

AEW RESEARCH

ASIA MARKET PERSPECTIVE

Q4 2015



AEW



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General Economic Overview

In the International Monetary Fund's (IMF) January World Economic Outlook Update, they estimate that 2015 world growth was 3.1% and predict growth will pick up slightly to 3.4% over 2016. They note overall activity in the U.S. is resilient, being supported by monetary policy and strengthening housing and labor markets. In the Euro area, strong private consumption is being supported by low oil prices, while the effects of accommodative monetary policy are outweighing weak net exports.

Globally, central banks are in what seems to be a difficult position. For years they have been looked at to stimulate growth through low rates and unconventional monetary policy, usually in the form of quantitative easing. With the Bank of Japan (BOJ) moving their target policy rate negative in January 2016, joining the Euro-zone and Switzerland among others, almost a quarter of world GDP is now in countries with sub-zero interest rates¹.

So far Central Banks have had limited success in engineering sustained global growth in the form of business investment and consumption growth. World trade growth has been constrained for years, and in September 2015, the World Trade Organization forecasted 2015 world merchandise trade growth of about 2.8% (down from their previous estimate of 3.3%). Data released since then, including weaker oil and other commodity prices as well as a fall in import demand (e.g. China's imports contracted 14.4% in Renminbi terms year-on-year for 2015), suggest that world trade continues to languish. Although oil prices have flowed directly to the consumer base through lower fuel prices, acting as a form of tax cut, it appears this has not been enough to stimulate spending or investment to the point of positively contributing to a pick-up in global demand.

Financial markets are now expecting one or two Federal Reserve rate hikes this year, adding to the move the Federal Reserve made last year, and it seems likely the Fed will want to keep their tightening stance, even at a very gradual pace, barring a contraction in U.S. GDP growth, which is certainly a possibility. For now though, the most likely outcome in an uncertain outlook is a very slow and gradual increase in the Federal Funds Rate. This would put them in contrast to many other central banks such as the BOJ, European Central Bank (ECB) and Bank of England (BOE) which continue to be firmly in the easing camp.

Hong Kong is directly exposed to higher U.S. interest rates via currency pegged to the U.S. dollar. Singapore is somewhat exposed to U.S. short rates, but with the Singapore Interbank Bank Offer Rate (SIBOR) increasing more than 75 basis points over 2015, the correlation has weakened as movements in the Singapore dollar become more important. Korea's central bank

policy rate is set independently and in response to local conditions, so it could remain low even with rising U.S. rates.

Domestic demand in these markets is supportive, with tight labor conditions and consumption growth that is typically greater than overall GDP growth forecasts. They also have a greater exposure to the services sector than manufacturing, insulating their outlook to the lower trade growth environment. World trade and export growth (both goods and services) continue to be important swing factors for overall GDP growth and confidence, especially business investment prospects.

Real Chinese GDP growth in 2015 was 6.9%, which was in line with official estimates of about 7% growth for 2015, but the headline growth rate hides the two-speed economy that has formed in the past several years. In nominal terms, the divergence in growth between the two main parts of the economy, industry and services, is clear. Overall nominal GDP growth in 2015 was 6.4%. Contributing to this was industry growth of just 0.9% while services growth was 11.7%.

Industry growth is being dragged down by excess capacity in heavy industries and the housing sector. In the residential sector, excess building and inventory is most acute in Tier II and III cities and expectations are for these lower tier cities to take much of 2016 to reduce their unsold units. Tier I cities are more balanced, having lowered their unsold units earlier than lower tier cities. Residential prices have reflected this diverging trend. In 2015, Tier I cities had residential price growth of between 9.2% (Guangzhou) and 47.5% (Shenzhen); Shanghai prices were up 18.2%. This compares to the wider set of monitored markets (70 cities) which are dominated by lower tier cities, the median price change was a decline of 1.5% year-on-year over 2015².

This is contributing to a stable labor market. Unemployment was steady at 4.1%, real household income growth was 7.1%, real consumption growth was 7.2% and 13 million urban jobs were created in 2015, while labor productivity (output per worker) rose 6.6% year-on-year³. The latter statistic compares very favorably to the U.S., where non-farm business sector labor productivity was up only 0.3% year-on-year⁴.

At the recent National People's Congress (NPC), Premier Li Keqiang announced the 2016 economic growth target would be 6.5% to 7.0%. This is consistent with comments by President Xi Jinping in November 2015 suggesting an economic growth rate of about 6.5% per annum through to 2020 would be sufficient to meet the government's previously stated goal of doubling GDP and incomes from their 2010 levels. The government continues to show its commitment to structural reform of the economy, from opening up the financial sector and capital markets and supporting the development of the services sector to reducing the dependence on industrial and infrastructure investment growth.

At the same time as implementing structural reform, the government is looking to support near-term growth by easing monetary policy and targeted fiscal spending. On top of interest rate cuts, the People's Bank of China (PBOC) is increasing liquidity in the system and supporting an expansion of bank lending. Most recently, in February 2016 the PBOC lowered the reserve requirement ratio (RRR) again, this time by 50 basis points. This is the fifth cut to the RRR since the start of 2015, with the last being in October 2015. More increases in liquidity can

²Price change estimates are as reported by Credit Suisse of the official National Bureau of Statistics (NBS) housing price index.

³National Bureau of Statistics of China

⁴United States Department of Labor, Bureau of Labor Statistics

2016 is forecast to be the peak of the office supply cycle.

be expected this year and most economists expect at least one more interest rate cut; the consensus view is that the PBOC can be expected to be in easing mode for most of 2016.

On August 11th last year, the PBOC surprised markets by devaluing their currency and making it more market-oriented. From the day before the devaluation to the end of 2015, the RMB was down 4.6% versus the USD, and the RMB fell another 0.9% in the first two months of 2016. The PBOC made further announcements that the currency would be measured against a trade-weighted basket of currencies rather than benchmarked to the USD, with their aim towards currency stability rather than devaluation. However, it has not been clear yet whether they have kept their activity consistent with these announcements or not.

Uncertainty on the outlook of the RMB looks to have been the primary contributor to large capital outflows in recent months. Recent analysis⁵ of the data suggest that these flows do not represent a rush by Chinese residents and firms to shift assets abroad, rather the outflows seem to be restricted to portfolio flows as Chinese firms reduce their external debt. Foreigners have reduced their exposure of Chinese securities and the RMB but continue to have confidence in China's long-term outlook with positive direct investment. Outflows in these forms should end well before the PBOC runs out of enough foreign reserves to keep the RMB stable⁶.

