FRONTIER

Real Assets Quarterly

June Quarter 2020

FRONTIER ADVISORS

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Real Assets: Frontier Advisors

COVID-19 has accelerated a number of structural changes that were afoot within the Property Sector, notably Retail but also within the Office sector. The use of technology combined with working from home (WFH) has demonstrated that disruption is extending to traditional work environments and the impact is yet to unfold.

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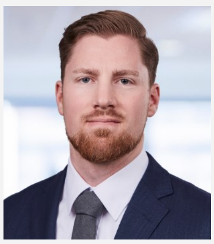

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The Australian Office Market

While COVID-19 has resulted in a high degree of economic uncertainty, the implications for office market valuations are yet to fully emerge. Prior to the coronavirus pandemic, Frontier had a cautious outlook on the Australian office market. Today, the combination of an economic contraction and meaningful supply coming to market are expected to culminate in increasing vacancy and decreasing effective rents.

Looking forward, we expect that the human, mental health and habitual elements of physical work environments will mean that corporate offices remain relevant to tenants.

However, we expect to see a shift in the usage of office space, providing safety and flexibility to workers, which could result in an evolution of workplace models and a reduction in the number of persons inside the office at any time. While the spread of office yields to government bonds remains attractive for long-term investors, uncertainty will see investors seek a higher risk premium.

Although the Australian office sector has delivered strong returns to investors over recent years, looking forward, Frontier does not believe the sector is immune from the economic fallout of COVID-19.

Source: JLL

Economic impact

After an effective shut-down of the Australian economy in March, businesses are slowly starting to reopen, albeit at limited capacity. Although this has had a significant impact on the economy and may have further consequences for office demand, COVID-19's financial reverberations do not look to be fully reflected in the office sector.

While contractionary economic data is widely reported, the long-term impact on economic growth and the shape of the recovery remains uncertain. If businesses can work productively despite the restrictions, a combination of Government stimulus and low interest rates could result in a strong rebound in the economy as early as the second half of 2020. In contrast, if the country experiences a second outbreak of COVID-19 (as we are seeing in Victoria), the re-introduction of restrictions could see the economy shrink further, with economic activity remaining subdued.

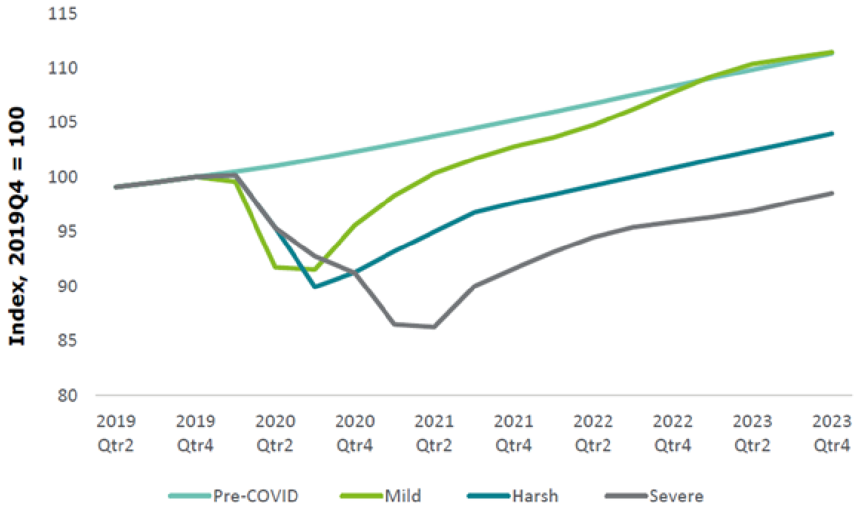
Decreased economic activity is expected to result in the unemployment rate peaking in the June quarter (at approximately 10%) before starting to recover (8.5% by the end of the year). Unemployment rates are only expected to recover to pre-COVID levels towards the end of 2023, although this is contingent on the implications of any future outbreaks or the development of a vaccine.

