Real Estate Research

October 2022



South Korea Real Estate Market Annual Report

Potential window of opportunity to optimize Korean portfolios by selling weak assets

IN A NUTSHELL

- —Following the modest expected recovery of 2.7% in 2022, the real GDP growth of South Korea is forecast to slow down to below the 2% level in 2023 along with high inflation and deteriorating external demands.
- —To tame the country's high inflation above 5% in 2022, the Bank of Korea continued to hike its base rate from 0.5% to 2.5% in the last two years and possibly further to 3.25% by the end of 2022.
- —Yield inversions between cap rates and borrowing costs have expanded to 150-200 basis points leading to a cap rate increase of the Seoul office market from 3.4% to 3.8% in YTD 2022 with further widening expected in the coming quarters, implying a potential capital value correction at around 15-20% from its previous peak in 2021.
- —Leasing market fundamentals in the office and logistics sectors showed their strength with the vacancy rate tightening, while retail and hotel sectors remained weak with lagging international travel recovery.

1 / Country Overview

1.1 Macro Economy

Entering 2022, the global economy has struggled from the multi-decade high level of inflation driven by the unprecedented financial liquidity and soaring energy prices, and so did the South Korean economy. Though the country's real GDP has managed to keep its modest recovery from COVID economic fallout with 2.7% growth in 2022, it is expected to slow down again to below the 2% level in 2023 along with high inflation and deteriorating external demands. The manufacturing sector is showing signs of contraction with waning demands for semiconductor and electric devices as well as the continuous zero-COVID policy of China dragging on their import demands. Private consumption grew off the back of eased domestic COVID restrictions in 2022, albeit turning to contraction again under increasing pressure of elevated inflation, higher interest rates, and a weakening consumer sentiment.

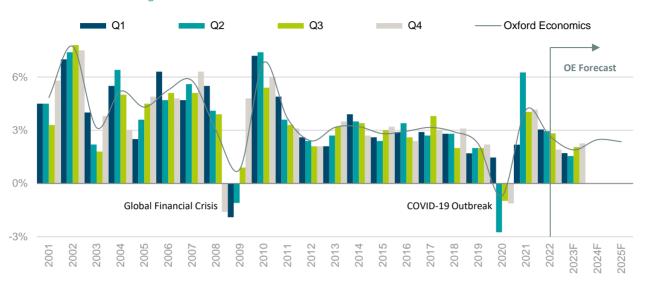
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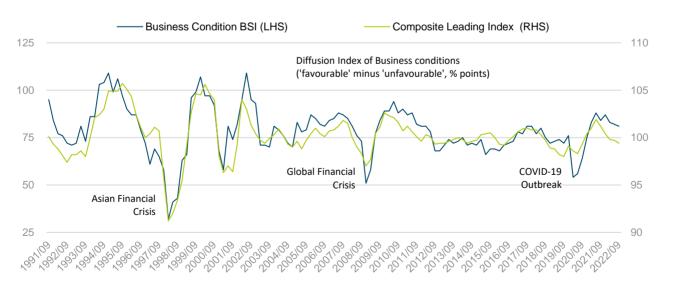
Exhibit 1: South Korea's GDP growth outlook



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 September 2022.

The latest result of Business Conditions in the Business Survey Index (BSI) conducted by the Bank of Korea, marked a reading of 81 in August 2022, a decrease from 87 a year ago. By industry, the business sentiment of manufacturing industries saw a significant decrease from 98 to 80 in the same period, reflecting weakening export activities, while non-manufacturing industries remain almost flat as pent-up reopening demands offset the impact of high inflation. The broad business condition outlook is expected to worsen further in the coming months with global recession risk looming.

Exhibit 2: Diffusion index of business conditions

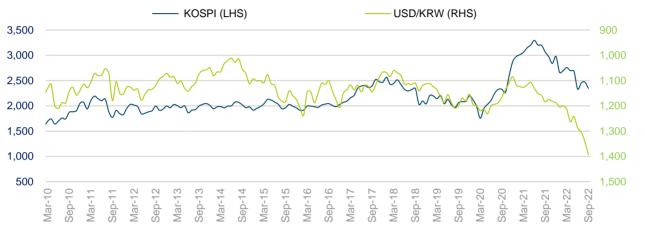


Past performance is not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. There is no guarantee the estimates shown will materialize.

Sources: Bank of Korea, Korea Statistical Information Service, DWS. As of September 2022.

After hitting a new all-time high of over 3,300 in June 2021, the benchmark KOSPI stock price dropped sharply to mid-2,300 in September 2022, marking one of the biggest stock slides among key stock markets in the same period. The slide has been driven by capital flights of overseas investors concerning the potential yield inversion between the United States and South Korea. The Korean won fell 23% against the US dollar in the same period to be traded at 1,393 per U.S. dollar in September 2021, the lowest level since March 2009.