Real Estate Review

A recent survey of large office occupiers in the Asia Pacific region reported that 40% of respondents intend to increase headcount over the next three years, from 2016 to 2018. New headcount will predominantly come from organic business growth (64%), as opposed to relocations or mergers and acquisitions, reflecting that the region is still a key growth engine for global corporations. The main driver of office demand is expected to be the tech sector, particularly internet software firms and service companies. Demand from regional and domestic financial services firms, such as securities brokerages and asset management firms, are also expected to be robust, while demand from global banks will be more cautious as they continue to focus on cost savings and the new regulatory environment that they face, which includes increases in capital reserves. One regional trend that may emerge during 2016 is a change from flight-to-quality to flight-to-value as the key driver for relocation and consolidation.

2016 is forecast to be the peak of the office supply cycle. Total grade A, CBD office stock across the gateway markets⁷ (Hong Kong, Singapore, Seoul, Shanghai and Taipei) was estimated to grow by about 1.3% over 2015, and is anticipated to increase by another 6.5% in 2016. Demand is expected to increase as well, with occupied office space growth rising from 2.2% in 2015 to 4.3% in 2016. As a result, the vacancy rate could rise over 2016, from 5.5% at the end of 2015 to 7.4% by the end of 2016. The longer-term outlook for the vacancy rate is for it to marginally rise again in 2017 before contracting in 2018 as supply reduces and demand is steady.

The increase in the target market vacancy rate is somewhat impacted by the timing of new supply. The increase in office space in 2016 is highly concentrated in two markets, Singapore and Shanghai. In Singapore, a large proportion of the supply is expected to be completed near the end of the year, leaving much of the lease-up to occur during 2017, and pulling the 2016 year-end vacancy rate up. In Shanghai, there are several large office projects to be completed

⁵Capital Economics

⁶Analysis by Capital Economics and Oxford Economics released in February 2016

⁷Gateway markets are defined as Hong Kong, Singapore, Seoul, Shanghai and Taipei for the purpose of this report

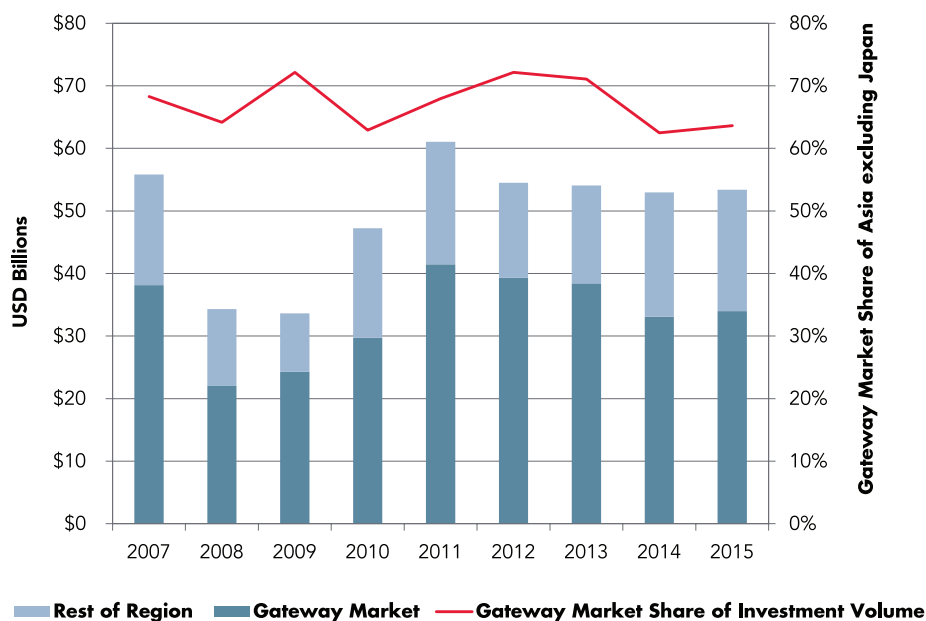
this year, 60% of which are in the Pudong submarket, and 40% in Puxi. The Puxi supply is mostly considered non-core CBD and some of these projects have less than ideal links to public transport, suggesting it could take some time to lease them up.

Transaction volume in the gateway markets grew marginally over 2015, up 3% in USD terms. Currency weakness to the USD over the year has contributed to some of the volume changes when reported in USD, in local currency terms both Shanghai and Singapore had higher transaction volumes in 2015 when compared to 2014. Conversely Hong Kong, Seoul and Taipei had weaker volume growth over the year. Overall volume growth for the Asia Pacific region was down 16% in USD, a large contributor was Japan where volumes were down 37%.

Major transactions during the year included the divestment of the CITIC Shipyard Phase 1 Tower 1 (GFA 1,152,340 square feet) and Tower 2 (1,627,730 square feet) in Shanghai by Chinese developer CITIC Limited for a combined value of about USD 2.45 billion. Industrial and Commercial Bank of China (ICBC) purchased Tower 2 for self-use while China Life Insurance purchased Tower 1, a deal where the price was agreed in 2012 (the transaction yield has been estimated to be 6.0% to 6.5%). Also in Shanghai, the Hong Kong listed Link REIT purchased Corporate Avenue 1 and 2, a mixed-use retail and office project from local developer Shui On Land for USD 1.03 billion (USD 1,188 per square foot⁸), representing a yield of about 4%.

In Singapore, the CPF Building (Central Provident Fund, a government-controlled entity to administer Singapore's compulsory savings) was announced in November to be sold to Ascendas Land for USD 393 million. The office building is being bought for redevelopment, with the major tenant, CPF, moving out in phases over 2016 and construction works due to be started by the end of 2016 or early 2017.

