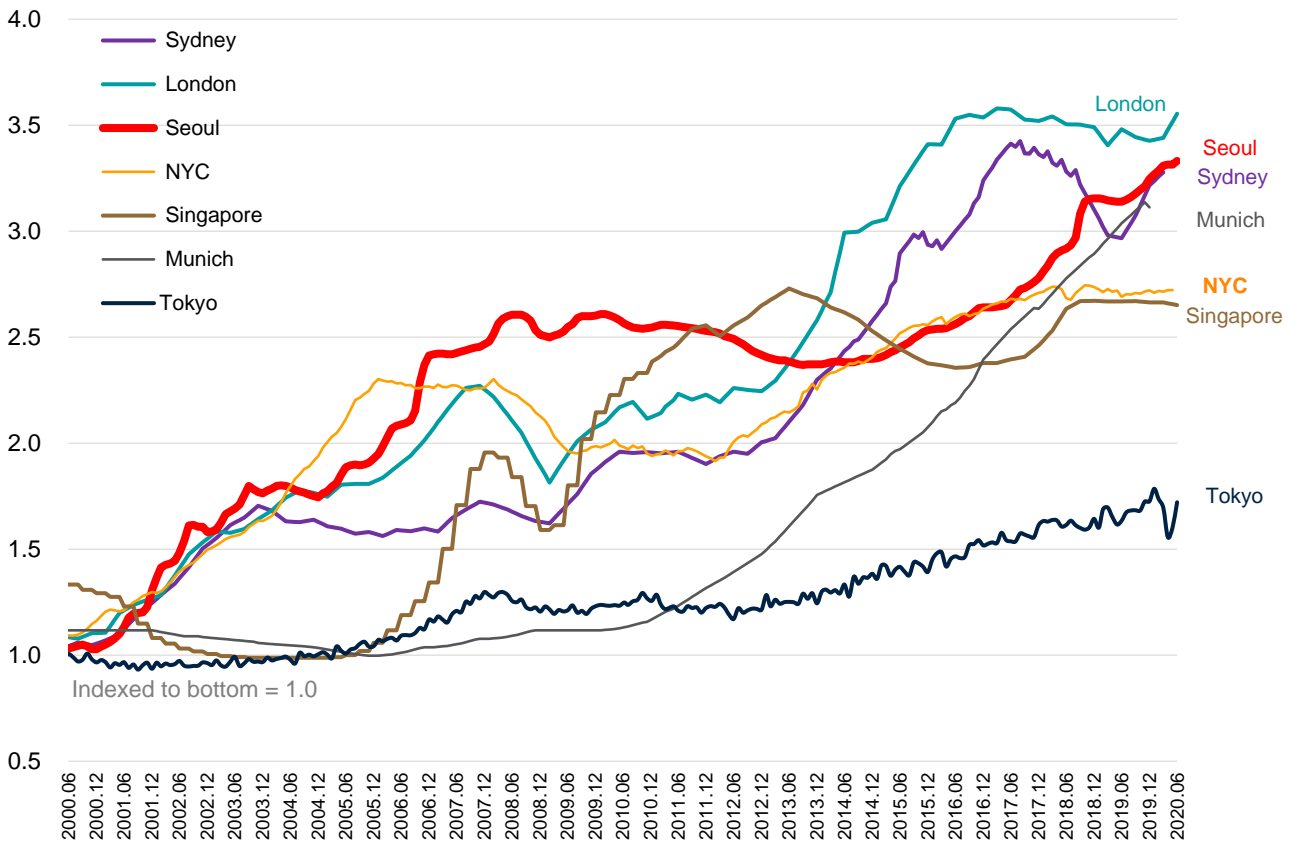
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### 3.3 Residential

Over the last 20 years, the average home price index in Seoul has increased 3.3 times, slightly lower than London at 3.6 times and higher than Sydney of 3.2 times and Munich at 3.1 times. Compared to other cities already entering a cool down phase following the housing boom between 2016 and 2018, the home price boom in Seoul is a step behind the others, thus still maintaining its momentum. It marked the rapidest one-year increase of 6.1% among global peer cities in June 2020, propelled by affluent capital liquidity and a lack of large-scale condo supply to the city. With increasing frustrations among first-time home buyers in Seoul, the Korean government has tried to cool down overheated housing prices mainly by limiting financing leverage and increasing taxes, but is yet to see any meaningful turnaround of the house price rally.