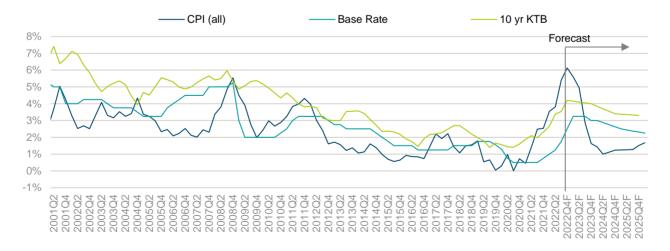
Exhibit 3: Stock (KOSPI) and Forex



Notes: Past performance is not a reliable indicator of future performance. Sources: Bank of Korea, DWS. As of September 2022.

Buoyed by rising energy prices, South Korea's CPI reached 6.3% in July 2022, still milder than those of the United States and Europe, but a nearly 24-year high level for the country as well. Bank of Korea foresees that the country's inflation will remain at an escalated level above 5% for the remainder of 2022, maintaining monetary tightening by hiking the base rate to 2.5% in August 2022 from 0.5% two years ago and expectedly reaching 3.25% or even above by the end of 2022. Along with the base rate increase, the 10-year Korea Treasury Bond also rose to 3.9% in September 2022 from 1.9% a year prior.

Exhibit 4: Forecast of interest rate and CPI

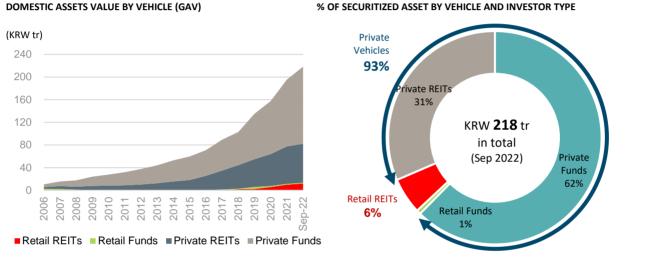


Notes: F = forecast, there is no guarantee rates forecasted will materialise. CPI = Consumer Price Index. KTB = Korea Treasury Bond. Please refer to Important Notes (see end of report) Past performance is not a reliable indicator of future performance. Sources: Bank of Korea, DWS. As of September 2022.

1.2 Fund and REITs

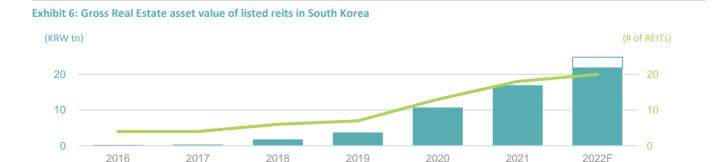
Exhibit 5 shows the aggregate size of real estate assets held by REITs and real estate funds in South Korea. As of September 2022, the level of securitized assets totaled KRW 218 trillion, rising more than five-fold in the last ten years with an 82% increase from the end of 2020. Still, most of these vehicles* remain accessible only to large institutions with a small number of vehicles open to retail investors, as 93% of these are non-listed, closed-end private vehicles accessible to institutional investors only. Listed REITs saw rapid growth with multiple IPOs over the last five years, though still accounting for only 6% of these assets, together with retail distribution funds holding only 1%.

Exhibit 5: Domestic Real Estate asset value held by fund and REIT



*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 September 2022.

The listed REIT market of South Korea has been one of the fastest growing markets across the global real estate world with 17 IPOs managing more than KRW 20 trillion assets in total over the last five years. However, its growth momentum has notably weakened since the third quarter of 2022 with multiple IPO candidates postponing their listing due to the ongoing stock market turbulences and worsening investment sentiments. Falling REIT prices would deteriorate the purchasing power of listed REITs, possibly leading to a transaction volume decrease as well as capital value correction of commercial real estate with a time lag of up to 12 months.



Past performance is not a reliable indicator of future performance.

Sources: Korea REITs Information System, Korean Association of REITs, DWS. As of September 2022

GAV (Listed REIT)

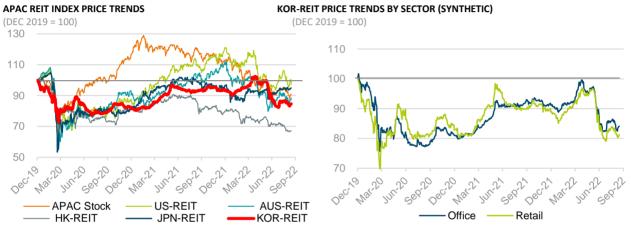
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GAV (Listing Postponed)

of REITs (RHS)

Despite the rapid growth of the listed REIT market, South Korea still lacks a reliable REIT index covering all the listed REITs in the country, hindering the comparative analysis of their performances and further development of associated financial products. Exhibit 7 shows the performance of a synthetic Korean REIT price underperforming as compared to other peer markets including Japan REIT and Australia REIT, implying the upcoming capital value correction of commercial real estate as an early market indication. From a sector perspective, there were no clear signs of price diversion witnessed between the office sector and retail sector in the last three years, with both sectors sinking at 80-85% of pre-COVID levels in September 2022.