Gateway Market Transaction Volume



Source: RCA

In Hong Kong, China Life Insurance announced the purchase of the One HarbourGate, 15-story West Tower (357,000 square feet), along with an attached shopping area (36,000 square feet),

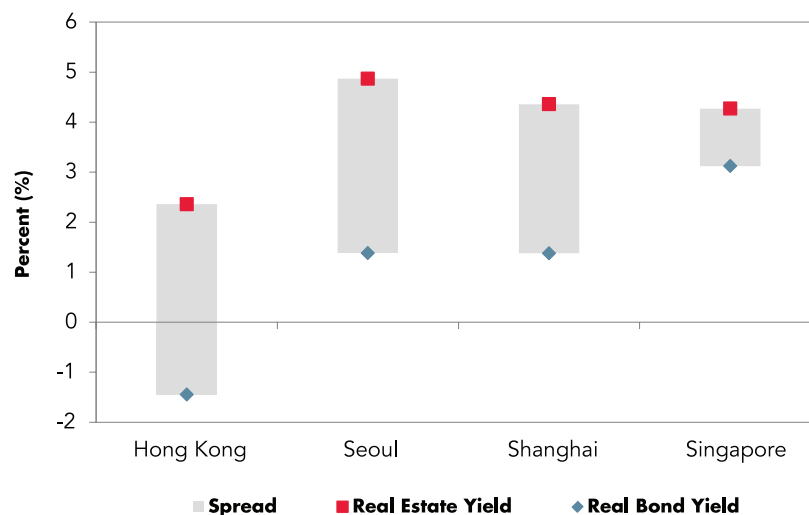
In an environment where fixed income portfolios are low yielding, investors continue to see real estate as a source of income.

from Wheelock & Co. (a Hong Kong property company) in November 2015 for about USD 755 million. China Life stated they intend to use the office building as the headquarters for China Life Insurance (Overseas) Company Ltd, its offshore subsidiary. This sale, along with Wheelock's sale of its One Bay East development to Citigroup (East Tower) and Manulife (West Tower), suggests confidence from both global as well as mainland Chinese firms on the outlook of Hong Kong as a place to headquarter their operations.

In Seoul, there were several transactions worth more than USD 200 million. In November, the Hana Daetoo Securities Building (Yeouido) sold for USD 350 million (USD 471 per square foot) representing a yield of about 4.5%. Hana Bank sold the building to Koramco, a local real estate asset manager. In the CBD, a partial interest (81%) of Susong Tower was sold by Samsung Life to IGIS Asset Management for USD 261 million (USD 542 per square foot) with no occupancy, although the buyer may have an agreement with a local occupier to occupy most of the office space.

In an environment where fixed income portfolios are low yielding, investors continue to see real estate as a source of income. Grade A office yields in gateway markets have an average spread of 250 basis points over the inflation adjusted 10-year sovereign local currency bond yield. This suggests capital inflows to the real estate sector from income-seeking investors will continue for some time. In addition, recent investor surveys have reported that these investors consider themselves under allocated to the region's real estate market, providing further evidence to suggest robust transaction volumes and firm pricing in the near-term.

Grade A Office Yield Spread Over Real Bond Yields in Select Markets



Source: Oxford Economics, JLL, AEW

Note: Office yields are net effective rent (net rent less incentives) over capital value

Hong Kong

Key Real Estate Indicators

	Vacancy Rate		Rents	Absorption	Completions	Cap Rates
Office (CBD)	1.2%	↓	↑	↑	↔	↔
Retail (Shopping Centre)	1.3%	↓	↑	↑	↑	↔
Residential	3.8% ^A	↓ ^A	↑	↑ ^A	↓	↔

^AAs at December 2014, the latest period reported

Source: JLL, Hong Kong Rating and Valuation Department

Note: For the vacancy rate, rents and cap rates the arrows reflect the trend for the current quarter compared with the comparable quarter one year earlier. For absorption and completions the arrows reflect the 12-months through to Q4 2015 trend compared with the 12 months through to end Q4 2014. For vacancy rates, a down arrow indicates declining vacancy rates or an improvement in market fundamentals. For cap rates, a down arrow indicates lower cap rates.

Hong Kong's GDP expanded 0.2% quarter-on-quarter versus 0.6% over the third quarter bringing annual growth to 2.4% for 2015. Domestic demand growth continued to slow, led by falling private investment, but supported by private consumption growth of 3.2% year-on-year. Hong Kong is being challenged on two fronts. The first is the slowdown in China that, along with policy changes, has reduced mainland China's tourist arrivals and spending as well as reduced the demand for Hong Kong's exports, especially services which have been falling for several quarters. The second is external monetary conditions, namely the strength of the US dollar and the potential for higher short-term interest rates. The 2016-17 government budget, released in February 2016, projects a large budget surplus. This allowed the government to announce tax cuts for both households and businesses, potentially stimulating some household spending and business investment growth, but it also could be an early mechanism to offset tighter monetary policy through 2016 if interest rates rise in line with the Federal Funds rate, which is likely to increase as discussed above in the General Economic Overview. 2016 GDP growth is forecast to be stable at 2.5% with private consumption growing 2.1% and inflation broadly unchanged at 2.9% (compared to 3.0% in 2015). The labor market is anticipated to continue to be very tight with nearly full employment and low unemployment of about 3.3%.

Structural long-term support in the Hong Kong office market is coming from policy initiatives that benefit Hong Kong as mainland China slowly opens up to greater foreign participation. Most recently this has included the rollout of the Stock Connect Pilot Program and Mutual Funds Recognition Scheme between Hong Kong and Shanghai and, soon, Shenzhen. These closer working ties are creating demand from mainland Chinese occupiers such as banks, asset and fund managers, as well as supporting services for office space in Hong Kong. This bigger pool of users that are new to the market, coupled with near full occupancy levels on Hong Kong Island (in Central the Q4 grade A vacancy rate was just 1.2% while on Hong Kong Island it was just 1.5%), and low near-term supply, suggest that the office market is better placed today than it has been in the past to weather the effects of an interest rate hike cycle. Net demand during 2015 was constrained by the lack of available vacant office space to take up. In Kowloon East where supply was high for the three quarters ending Q2 2015, the vacancy rate is now only 5.5% due to 1.5 million square feet of demand in 2015.