**EXHIBIT 24: HOME PRICE INDICES IN GLOBAL CITIES (RECOVERY FROM THE RECENT TROUGH)**

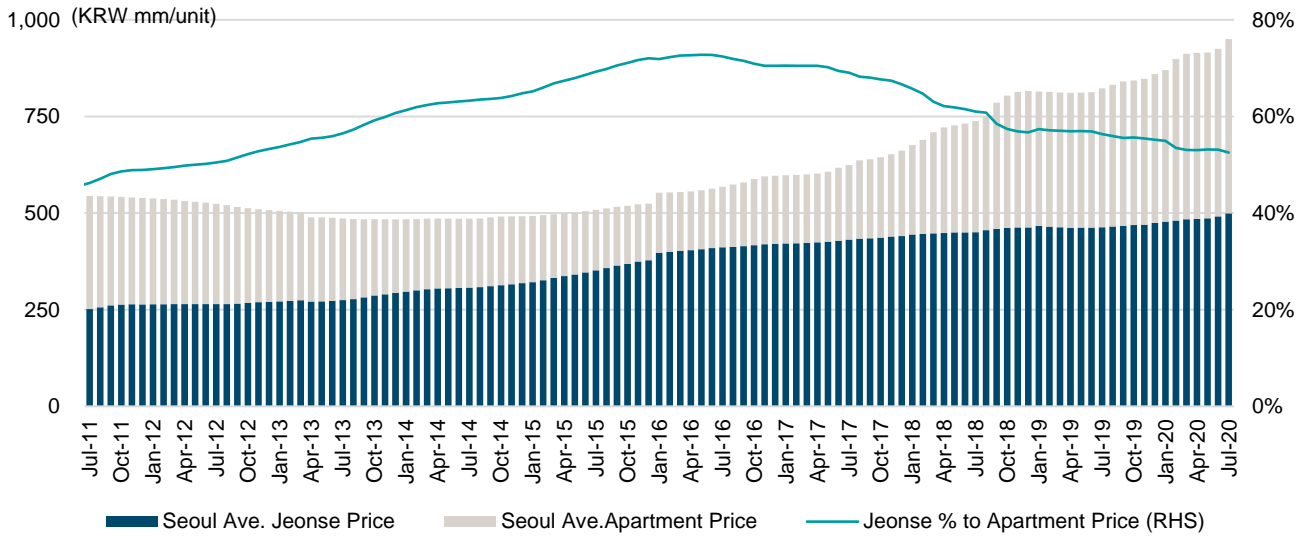


Notes: Past performance is not indicative of future results.  
Sources: Australian Bureau of Statistics, Case-Shiller, Nationwide, Rating and Valuation, URA, IPD-Recruit, KB Kookmin Bank, DWS. As of Aug. 2020

Having timid institutional rental house businesses, the country invented their own way of running individual rental house businesses, namely “Jeonse,” or deposit-only. These unique Korean leasing contracts require tenants to place the lump sum of returnable deposits amounting to 40–80% of the house value, instead of paying monthly rents, leaving options to the landlords whether to use it as the leverage or take the interest revenue with it.

The exhibit 25 shows the average condominium price in Seoul and Jeonse ratio to the entire purchase price. The Jeonse ratio peaked out at 73% in May 2016 to 53% in July 2020, raising the required down payment ratio from 27% to 47%. In the meantime, the average condo price has grown by 66% in total, much larger than 21% of the Jeonse price growth in the same period, due to the speculative condo investment demand coupled with more affordable mortgage rates.