Exhibit 7: Global REIT Price Index and Korea REIT Index

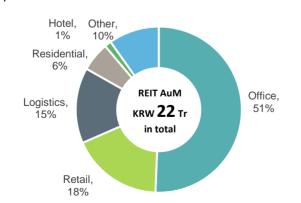


Note: APAC Stock = MSCI AC APAC Index, US-REIT = FTSE EPRA/NAREIT United States, AUS-REIT = S&P/ASX 200 REIT, SIG-REIT = FTSE ST REIT Index, HK-REIT = Hang-Seng REIT Index, JPN-REIT = TSE REIT Index, KOR-REIT = Synthetic Index based on the weighted average of stock price change of all the listed REITs in South Korea Note: Past performance is not a reliable indicator of future performance.

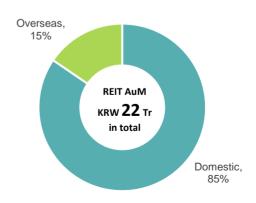
Source: DWS. As of September 2022.

In addition to quantitative growth, qualitative improvement of the listed REIT market in South Korea is also underway with advanced sectoral diversification. Extremely high dependency on office and retail sectors has significantly relieved, as the share of the two sectors dropped from 98% in December 2019 to 68% in September 2022, while the level of diversification is still lower than other major REIT markets. It is noteworthy that the share of overseas assets has rapidly increased to 15% and is expected to grow further with multiple IPO candidates trying to secure their seed assets in overseas markets such as the United States, Europe, or Japan.

Exhibit 8: Asset Diversification of Listed REIT in South Korea By Sector



By Location



Note: Past performance is not a reliable indicator of future performance. Source: DWS. As of September 2022.

1.3 Cap Rates and Performance

Since the start of 2022, long-term South Korean bond yields have soared from 2.3% in December 2021 to 4.0% in September 2022, bringing the unprecedented level of yield inversion between transaction cap rates and lending rates by 150-200 basis points. It is putting strong upward pressures on transaction cap rates, potentially leading to a capital value correction of around 15-20% from its previous peak in 2021 in the near future¹. Among sectors, the market cap rate of Grade A offices rose from 3.4% a half year ago to 3.8% in the third quarter of 2022, while logistics cap rates also rose from 4.3% to 4.6% in the same period with further cap rate widening expected in the coming quarters. The average office yield spread in Seoul was approximately minus 100 basis points, the lowest level among key global markets.

Exhibit 9: Cap Rates and Yield Spreads Transaction Cap Rate (Stabilized) Grade A Office Yield Spread (Average Transacted) Forecast 6% 12% 10% 4% 8% 6% 4% 2% 202015 202016 202010 202012 202017 London New York Gov't Bond (10Y) Seoul Office Tokyo Hong Kong Sydney Seoul Retail Seoul Logistics Notes: Past performance is not a reliable indicator of future performance Sources: Avison Young, Cushman & Wakefield, DTZ, Real Capital Analytics, DWS. As of September 2022.

The average unlevered total return of commercial real estate investments in the country hit a record high of 12.8% in 2021 driven by steep cap rate compression, while it is expected to decrease to near 0% in 2022 along with a possible capital value correction in the coming years. Among sectors, the office and industrial sectors delivered the highest returns at around 13-14% in 2021, compared to the retail and hotel sectors sinking below the 0% level in the same period, while they are also expected to mute to near 0% in 2022.

Exhibit 10: Real Estate Total Return in South Korea (Unlevered)

TOTAL RETURN BY COMPONENT

TOTAL RETURN BY SECTOR

TOTAL RETURN BY SECTOR

TOTAL RETURN BY SECTOR

TOTAL RETURN BY SECTOR



Notes: There is a time lag because of raw data being collected through semi-annual reports. Past performance is not indicative of future results. Forecasts are not a reliable indicator of future performance Forecasts are based on assumptions, estimates, views and hypo-thetical models or analyses, which might prove inaccurate or incorrect.

Sources: MSCI Real Estate - IPD. DWS. As of September 2022.

¹ Please refer to "Asia Pacific Real Estate Strategic Outlook July 2022" report for house-view forecast of DWS

1.4 Lending and Transactions

Commercial real estate lending by major Korean lenders amounted to KRW 298 trillion in the first quarter of 2022, maintaining the pace of double-digit growth for 32 consecutive quarters. However, the recent rising interest rate environment is expected to change the lending landscape dramatically for commercial going forward, as the lenders are increasingly cautious on potential price adjustments of collateral assets, especially becoming selective to the financing renewal of vulnerable assets whose interest payment would surpass the income revenue.

Exhibit 11: Commerical 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 September 2022.

After the market fallout in 2020, commercial real estate transaction activities across the Asia Pacific region saw a strong annual rebound of 30%, surpassing US\$ 200 billion for the first time in the third quarter of 2021, though they turned to a modest decrease again by 5% in the second quarter of 2022. Throughout 2021, China kept its position as the largest real estate market in the region, followed by Japan and Australia, while South Korea ranked fourth with a marginal gap with the latter two countries. South Korea's regional share increased from 6.1% in 2014 to 19.2% in the second quarter of 2021, the highest level in the last 15 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 September 2022..