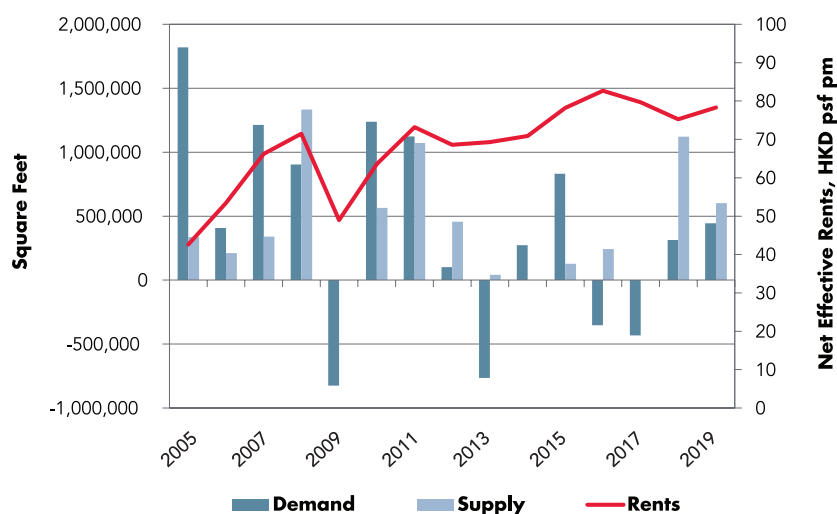
Because of sustained demand and low supply, rents have been growing in Hong Kong. In Central, they were up 2.4% over the fourth quarter and almost 13% for the full year. On Hong

Kong Island, rents were up 8.9% for the year, and in Kowloon East, rental growth was lower at 2.6%, as a result of high supply in early 2015. For 2016 occupancy is forecast to remain very tight and rents should continue to rise, albeit at a slower rate than 2015. In Central, rents are anticipated to grow 7.1% for the year, while overall Hong Kong Island rental growth will be 4.8%.

Similar to previous quarters, the retail environment remains weak. Total retail sales were down 3.7% over full year 2015 compared to 2014. The USD-pegged HKD remained strong compared to other regional currencies such as the Japanese Yen and Korean Won. This encouraged mainland Chinese tourists and locals to spend outside of Hong Kong. On top of this, mainland tourists continued to shift their spending patterns from high-end luxury to mid-range products. Sales of tourist-oriented goods, such as watches and jewelry, fell 15.5% over 2015. Comparatively, categories more exposed to everyday spending habits were more stable, such as supermarket sales, which were up 1.3%.

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Hong Kong Island Demand, Supply and Rental Outlook



Source: JLL

Reflecting the changing operating environment, mid-range retailers competed for space given up by luxury brands, a trend clearly evident on prominent prime high-street locations. High-street shops are bearing the brunt of this downturn with landlords becoming more realistic on what is an achievable rent and often accepting rents lower than the previous lease to secure income and avoid vacancy. For example, Causeway Bay saw high-street rents fall 3% quarter-on-quarter, bringing the full year decline to 24%. Shopping malls, with a more balanced tenant mix, are faring comparatively better. The Hong Kong retail sector seems to be mid-cycle because of a few medium-term headwinds such as a continued reduction in mainland purchasing, HKD (via USD) strength and low domestic growth.

Singapore

Key Real Estate Indicators

	Vacancy Rate	Rents	Absorption	Completions	Cap Rates
Office (CBD)	5.0%	↓	↓	↓	↔
Retail (Shopping Centre)	2.8%	↑	↓	↓	↔
Residential	8.1%	↑	↓	↓	↔

Source: JLL, Singapore Urban Redevelopment Authority

Note: For the vacancy rate, rents and cap rates the arrows reflect the trend for the current quarter compared with the comparable quarter one year earlier. For absorption and completions the arrows reflect the 12-months through to Q4 2015 trend compared with the 12 months through to end Q4 2014. For vacancy rates, a down arrow indicates declining vacancy rates or an improvement in market fundamentals. For cap rates, a down arrow indicates lower cap rates.

In the fourth quarter of 2015, Singapore's economy expanded by 5.7% (advance estimate). This brought the estimate of full year growth to 2.1% (compared to 2.9% in 2014). Familiar growth themes persist with the manufacturing sector in recession while the service sector continues to be the key driver of the economy (the latter accounts for two-thirds of the economy). It is likely these twin themes will continue for most of 2016. However, weakness in the equity market and a fall in oil prices suggest there could be some near-term risks to service sector growth. That said, government spending (including possible additional fiscal spending in the March 2016 Budget) and a pick-up in world trade growth, supporting a moderate cyclical recovery in manufacturing and export-dependent services, should assist the growth outlook.

GDP growth is currently forecast to be 2.3% in 2016, rising slightly higher in 2017 as the later themes of government spending and export recovery take hold and contribute more to growth. The January 2016 Consumer Price Index (CPI) showed that deflation continued in Singapore with the general price level across all categories slipping 0.6% year-on-year.

While this marks the 15th month of falling prices, the Core Inflation Measure used by the Monetary Authority of Singapore (MAS) rose 0.4% over the same period, suggesting the MAS will be less worried about deflation than the headline CPI suggests. The MAS noted in February⁹ that external sources of inflation are likely to remain muted at the moment, and even though wages are expected to increase in 2016, albeit at a slower rate than 2015, the pass-through to consumer prices is being tempered by low economic growth. Their next monetary policy meeting is scheduled for April 2016, and to date they have kept their policy stance broadly stable with only minor adjustments.

Lastly, the Singapore dollar weakened about 7% over the year and the 3-month Singapore Interbank Offer Rate (SIBOR) rose from 0.4% at the start of the year, to 1.185% by the end of the year, significantly increasing the local cost of debt financing.

The Singapore office sector continues to contract, and forecasts suggest it will continue to fall for some time to come. The downturn is supply-led, with rents and now more recently capital values declining. Therefore, while the current cycle likely still has more contraction in its future, this cyclical downturn may present compelling opportunities to enter the sector at attractive

⁹Consumer Price Developments in January 2016. Monetary Authority of Singapore and Ministry of Trade and Industry Singapore. 23 February 2016

With 2.8 million square feet of office space due to be completed this year, 2016 will be the peak of the current cycle.

Singapore continues to be viewed as the gateway to South-East Asia, attracting a number of new-to-market foreign brands that use the city as a first step into the region.

pricing levels. CBD office rents fell 1.3% over the fourth quarter, but this result was helped by the delayed introduction to the rental basket of CapitaGreen, a recently completed grade A office tower by CapitaLand (a large Singapore developer) re-basing rents higher. Without this new building being added to the basket, rents would have fallen by about 3% over the quarter.