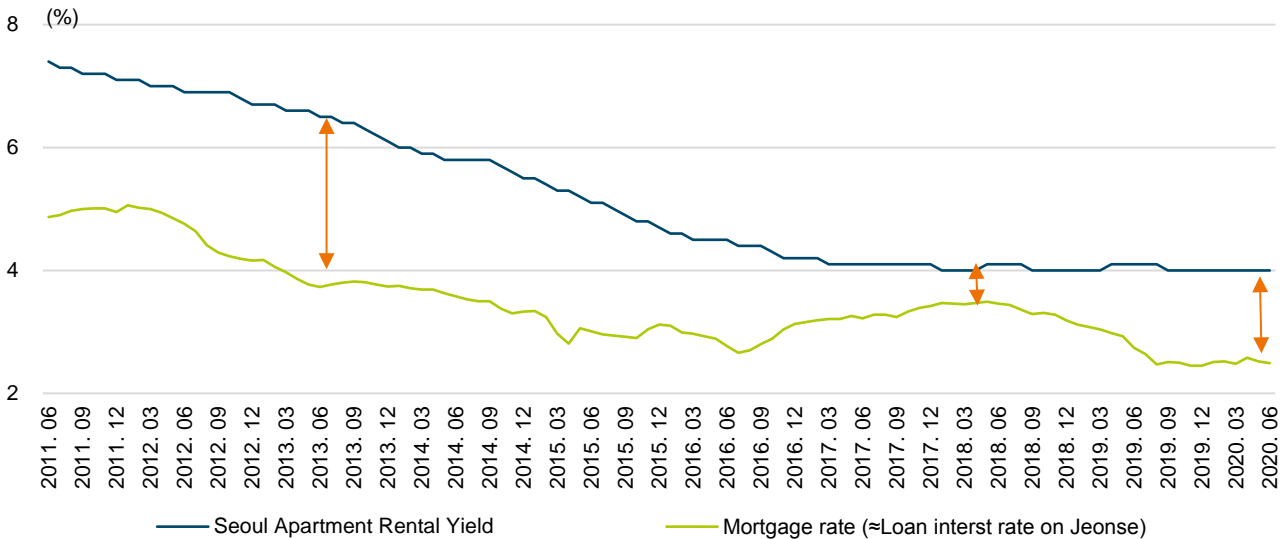
**EXHIBIT 25: AVERAGE PRICE OF SEOUL CONDOMINIUM & JEONSE RATIO**



Notes: Past performance is not indicative of future results.  
Sources: KB Kookmin Bank, DWS. As of Aug. 2020

Yield spreads between the rental yield and the Jeonse loan interest rate widened from 53 basis points in April 2018 to 151 basis points in June 2020, though it still remains at a modest level as compared to the above 200 basis points level before 2015. The narrowing of yield spreads between the Jeonse borrowing yield and the monthly rental yield theoretically makes rental houses a more affordable option for tenants. It will take time for Koreans to become familiarized with the concept to pay monthly rents for standard living, who have traditionally regarded Jeonse as a more economical option over the last 70 years. Recently the South Korean government started to push forward the shift from Jeonse to monthly rent as a way to deleverage the overheated for-sale condo market. This should help to support the emergence of institutional rental houses in the mid-term, if accompanied by adequate incentives.