The commercial real estate transaction volume of South Korea amounted to KRW 26.9 trillion in 2021 on a preliminary basis, a bit shy of the previous peak in 2020, though keeping the highest level above KRW 25 trillion for four consecutive years. Among buyers, domestic institutional investors were predominantly active in acquiring assets, while cross-border investors were struggling from the severe competition with local capitals and rising hedging losses. By sector, office occupied the largest share at 59% followed by retail (28%), industrial (7%), and hotel (4%) with only a few recorded transactions in the residential sector. As an increasing number of asset owners sit back from sales given growing market uncertainties, the semi-annual transaction volume in the first half of 2022 is estimated to decrease by 12% year on year.



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 September 2022

In 2021, the United States remained the largest investment destination for cross-border investment amounting to US\$ 70 billion, followed by the United Kingdom and Germany. South Korea ranked 17th globally with US\$ 3.1 billion of inbound investment, gradually stepping down from 12th position in 2018.

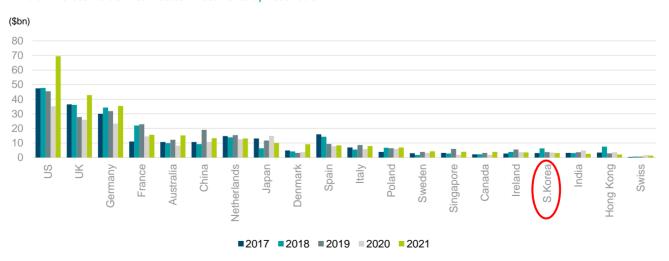


Exhibit 14: Cross-Border Real Estate Investments by Destination

Notes: Past performance is not indicative of future results. Sources: Real Capital Analytics, DWS. As of September 2022.

Exhibit 15 shows major real estate transactions announced since September 2021. The largest deal was the acquisition of the Millennial Seoul Hilton hotel for KRW 1,100 billion by a consortium between Hyundai Construction and IGIS asset management, followed by Alpharium Tower 1&2 for KRW 1,021 billion purchased by Mastern Investment and Shinhan Investment building purchased by SK D&D, IGIS, and GIC for KRW 640 billion. Prime and Grade A office properties in key office districts have seen active transaction activity throughout the period driven by strong investment demand of local institutional investors and REIT listing candidates. Interestingly, three out of the top five office transactions were in Pangyo/BBD area, representing the strong investment demands for the IT industry hub in the country. It is also noteworthy that the acquisition of the IFC complex at KRW 4.1 trillion, which would have been the largest ever deal in the country, was allegedly withdrawn.

Exhibit 15: Major Real Estate Transactions Announced Since September 2021

Туре	Asset	Price (KRW bn)	Unit price (KRW m /GFA py* or unit)	Est. Cap rate*	Location	Month	- Asset Manager / Investor	Invest. Origin
Office	Alpharium Tower 1,2	1,021	30.1	-	Pangyo /BBD	Jan-22	Mastern	Korea
	Shinhan Investment Building	640	30.2	3.3%	Yoido	Jul-22	SK D&D, IGIS, GIC	Korea/ Singapore
	SK U Tower	507	19.3	4.1%	Pangyo /BBD	Jun-22	SK REIT	K-REIT
	Seoul City Tower	490	27.0	-	CBD	Jul-22	IGIS, PAG (ASIA)	Korea/ Hong Kong
	First Tower	447	25.1	3.5%	Pangyo /BBD	Oct-21	KORAMCO	Korea
	E-mart HQ Building (Office)	413	57.2	-	Seoul Others	Jan-22	Krafton Co/ Mirae Asset	Korea
	Mando Global R&D Center	400	23.3	-	Pangyo /BBD	Aug-22	Halla REIT	Korea
	Gangnam P Tower	400	30.0	4.3%	Gangnam	Jan-22	POBA, KORAMCO	Korea
	Center Point West (Condo)	400	14.3	4.2%	Seoul Oth- ers	Sep-21	КВ АМС	Korea
	Wise Tower	333	26.0	3.5%	CBD	Sep-21	Shinhan Alpha REIT	K-REIT
	HP R&D Center	324	16.6	-	Pangyo /BBD	Feb-22	Hoban Construction	Korea
	75% of A Plus Asset Tower	323	47.5	2.7%	Gangnam	Jun-22	Hana Financial Group/ Dunamu Samsung Se- curities/ KORAMCO	Korea