CBD rents are now down 10.7% from their peak (Q1 2015). Net absorption was negative for the third consecutive quarter, bringing full year net take-up to 485,000 square feet, about half of the volume recorded in 2014. The positive full-year take up was due to a strong first quarter, during which CapitaGreen was leasing up. The vacancy rate declined over the quarter thanks to the removal of the CPF Building from total stock for redevelopment purposes.

With 2.8 million square feet of office space due to be completed this year, 2016 will be the peak of the current supply cycle. In the next four years, 2017 to 2020, an average of 400,000 square feet per annum is forecast to be completed. It is this supply forecast, coupled with very low large tenant expansion demand, that precipitated the market's current cyclical downturn. Looking forward the market is waiting for pre-leasing activity to provide evidence of both achievable rents in these buildings and leasing demand from tenants for the space. Currently, there is no substantial third-party pre-leasing in the two big projects that make up most of the supply this year, and it does not seem likely that it will arrive before the second half of 2016. Capital values started to fall at a faster rate over the quarter, down 3.1%, compared to a drop of 1.3% in Q3. This is the first sustained (more than one quarter) decline in capital values since 2009.

Retailer operating conditions continue to be mixed. Singapore's retail sales decreased 3.6% year-on-year in December 2015¹⁰, but the labor market remains tight with the unemployment rate at 1.9%. The latter is a double-edged sword, supporting the consumption base but making it hard to source store-front labor, which is a challenge for many retailers. A recent HSBC report noted that Singapore consumers are spending less on discretionary items as well as cutting back on fine dining, and consumers are expected to remain cautious on discretionary spending, given both the low growth near-term outlook and the specter of higher mortgage payments as a result of higher interest rates.

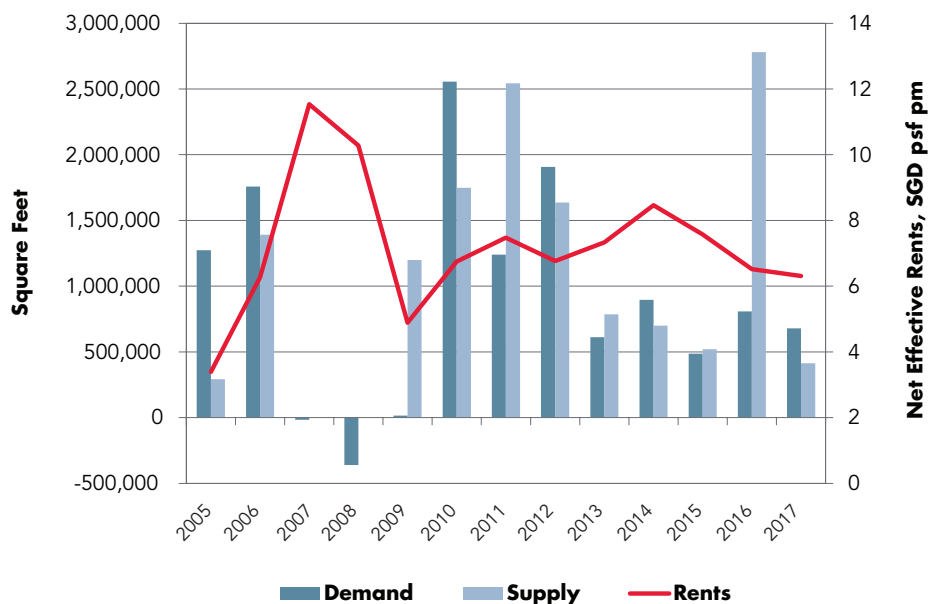
Cautious demand is coinciding with new and secondary space becoming available. As a result the prime retail vacancy rate is rising and rents are falling. Although higher than where they started the year, prime vacancy rates are still very low, ending 2015 at just 3.1%. Prime specialty shopping center rents were down over the quarter and for the full year, reflecting these conditions (-1.2% quarter-on-quarter, -3.0% year-on-year).

Supporting the medium-term outlook, real private consumption and personal disposable income both continue to grow at 5.1% and 6.2%, respectively, over the year. Forecasts are for this growth to continue over 2016 at 4.2% and 4.8%, respectively. Singapore continues to be viewed as the gateway to South-East Asia, attracting a number of new-to-market foreign brands that use the city as a first step into the region. In addition there is evident demand from the food and beverage ("F&B") sector, especially from casual or fast-food dining outlets. The market is expected to stabilize in the medium-term as retailer demand consolidates and new supply troughs in 2017.

The Singapore residential price index fell for the ninth consecutive quarter in Q4 2015, down

0.2%, the lowest quarterly decline this cycle. The index is now down 7.7% from its peak in Q3 2013. Price declines are due to government-implemented policies to reduce demand-side activity, especially speculative and investment activity and the introduction of leverage restrictions to protect against excessive use of debt. At the same time, there is a wave of new supply that is currently being completed (50,000 housing units per annum are expected to be completed from 2014 to 2018, up from 24,000 units per annum from 2010 to 2013). As a result of these price falls, affordability has improved. As measured by price to income, it currently takes slightly less time (years of income) to pay for a housing unit than back in 2003, improving from a peak of about 9 years in 2010 to 5.5 years in 2015. It seems likely 2016 will mark the low point in this cycle, and it is possible the government will relax some of the restrictions on the market this year, most likely by reducing either the buyer or seller stamp duties. This will likely be very limited in scope, though, and may only be aimed at stabilizing prices rather than focusing on engineering a strong price recovery in the short-term.

Singapore CBD Demand, Supply and Rental Outlook



Source: JLL

Seoul

Key Real Estate Indicators

	Vacancy Rate		Rents	Absorption	Completions	Cap Rates
Office (Overall)	11.0%	↓	↑	↓	↓	↔
Office (CBD)	12.5%	↑	↑	↓	↓	↔
Office (Yeouido)	12.6%	↓	↑	↓	↔	↔

Source: JLL, CBRE, Bank of Korea

Note: For the vacancy rate, rents and cap rates the arrows reflect the trend for the current quarter compared with the comparable quarter one year earlier. For absorption and completions the arrows reflect the 12-months through to Q4 2015 trend compared with the 12 months through to end Q4 2014. For vacancy rates, a down arrow indicates declining vacancy rates or an improvement in market fundamentals. For cap rates, a down arrow indicates lower cap rates.