**EXHIBIT 26: SEOUL CONDOMINIUM RENTAL YIELD VS. HOUSE MORTGAGE RATE**

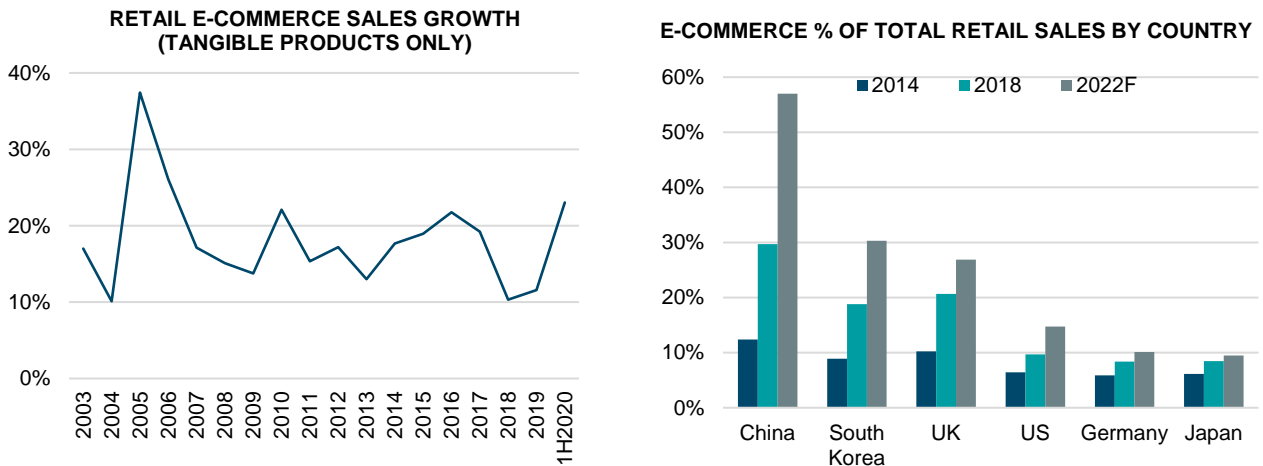


Notes: Past performance is not indicative of future results.  
Sources: Korea Appraisal Board, Bank of Korea, DWS. As of Aug. 2020

### 3.4 Industrial

Ironically the COVID-19 pandemic and its resulting stay home campaign provided a tailwind to retail e-commerce sales continuing its double-digit growth over the last 17 years. Retail e-commerce sales growth accelerated by 23% in the first half of 2020, compared to 10% in 2019, becoming the main growth driver of the modern logistics space. With active category extensions such as fresh foods or luxurious brand products, e-commerce retail sales in South Korea is expected to keep the current momentum in the foreseeable future and raise its share of entire retail sales to above 30% in 2022.

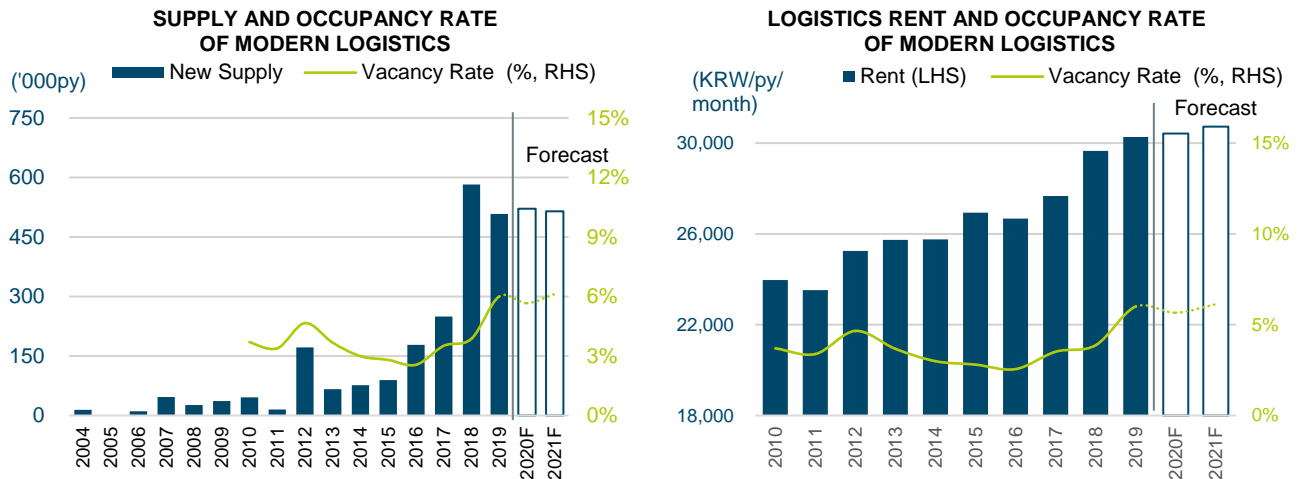
**EXHIBIT 27: RETAIL E-COMMERCE SALES AND 3PL INDUSTRY REVENUE IN KOREA**



Notes: Past performance is not indicative of future results.  
Sources: Korea Statistical Information Service, eMarketer, DWS. As of Aug. 2020

The average vacancy rate of modern logistics assets in Greater Seoul is expected to hover at around 6.0% between 2019 and 2021 under the upward trend in light of a record amount of supply since 2018, though considerably offset by the strong logistics space demand from e-commerce and 3PL industries. The average rental growth for modern logistics assets remained robust at 2.1% in 2019, boosted by strong leasing demand, while the consecutive large amount of supply is expected to slow the rental growth speed over the next 1-2 years.