	Apro Square	307	37.3	3.2%	GBD	Apr-22	JR AMC	Korea
	Yuanta Security Building	306	36.1	3.4%	Seoul CBD	Apr-22	Capstone AMC	Korea
Retail	Gwangmyeong Lotte Mall	324	8.5	4.5%	Greater Seoul	Jun-22	Kiwoom AMC	Korea
Logistics	Aster Hangdong Logistics Center	585	8.0	-	Incheon	Dec-21	GIC/ ADF AMC	Singapore
	Incheon Hangdong Logistics	438	9.8	-	Incheon	Dec-21	DWS	Germany
	Samsong Logistic Center	400	12.3	-	Greater Seoul	Sep-21	Hanwha Inv & Securities/ Pacific AMC/ BlueCove Investment	Korea
	CJ Logistics Namsa Logistics Center	356	8.9	-	Greater Seoul	Jun-22	Samsung SRA, CJ Logistics	Korea
	Anseong 2 Logistic Center	325	7.0	-	Greater Seoul	Dec-21	ESR Kendall Square REIT	K-REIT
	Namcheongna Smart Logistics Center	310	7.3	-	Incheon	Apr-22	KORAMCO Energy Plus	K-REIT
	Incheon Wonchang Logistics Center	308	8.1	-	Greater Seoul	Oct-21	AEW Capital	US
Hotel	Millennium Seoul Hilton	1,100	1,617/key	-	CBD	Feb-22	Hyundai E&C/ IGIS	Korea

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

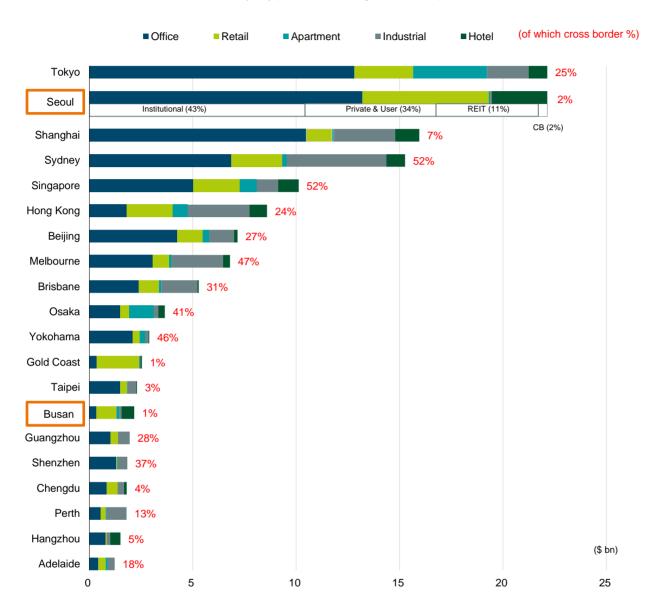
Estimated cap rate*: Even though all the cap rates are based on an estimated basis and obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness, and it should not be relied upon as such.

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 September 2022.

Seoul's preliminary commercial real estate transaction volume for the 12 rolling months ended in June 2022 increased 14% year-on-year to US\$ 22.1 billion. It ranked second amongst Asia Pacific cities after Tokyo and was followed by Shanghai and Sydney. The acquisition activity of cross-border investors remained significantly weak with only a 2% share in the total volume in Seoul, compared to the historical average of 19% in the last fifteen years, while acquisition activity of listed REITs was also slow at 11% due to the continuous REIT price slides in the last 12 months. Busan ranked 14th with a transaction volume of US\$ 2.2 billion in the same period, larger than Guangzhou and Shenzhen, emerging as another institutional investment market in South Korea.

Exhibit 16: Real Estate Transaction Volume by City (12 Months Rolling till June 2022)



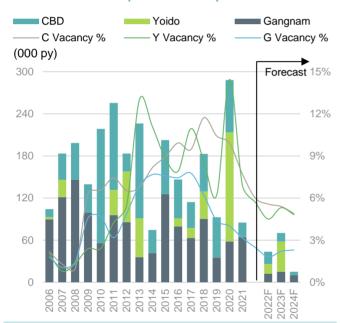
Notes: Commercial real estate transactions exclude non-income producing assets, such as development site transactions. Past performance is not indicative of future results. Sources: Real Capital Analytics, DWS. As of September 2022..

2 / Real Estate Market Fundamentals

2.1 Office

In stark contrast to western markets concerning the long-term impact of working from home to office leasing demands, the tenant leasing activity in the Seoul office market remains almost intact, owing to the country's success in keeping high office attendance during the pandemic. Average office vacancy rates in the CBD and Yoido significantly decreased to 5.6% and 4.5% in the second quarter of 2022 from 9.1% and 15.3% respectively two years ago, while Gangnam remained extremely tight at 1.8% in the same period. Buildings with large vacant spaces in the CBD and Yoido succeeded in lease-up by securing the spillover or upgrade demands from the tight Gangnam submarket, as the market consolidation was accelerated by tight market fundamentals. Given the limited future office supply and the healthy expansion of IT and tech office tenants, the office vacancy rates in key office districts are expected to remain tight in the foreseeable future, turning the markets into strong landlord markets with weak tenant bargaining power.²

Exhibit 17: Office Vacancy Rates in Seoul by Submarket



Major Supply Planned in Seoul						
Area	Building	Date	GFA(py)			
CBD	Bank of Korea Bldg.	2Q22	17,559			
Yoido	MBC Redevelopment	4Q22	13,853			
Yoido	Teachers' Pension Bldg.	2Q23	42,980			
Gangnam	Yeoksam Office	2Q23	14,948			
Seoul Others	Jayang District	3Q23	26,566			
CBD	Bongrae District	4Q23	12,224			

^{*}py (=pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet).