Reflecting a generally positive domestic macroeconomic environment, office demand has been positive with a net expansion of occupied office space during 2015 led by the Yeouido Business District (YBD).

GDP growth averaged 2.4% (annualized) for the first three quarters of 2015. Indicators released over the fourth quarter suggest that economic activity continued to build over the remainder of the year, and the Bank of Korea forecasts growth over the second half of 2015 to be much stronger than the first half, at about 3.0% (annualized). This would bring full year 2015 growth to about 2.7%. Forecasts for 2016 growth are for an even stronger expansion at about 3.2%.

While the pickup in output is coming from several sectors, it is primarily led by domestic demand. Household consumption growth is accelerating, with a more than 19% pick-up in the sales of durable goods, which is a good sign of the level of consumer confidence. In November, the consumer confidence index rose to its highest level since September 2014. The robustness of the consumer sector is feeding through to strong retail sales growth, and in November total retail sales volume was up 5.5% year-on-year.

Behind the strength of the consumer is progressive fiscal and monetary policy. Government spending increased over the year to pre-emptively support domestic conditions in response to the effect MERS was expected to have on the economy. The Bank of Korea is ahead of the curve after dropping the benchmark policy rate twice over the year to a record low of 1.5%. This is very stimulatory and projections are that they will keep the rate at this level for some time as they look to underpin the domestic economy.

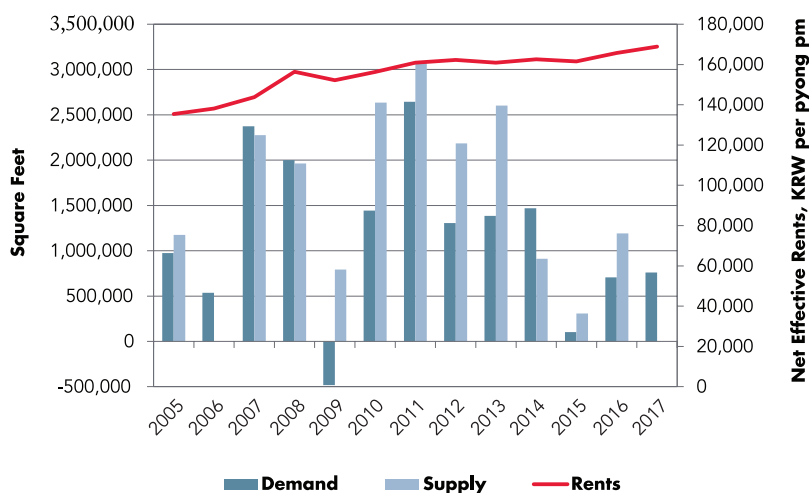
Reflecting a generally positive domestic macroeconomic environment, office demand has been positive with a net expansion of occupied office space during 2015 led by the Yeouido Business District (YBD). Similarly, over the fourth quarter, occupational demand was strongest in the YBD with demand 50% greater than the CBD. The majority of the new demand in the YBD is occurring in two premium grade A buildings, FKI Tower and IFC. FKI Tower is now more than 90% occupied, with only part-floor vacancy available. Consequently, with no new supply projected to be completed in the submarket for several years, occupiers with requirements for premium, full or multiple floors will be limited to IFC. Demand is fairly diversified led by manufacturing related firms, finance and professional services and IT related companies. The introduction of this new supply in recent years is also transforming the district. Grade A office buildings along the avenue facing IFC can accommodate approximately 40,000 office workers, including a set of new-to-market multi-national corporates (current tenants include IBM, Deloitte, LG, and Adidas). This mixed-use development is contributing to an increased demand for retail, especially high-street dining and service-based retail such as clinics, doctors and dentists.

During 2015 the YBD vacancy rate decreased from 16.6% to 12.6%. Conversely the vacancy rate rose in the two other office submarkets, CBD and GBD, during the year. Behind the headline vacancy rates, at the building-by-building level, there is a polarization occurring. Buildings with high, stable occupancy are able to attract tenants, increase rents and lower incentives, outperforming the market average. Buildings with low occupancy and space that has remained vacant for a long time have to offer high incentives to attract tenants, underperforming the market. For example, some in-demand buildings saw rental increases of up to 9%. This contrasts with buildings that have long-standing vacancy that has lingered for some time. In these cases, rents may have been lowered (a couple of grade A buildings in the CBD reduced rents by 5% to 10% over the quarter) or incentives increased, often over already elevated levels.

Expectations are for overall gross face rental growth of about 2% to 3% per annum over the next several years. On top of this, as incentives start to taper off, net effective rental growth is forecast to be stronger at about 3% to 4% per annum. It is also anticipated that demand will increase in 2016 and 2017, helping to reduce the overall vacancy rate to the mid-single-digits by end-2017.

There were several key office transactions over the past few quarters providing evidence that pricing continues to firm. Grade A office yields started the year at just under 5% and have firmed over the year to average about 4.7% by end-2015. There are several deals expected to be completed over the coming months that will likely provide further support to strong valuations and asking prices in 2016.

Seoul Demand, Supply and Rental Growth



Shanghai

Key Real Estate Indicators

	Vacancy Rate		Rents	Absorption	Completions	Cap Rates
Office (CBD)	3.6%	↓	↑	↑	↑	↓
Office (Puxi)	3.2%	↓	↑	↑	↑	↓
Office (Pudong)	4.0%	↑	↑	↑	↑	↓

Source: JLL

Note: For the vacancy rate, rents and cap rates the arrows reflect the trend for the current quarter compared with the comparable quarter one year earlier. For absorption and completions the arrows reflect the 12-months through to Q4 2015 trend compared with the 12 months through to end Q4 2014. For vacancy rates, a down arrow indicates declining vacancy rates or an improvement in market fundamentals. For cap rates, a down arrow indicates lower cap rates.

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During 2015, China continued to transition to a more service-oriented economy, and policy reforms contributed to the tertiary sector growing 8.3% year-on-year, 2.4 percentage points faster than 2014. Nationally, the tertiary sector accounted for just over half of the GDP in 2015 (50.5%). Tertiary sector growth has been evident in Shanghai as well. The city's tertiary value-add increased three percentage points over 2015, and accounted for two-thirds (67.8%) of its economy by the end of the year.