While white collar employment may be able to adapt to health restrictions over the short-term (i.e. working from home), it is not immune from the economic impacts of COVID-19. As businesses adjust for a reduction in business activity, they will invariably look to trim costs. Businesses will reassess the level of office-based staff needed to support reduced revenue. We anticipate that this trend will accelerate once Government support is wound back and the protections of JobKeeper cease.

Some office-based businesses, such as professional services, have already begun this process. In addition to pay cuts and reduced working hours, a majority of the 'Big 4' accounting firms have made redundant at least 5% of their workforce. Similarly, Qantas recently announced 1,450 office staff would no longer be required. Inevitably, a reduction in office-based employees reduces demand for office space, placing pressure on rental income.

Closure of international borders and the cessation of migration could have a further devastating impact on the Australian economy, as population growth is a key contributor to economic growth. Deloitte Access Economics has estimated the impact of partially closing borders could mean approximately 480,000 fewer people across Australia by the end of 2022. As forecast by CBRE, this could translate to up 72,000 fewer white-collar employees in 2022.

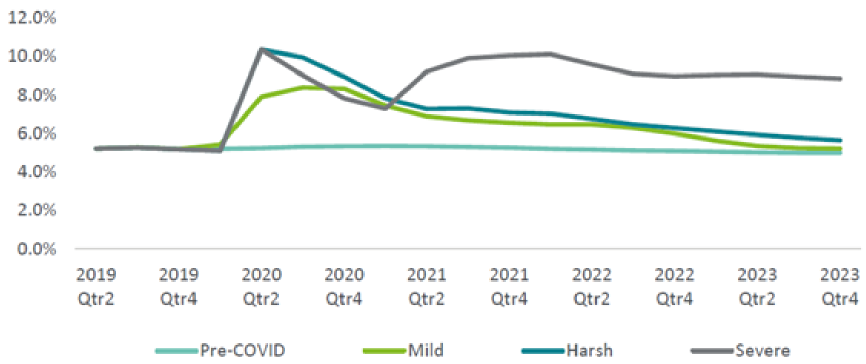
Chart 1: Real GDP impact relative to pre-COVID expectations



		2020	2021	2022	2023
GDP growth year average, percent	Pre-COVID	2.1	2.7	2.9	2.9
	Mild	-4.7	6.5	4.8	4.6
	Harsh	-5.0	1.6	4.2	3.2
	Severe	-4.4	-6.6	6.9	2.8

Source: Deloitte Access Economics

Chart 2: Unemployment rate impact relative to pre-COVID expectations



		2020	2021	2022	2023
Unemployment rate, percent *Change in unemployment ('000) from the previous year in italics*	Pre-COVID	5.3 *(28)*	5.3 *(20)*	5.1 *(-10)*	5.0 *(-7)*
	Mild	7.5 *(320)*	6.9 *(-61)*	6.3 *(-63)*	5.3 *(-119)*
	Harsh	8.6 *(463)*	7.4 *(-192)*	6.6 *(-70)*	5.9 *(-96)*
	Severe	8.1 *(394)*	9.1 *(69)*	9.4 *(89)*	9.0 *(-49)*

Source: Deloitte Access Economics

Performance of the Australian Office Market

Despite the severe economic backdrop, the impact on the office property sector has been relatively muted to date. Office space fundamentals, including rents, vacancy and yields, are yet to see a material shift.

Leading into 2020, continued growth in rents and strong capital appetite delivered robust performance from the sector. At a national level, office delivered a 12-month return of 11.1% to 31 March 2020, which was ahead of the 15-year average.

While there is some evidence that office valuations have softened, to date any movement has been marginal. The MSCI/Mercer Australia Core Wholesale PFI to the end of May 2020 reported a quarterly total return for the office sector -0.5%, with the 12-month return remaining at 8.3%.