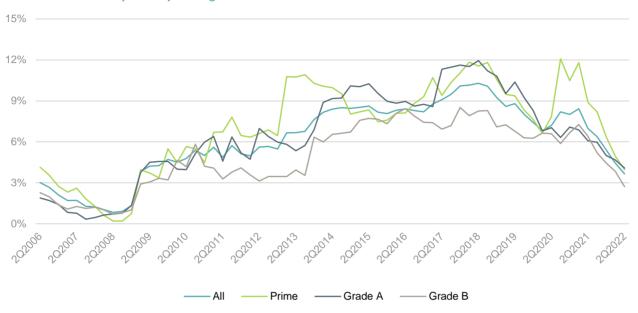
Notes: GFA = gross floor area. sqm = square metres. Past performance is not indicative of future results. There is no guarantee the supply pipeline will materialize. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models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

Sources: Avison Young, DWS. As of September 2022.

The average office vacancy rate in Seoul tightened to 3.7% in the second quarter of 2022, the lowest level in the last 14 years, from 7.4% two years ago. The strong momentum was witnessed regardless of grades as the vacancy rates of Prime, Grade A, and Grade B offices came down altogether from 6-8% range to 3-4% range in the same period, a distinguishing feature compared to other key office markets seeing the clear performance diversion by grade, often dubbed as "Flight to Quality."

² Please refer to "Asia Pacific Real Estate Strategic Outlook July 2022" report for house-view forecast of DWS.

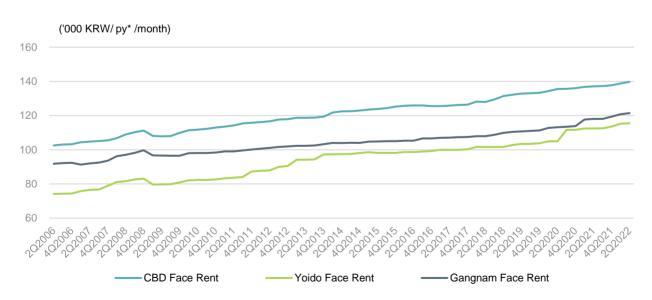
Exhibit 18: Office Vacancy Rates by Building Grade in Seoul



Notes: Past performance is not indicative of future results Sources: Avison Young, DWS. As of September 2022.

In Seoul, office face rents have grown by 2-3% per annum over the last ten years, despite fluctuations in vacancy rates. Average monthly gross rent in CBD rose to KRW 139,800 per pyeong in the second quarter of 2022, a 2.0% increase on a year-on-year basis, followed by KRW 121,452 in GBD and KRW 115,4600 in YBD.

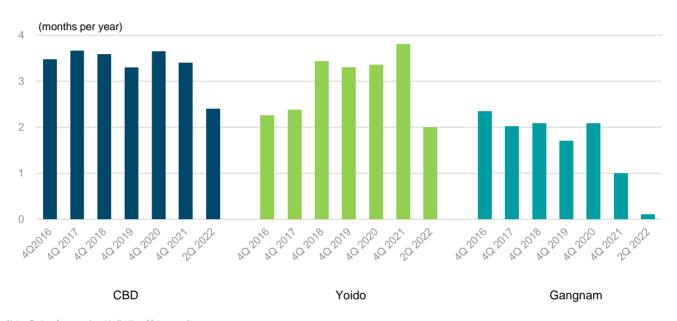
Exhibit 19: Office Face Rent in Seoul (Including Cam)



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 September 2022.

Along with the downtrend of vacancy rates, the average concessions granted to tenants also considerably diminished in all the key submarkets. The average rent-free period in the CBD decreased from 3.4 months per year in the fourth quarter of 2021 to 2.4 months per year in the second quarter of 2022, while it decreased to 2.0 months per year in Yoido, and to almost zero in Gangnam. It would help landlords to achieve stronger net effective rental growth at the time of tenant renewal, together with other incentives concurrently shrinking such as tenant improvements and fit-out periods.

Exhibit 20: Typical Office Rent Free Period by Submarket in SE

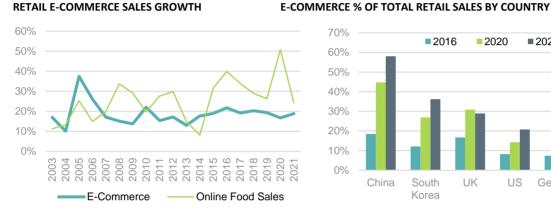


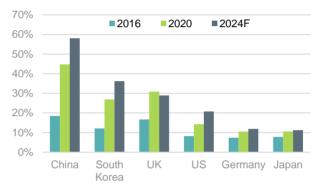
Notes: Past performance is not indicative of future results. Sources: Avison Young, DWS. As of September 2022.