Because of the city's service focus, Shanghai's GDP growth, while not a focus for the city's leaders, has been tracking the national growth rate for several quarters and AEW expects this to continue. Shanghai's city leader is more focused on contributing to China's push for financial reform and stimulating the overall service sector. Shanghai leads the government's reform efforts and opening up of the domestic market. As the financial market matures, more business opportunities have emerged, leading to more new business formation in, or related to, the financial services market as well as traditional financial services companies expanding into new business lines. All these are positively correlated with office demand.

These positive characteristics were evident in Shanghai's office market in 2015, with a high volume of leasing enquiry leading to record high net absorption of 10.6 million square feet across both the CBD and decentralized markets. Take-up was constrained in Pudong's CBD due to very high occupancy levels, which reached more than 98% by mid-year, but started to ease by year-end as supply entered the market. In Puxi's CBD, the vacancy rate fell from 8.5% at the start of the year to just 3.2% due to 2.8 million square feet of take-up. Despite very high levels of decentralized (non-CBD) net absorption (6.9 million square feet in 2015), supply was high as well and the decentralized vacancy rate declined very slightly, down 1.1 percentage points to 18.9% by December 2015.

Grade A office rents in the CBD (Puxi and Pudong combined) rose over the quarter and year, up 2.5% quarter-on-quarter and up 8.9% for the full year. In People's Square district, the center of the core Puxi CBD submarket, grade A rents rose 0.6% quarter-on-quarter and 4.7% year-on-year. Grade B rents were comparatively stronger with rental growth of 4.2% quarter-on-quarter and 9.1% year-on-year.

Looking forward, supply in 2016 is expected to rise as several large projects complete and decentralized supply continues to be very high. CBD office supply is forecast to peak in 2016 at 6.4 million square feet and then taper off in 2017 to 5.2 million square feet.

The delay of Shanghai Tower in Pudong, a premium quality development with 2.2 million square feet of office space, until Q1 2016 will push the district's increase in office space to a record high. Interestingly, reports are around one million square feet of lettable space has been committed prior to its completion (based on signed LOIs). Puxi will also see an increase in new supply completed in 2016 compared to 2015. The large majority of this new supply will be outside the core CBD sub-district and some buildings will be completed in immature, untested office locations where public transport is less convenient. Accordingly demand for these buildings is expected to be challenging.

Although there is a lot of supply due to be completed in 2016, there is equally a lot of demand for office space. The CBD vacancy rate is anticipated to increase from 3.6% in 2015 to 7.4% in 2016, peaking at 9.3% in 2017. Even though the vacancy rate is increasing, the forecast is for rents to continue to grow as well by 6.4% during 2016 and 4.9% in 2017. Because rents have been growing for a number of years, leases expiring in 2016 could be expected to be renewed at 20% higher than contract rent (assuming market norms such as 3-year lease terms and no escalations).

Investors are likely to continue to target Shanghai's office market because of supportive government policy, a strong leasing market and very poor fundamentals in many Tier II and III cities (excess supply, high vacancy rates and heightened investment risk). Buyers for office buildings in Shanghai will likely become more diverse ranging from foreign funds with uncommitted capital to domestic institutions and corporates. Moreover, with the PBOC firmly in easing mode, lower domestic interest rates could be expected in the short-term, lowering the on-shore cost of debt. Yields are forecasted to fall slightly in 2016 and to then remain stable at about 5.5% for several years.

China's retail sales continue to rise, up 10.7% for the full year at 2015. Retail sales growth is being supported by policy that is in favor of consumption growth as well as strong income growth (per capita urban disposable income grew 8.4% year-on-year in 3Q 2015, the latest period available). Spending by affluent Chinese on luxury goods continues to grow despite a sustained effort to reduce graft that had historically been linked to the sales of luxury items. According to the China Luxury Report 2015, published by Fortune Character Institute (FCI), Chinese luxury consumption grew about 9% over 2015, and is now about 46% of global luxury spending. Chinese shoppers now prefer to spend most of their luxury spending offshore, a trend that is expected to continue, and consequently the same report found more than 80% of luxury brands in China closed at least one store in 2015, a situation that is predicted to continue in 2016.

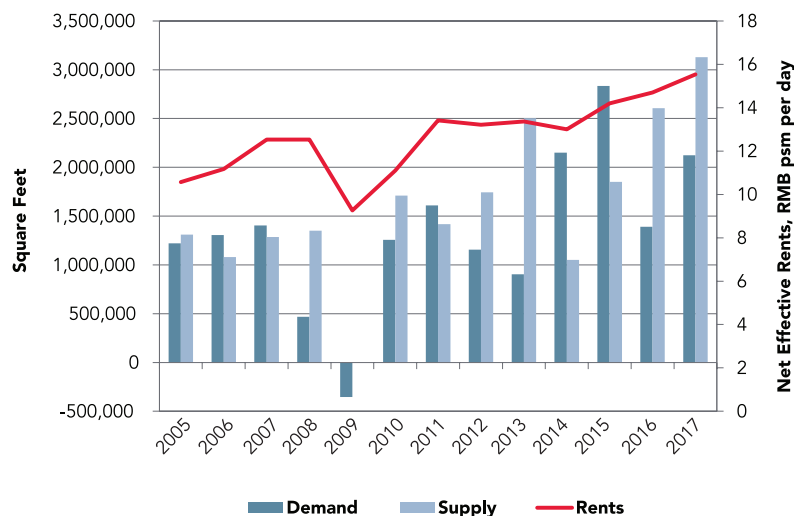
In Shanghai first-tier retailers are finding operating conditions challenging. They are no longer expanding in the city and held their year-end sales events earlier and at a larger scale than usual. In contrast affordable luxury brands (such as Coach, Furla, Michael Kors and Kate Spade) and mass market, fast fashion brands (such as Muji, Uniqlo, Gap and H&M) expanded their presence in Shanghai. Landlords are now targeting these types of tenants as well as sportswear retailers, such as Under Armour and New Balance which have recently opened new stores. In addition, F&B in the form of casual dining restaurants and experience-oriented tenants such as cinemas and children's focused activity centers are expected to be active in 2016. A new growth category could be Asian-based, mass-market cosmetics retailers that are being preferred by young Chinese women.