Table 1: Australian Office market returns (%)

	March Quarter Return			1 Year Return		
	Income	**Capital**	**Total**	**Income**	**Capital**	**Total**
Total Office Sector	**-1.9**	**-6.0**	**-4.2**	**5.1**	**5.7**	**11.1**
Office – Location						
Melbourne CBD	-2.9	4.4	1.6	4.8	8.4	13.6
Sydney CBD	-1.5	-7.5	-5.1	4.7	6.2	11.1
Office - Grade						
Premium Grade CBD	-2.5	2.7	0.1	5.2	5.4	10.9
Grade A CBD	-0.8	-8.2	-5.1	4.9	6.0	11.2
Grade B CBD	-2.4	-7.2	-5.6	5.0	8.1	13.5
Non CBD	-1.6	-19.5	-11.0	5.6	4.7	10.6

Source: MSCI

Vacancy remains well below the 10-year average across both Melbourne and Sydney, which could soften the impact of COVID-19 on landlords relative to history. Vacancy in Melbourne remains at a historic low of 3.4% at the end of March. Sydney, which has now recorded two consecutive quarters of negative net absorption, has seen rising vacancy, albeit to a relatively modest 5.8%. However, there has been a meaningful increase in the amount of sub-lease space put to market, which will see vacancy soften even before new supply is factored in. Melbourne will see an additional 333,000 sqm of office space with an expected completion date by in the second half of 2020 and an anticipated further 500,000 sqm over the next three years. Sydney, by comparison, has 320,000sqm of new and refurbished space currently under construction with 105,000 sqm anticipated to be complete by the end of 2020. While much of the space is pre-let, newly vacated tenancies will need to find occupants.

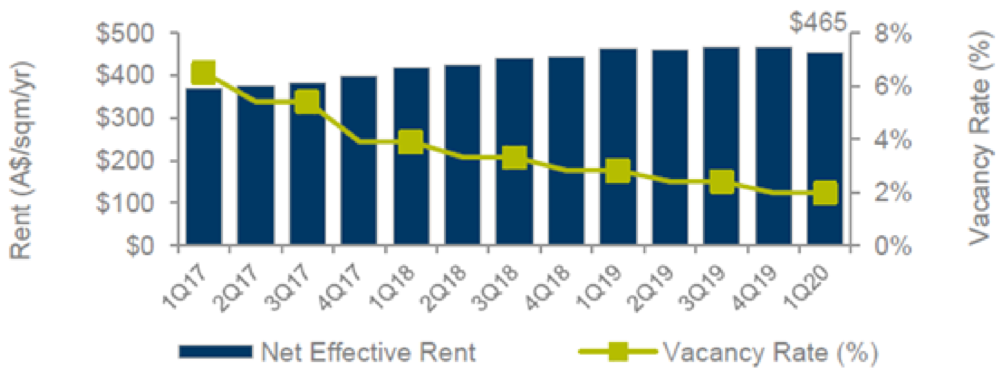
Throughout the first three quarters of FY20, face rents grew across most CBD markets. To 31 March 2020, Melbourne CBD prime face rents grew by 6.5%, while Sydney rents increased by 4.8%. Following the onset of COVID-19, there hasn't been a large change in face rents. However, we have seen a meaningful increase in incentives. In the June quarter, Melbourne recorded a decline in effective rents of 5.4%, while Sydney saw a decline in effective rents of 8.6%.

The impact of COVID-19 on yields remains less clear. Prime capitalisation rates have experienced a slight softening, however, it is still too early to understand the full impact as transactions have been limited. There were no transactions in Melbourne CBD in Q1 2020, the first time in ten years, while Sydney had only one major transaction (191-201 Thomas Street). Uncertain outlook for the sector will likely increase investor risk premiums, however, central banks have clearly signalled "lower for longer", which may make current office yields attractive for long-term investors and limit cap rate widening.