**EXHIBIT 28: LOGISTICS SUPPLY AND VACANCY RATE IN GREATER SEOUL**

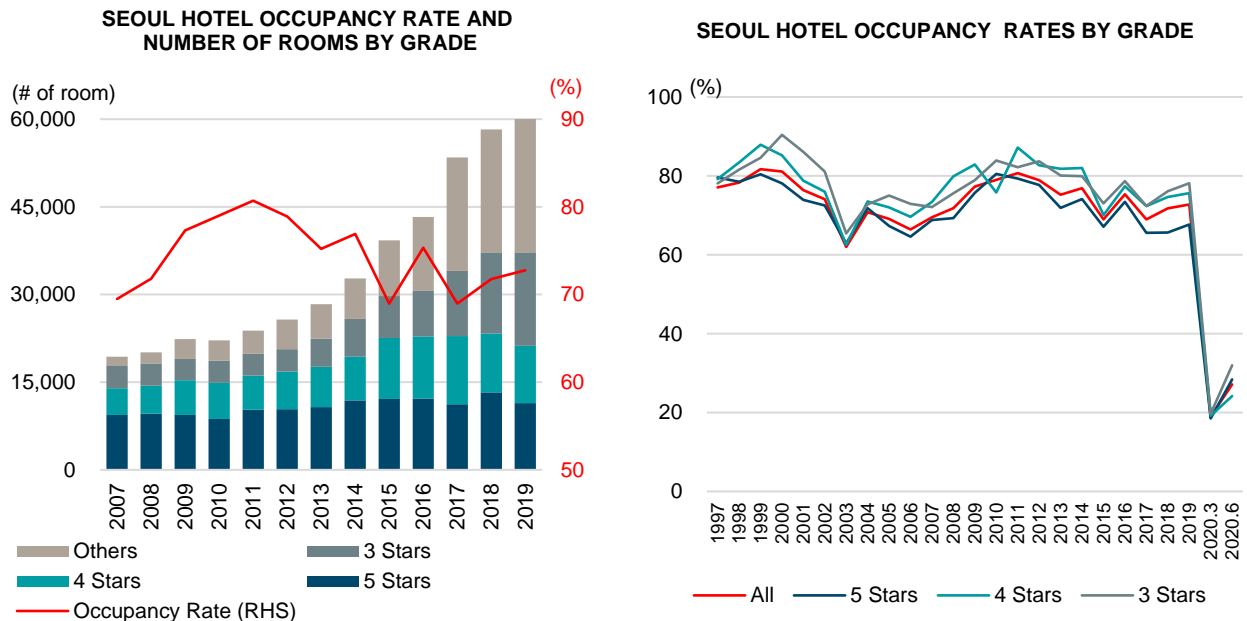


\*py(=Pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet).  
Notes: Past performance is not indicative of future results. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.  
Sources: DTZ, CBRE, DWS. As of Aug. 2020.

### 3.5 Hotel

With the sudden drop in overseas tourist arrivals to the country from February 2020 until now, the average hotel occupancy rate in Seoul plummeted from 73% in 2019 to the unprecedented level of 19% in March 2020, though inching up to 27% in June with the resuming of domestic travel. Suffering from both dwindling revenues and soaring costs for hygiene, many hotel operators are desperately trying to secure visitors by offering big discounts or unconventional services such as “time use” or “indoor entertainment,” but are yet to see any signal of a turnaround. Some hotel industry institutions forecast that global hotel demand will not fully recover to pre-COVID-19 levels until 2022 with prolonged impacts of COVID-19 and its resulting travel restrictions, though the recovery speed itself should depend on the containment of the virus at the international level.

**EXHIBIT 29: NUMBER OF HOTEL ROOMS AND HOTEL OCCUPANCY RATE IN SEOUL**



Notes: Past growth is not a reliable indicator of future growth.  
Sources: Korea Hotel Association, DWS. As of Aug. 2020

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- \_Adverse changes in law and regulation including environmental laws and regulations, zoning laws and other governmental rules and fiscal policies;
- \_Environmental claims arising in respect of real estate acquired with undisclosed or unknown environmental problems or as to which inadequate reserves have been established;
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