2.2 Industrial

Boosted by the ongoing structural shift of consumer behavior from physical stores to online, retail e-commerce sales in South Korea grew by 19% annually in 2021, continuing its double-digit growth in the last 19 years. Even though concerns are growing over the slowdown of the e-commerce sales boom in some regions of the global market, the country's e-commerce retail industry is still estimated to have ample room for further growth with product category diversification and ongoing business expansion to regional cities. Accordingly, the share of e-commerce retail sales in total retail sales is projected to rise to 34% in 2024.

Exhibit 21: Retail E-Commerce Sales and 3PL Industry Revenue in Korea





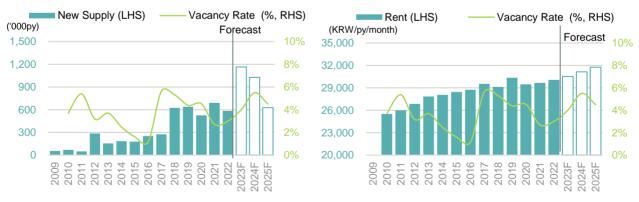
Notes: Past performance is not indicative of future results Sources: Korea Statistical Information Service, eMarketer, DWS. As of September 2022.

The average vacancy rate of modern logistics assets in Greater Seoul decreased from 4.7% in 2019 to 3.0% in the second quarter of 2022, proving the strong logistics space demand from e-commerce and 3PL companies. It is expected to rise to near 6% with record supply expected in 2023 and 2024 while rising construction prices for logistics developments should somehow relieve the concerns over oversupply beyond 2023. The average rental growth for modern logistics assets is expected to grow at 2% per annum in the coming years, underpinned by healthy upgrade demands from obsolete assets and high inflation.

Exhibit 22: Logistics Supply and Vacancy Rate in Greater Seoul

LOGISTICS SUPPLY AND VACANCY RATE

LOGISTICS RENT AND VACANCY RATE



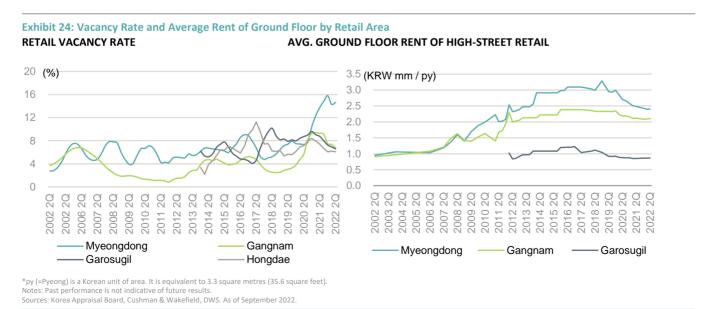
*py(=Pyeong) is a Korean unit of area. It is equivalent to 3.3 square metres (35.6 square feet). Notes: Past performance is not indicative of future results. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect Sources: DTZ, CBRE, WeFunding, DWS. As of September 2022

2.3 Retail

Driven by pent-up demands and the easing of domestic COVID restrictions, retail sales in brick-and-mortar retail stores saw a strong rebound of 9.1% annually in 2021. Among retail types, the sales of department stores (+22.9%) and duty-free shops (+15.0%) saw a steep recovery, while the sales of non-discretionary retail such as hypermarkets (+2.3%) and supermarkets (-2.2%) remained modest with the waning of the home dining boom.



Entering 2022, major high street retail areas of Seoul enjoyed the gradual recovery of foot traffic, while average retail vacancy rates in Gangnam, Garosugil, and Hongdae tightened from 9-10% in 2020 to mid-6% in the second quarter of 2022. On the other hand, it remained at the highest level of 14.6% in Myeongdong, the top tourist destination in the country. The average retail ground floor rents were pushed down to KRW 2.4 million per pyeong in Myeongdong and KRW 2.1 million per pyeong in Gangnam in the second quarter of 2022, a decline of 20% and 10% from the end of 2019.