We anticipate growing demand for suburban office stemming directly from the maturation of the Millennials, but it will be highly amenitized space or in a location with restaurants, gyms, and shopping nearby.

The central area shopping center vacancy rate decreased from a peak of nearly 12% in Q2 2015 to 7.5% in Q4 2015. There is a lot of supply currently under construction that will complete in either 2016 or 2017. In the central area some 14 projects with a total retail gross floor area (GFA) of about 9.8 million square feet could complete in 2016. Meanwhile the decentralized market has some 21 projects with a total GFA of 19.7 million square feet which is scheduled to be completed in 2016. While demand is projected to be strongest in the central area, the vacancy rate is forecast to rise slightly to 5.9% by the end of 2016 (from 5.3% at the start of the year). Contrasting this, the decentralized vacancy rate is expected to increase from 6.8% at the end of the 2015 to 11.2% at the end of 2016. It is likely that 2016 and 2017 will represent the peak of the current supply cycle with the increase in prime shopping centre stock falling from 19% in 2016 to 3% in 2019. The vacancy rate will moderate over the coming five years, although the decentralized vacancy rate will continue to be elevated as compared to the central area.

In the central area, ground floor retail rental growth will likely slow to 4.2% in 2016, from 4.8% in 2015. Leasing demand is expected to be the strongest in successful and mature malls with proven sales track record. The large amount of new supply in the decentralized market will likely reduce rental growth from 5.1% in 2015 to 4% in 2016, slowing further in 2017 and 2018 to between 3% and 4% per annum. In the decentralized market, retailers are expected to assume more bargaining power and landlords will need to balance occupancy over income until their centers have a track record. Yields are forecast to remain stable over 2016 and 2017 as investors continue to target shopping centers in China's Tier I cities, especially Shanghai where incomes are high and the consumption base is among the highest in the country.

Shanghai CBD Demand, Supply and Rental Outlook



Source: JLL

Taipei

Key Real Estate Indicators

	Vacancy Rate	Rents	Absorption	Completions	Cap Rates
Office (overall)	10.7%	↑	↑	↓	↑

Source: JLL

Note: For the vacancy rate, rents and cap rates the arrows reflect the trend for the current quarter compared with the comparable quarter one year earlier. For absorption and completions the arrows reflect the 12-months through to Q4 2015 trend compared with the 12 months through to end Q4 2014. For vacancy rates, a down arrow indicates declining vacancy rates or an improvement in market fundamentals. For cap rates, a down arrow indicates lower cap rates.

The solid economic performance in the final quarter of the year was driven by a strong gain in consumption, up 1.1% for the quarter.

After two quarters of GDP contraction in Q2 and Q3 2015, Q4 saw a mild turn around, with GDP growth of 0.5%, bringing full year growth to 0.7%. The solid economic performance in the final quarter of the year was driven by a strong gain in consumption, up 1.1% for the quarter. Monthly data on retail sales (+0.9% Q4 year-on-year) and employment (Decembers unemployment was 3.9%) support the view that consumer spending rebounded at the end of the year. Additionally, capital spending was surprisingly strong, maintaining the steady year-on-year growth registered in the previous quarter. However the external environment continues to be a drag on overall growth. Full year export growth fell from 5.9% in 2014 to -0.2% in 2015.

Near-term forecasts are for sluggish export growth for much of 2016 as world growth is expected to be downgraded soon (IMF estimates), including growth expectations for Taiwan's main trading partners, including China and the U.S. However, a recent Nikkei Manufacturing PMI release suggested an improvement in operating conditions in December and January. Additionally, Apple is expected to partly source their new iPhone generation from Taiwan, starting from Q4 2016. Combined, this suggests that a recovery in the second half of the year could occur.

The January 16, 2016 elections saw a change of government and governing party to one less favorable to a closer relationship with China. This presents a risk to Taiwan's outlook, as poorly handled political relations could undermine trade, tourism, business and even consumer confidence.

Lastly, the Central Bank of the Republic of China (Taiwan) met in December to decide monetary policy. They concluded global growth had fallen short of expectations, domestic conditions were challenging and inflation expectations were low. As a result, they cut the discount rate by 12.5 basis points to 1.625% and kept the M2 growth target range for 2016 at 2.5% to 6.5% in order to foster economic growth and keep money conditions 'easy'.

Demand for office space in Taipei ended the year slightly down with negative absorption of about 13,000 square feet. However for the full year, demand was strong with occupied space growing by just over 600,000 square feet. Most of the demand was from the financial services, IT, tourism (such as airlines) and retail sectors. Tourism has been a core driver of demand over recent years with arrivals growing 5.3% in 2015, building on the 23.6% growth over 2014. Most of the increase has been from mainland Chinese arrivals which has created demand from retail and service firms benefiting from this new source of revenue growth.

During 2015 corporates continued to pay attention to location and rent levels, but increasingly they are also noting transport access and proximity to amenities as key decision making factors. New supply that is close to transport nodes is seeing above average leasing inquiry, and these buildings do not have to be centrally located. City fringe and non-core buildings that have good access to transportation routes are being equally considered by occupiers.

Rents were broadly flat over the year, up only 0.8% year-on-year and 0.2% quarter-on-quarter. This is mostly due to new supply that was completed over the year and reasonably slow leasing up periods stretching some of this vacancy into 2016. By the end of the year, Taipei's grade A vacancy rate was 10.6%, up from 8% at the start of the year. In 2016, supply is expected to fall as there is only one building scheduled to be completed in a non-core submarket and two thirds of it is expected to be absorbed by owner-occupiers. As a result, the vacancy rate is expected to firm to 7.4% by the end of 2016, the lowest since 2009, and rental growth of about 2%.

The investment market remains dominated by domestic investors and is especially influenced by the insurance sector. Domestic insurance firms are under Taiwan's Financial Supervisory Commission (FSC), which regulates their investment activities. The FSC sets an annual yield requirement for insurers investing in domestic commercial real estate and as of November 2015, reduced this required yield from 2.805% to 2.555%. With yields currently around 3.25%, this decision effectively made domestic commercial real estate more attractive to this large capital source. Expectations are for the FSC to continue to gradually reduce the required yield and forecasts are for office yields to gradually firm over the medium-term. Capital value growth is projected to range from 3% to 5% per annum in the next five years.

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