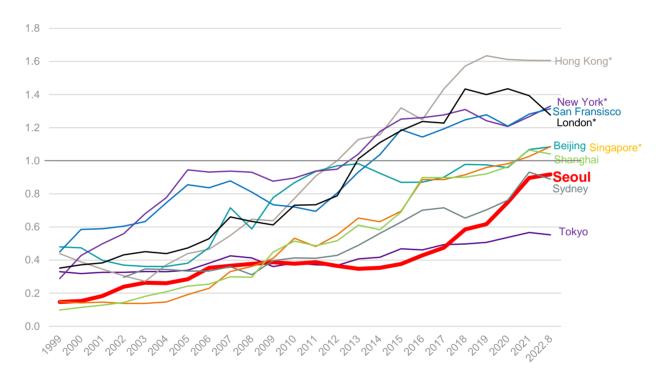


2.4 Residential

Over the last 20 years, the average condominium price per unit in Seoul has increased by approximately 3.8 times to US\$ 0.9 million in August 2022, slightly lower than Beijing, Shanghai, and Singapore, but higher than Sydney. However, since the start of 2022, Korea's housing market has shown clear signs of entering a downturn and is highly likely to stay in the doldrums for a while amid steeply rising interest rates and a bleak outlook for an economic recovery. Even though the impact is not yet reflected in the statistics, the recent second-hand condo transaction price in Seoul is estimated to drop by 10-15% from its previous peaks in 2021. As the country's central bank has signaled additional rate hikes in the remainder of 2022, the housing market sentiment may end up worsening further this year.

Exhibit 25: Average For-Sale Condo Price in Global Cities





*Average price of central residential areas in the city
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 September 2022.

Due to a lack of established institutional rental house businesses in the country, South Koreans invented their own way of running rental houses, namely "Jeonse," or deposit-only contracts. 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, giving landlords the flexibility of using it as leverage or taking the interest revenue with it.

Exhibit 26 shows the average condominium price in Seoul and Jeonse ratio to the entire purchase price. The Jeonse ratio peaked at 73% in May 2016 to 53% in August 2022, raising the required down payment ratio from 27% to 47%. In the meantime, the average condo price has grown by 89% in total, much larger than 53% of the Jeonse price growth in the same period.

Exhibit 26: Average Price of Seoul Condominium & Jeonse Ratio

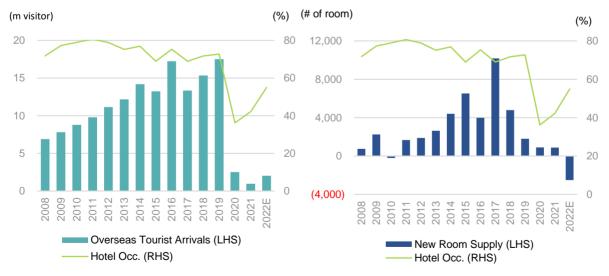


Notes: Past performance is not indicative of future results. Sources: KB Kookmin Bank, DWS, As of September 2022.

2.5 Hotel

Though coronavirus concerns appear to have waned worldwide in the first half of 2022, international tourist arrivals in Asia Pacific remain at only 10% of 2019 levels with ongoing strict border controls, resulting in the underperformance of APAC hotels compared to their global peers. Even though the average hotel occupancy rate in Seoul modestly recovered from 36% in 2020 to 55% in the first half of 2022, with some resort and luxurious hotels outperforming the market, many hotels in Seoul still have difficulties in normalizing their operation, resulting in a net loss of almost 2,500 hotel rooms with more than 53 hotels in Seoul permanently closing their business. Having said that, we believe Seoul hotels are well positioned to lead the long-term growth of the tourism industry, once region-wide travel restrictions are lifted, with their high tourism competitiveness and rising interest in the country's pop culture symbolized as K-Pop or K-Drama.

Exhibit 27: Number of Hotel Rooms and Hotel Occupancy Rate in Seoul
OVERSEAS TOURIST AND HOTEL OCCUPANCY RATE HOTEL ROOM SUPPLY IN SEOUL



Notes: Past growth is not a reliable indicator of future growth. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, views and hypo-thetical models or analyses, which might prove inaccurate or incorrect.

Sources: Korea Hotel Association, DWS. As of September 2022.

3 / Conclusion

Along with a rapid increase in interest rates since the start of this year, yield inversion between commercial real estate transaction cap rates and borrowing costs has expanded to 150-200 basis points in South Korea. It is expected to bring incremental capital value depreciation by 15-20% in the near future³, while the market correction speed is rather slow as the transaction market is dominated by local investors. Accordingly, many investors see it as a good time to optimize their portfolio by selling assets with limited future upside and adopting an opportunity-driven approach with strong downside protection.

Among sectors, the active logistics theme⁴ in South Korea remains attractive given the continuous strong leasing demands from e-commerce and large retailers and the potential impacts of construction cost rises leading to stronger logistics rental growth. Even though pricing adjustments should be factored into the new investment opportunities, logistics opportunities in key metros like Seoul, Busan, and Daegu with active asset management schemes should provide decent risk-adjusted returns for investors.

Finally, the Korean hotel sector is well positioned to enjoy potential pricing discounts in the short term despite being underpinned by long-term travel demand growth. However, the opportunities to find proper structuring and investible size assets are rather limited due to the shallow market. Nonetheless, well-located investment-grade hotels secured by a master-lease contract to a strong hotel operator could provide strong potential for attractive risk-adjusted returns.

³ Please refer to "Asia Pacific Real Estate Strategic Outlook July 2022" report for house-view forecast of DWS.

⁴ Please refer to "Asia Pacific Real Estate Strategic Outlook July 2022" report for house-view forecast of DWS.

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