Chart 3: Prime gross effective rent, overall vacancy—Sydney

Source: PCA, Cushman & Wakefield Research

Chart 4: Prime gross effective rent, overall vacancy—Melbourne



Source: PCA, Cushman & Wakefield Research

The Great Financial Crisis (GFC) versus The Great Pause

Market observers often compare current conditions to previous events. While vacancy rates suggest that the office market is better placed entering the "Great Pause" than the GFC (see Table 2), the economic ramifications of COVID-19 may be much more severe than the GFC, making any comparison challenging.

In addition, COVID-19 has offered up new challenges that didn't exist following the GFC. With ongoing health concerns and technology-enabled flexibility, questions remain over the counterbalancing forces of working from home and potential increases in workspace ratios.

While speculation surrounds the future demand for office, Frontier continues to believe that prestige business addresses, spaces for collaboration, places that foster culture, settings for networking and mentoring, and environments that provide for mental wellbeing will remain relevant for tenants.

However, increased flexibility will likely temper longer-term growth rates.

While reduced demand is negative, investors must also consider the other side of the equation; supply. Given the uncertainty, will financiers be comfortable lending to large office developments? If there is a pause in supply and tenant demand returns quicker than anticipated, could equity investors benefit?

Table 2: Comparison of GFC and COVID-19

Metrics	GFC	COVID-19 Forecast
Unemployment Rates	5.8%	10% (forecast)
GDP Contraction	0.5%	5% (forecast)
Beginning Vacancy Rate	Melbourne – 5.3% Sydney – 6.6%	Melbourne – 3.4% Sydney – 5.8%
Net Effective Rent Decline	31%	n.a.

Source: ABS, Deloitte Access Economics, AMP Capital

Conclusion

Although the Australian office sector has delivered strong returns to investors over recent years, looking forward, Frontier does not believe the sector is immune from the economic fallout of COVID-19. Reduced economic output, rising unemployment, lower population growth, depressed business confidence and the withdrawal of Government support will all see lower tenant demand. Combined with an increase in supply from projects that were underway prior to COVID-19, net effective rents are likely to fall.

Increased expenditure on cleaning and capital expenditure on "COVID-safe" technologies may further drain net operating income. While Frontier continues to believe that the office will remain a central part of conducting business, widely adopted technologies have proven that increased flexibility is possible, providing the tools to support the evolution of tomorrow's workplace.

Source: JLL

Property

Index performance to 31 March 2020

	1 Year			Total returns						Index composition		
	Income	Capital	Total	3 Yr	5 Yr	10 Yr	15 Yr	20 Yr	25 Yr	Assets	Capital	Weight %
All property -	**5.2**	**0.9**	**6.2**	**9.1**	**10.5**	**10.3**	**9.9**	**10.3**	**10.2**	**1,348**	**198,809**	**100**
Retail	5.0	-6.2	-1.6	4.1	6.9	8.3	8.6	9.9	9.9	381	70,243	35
Office	5.1	5.7	11.1	12.6	13.0	11.3	10.7	10.3	10.0	355	97,112	49
Industrial	5.8	5.7	11.8	12.2	12.4	11.8	10.3	10.9	11.5	400	21,453	11
Other (inc. ho-tels)	5.8	0.5	6.4	9.9	13.3	13.0	12.0	-	-	216	10,522	5
Retail—												
Super/major regional	4.4	-6.2	-2.1	3.7	6.1	7.5	8.4	9.7	9.7	64	36,785	19
Regional	5.7	-10.9	-5.7	2.0	5.4	7.8	8.6	9.5	9.4	30	7,003	4
Sub regional	5.8	-8.3	-3.0	3.0	6.5	8.4	8.3	10.0	10.1	75	9,985	5
Neighbourhood	5.7	-6.3	-1.0	3.7	7.5	8.9	8.4	9.8	10.3	67	3,320	2
Other	5.4	-3.3	2.0	6.8	9.2	10.2	10.0	-	-	141	12,932	7
Office -												
Premium grade CBD	5.2	5.4	10.9	11.7	12.1	11.1	10.8	10.2	10.0	64	32,565	16
Grade A CBD	4.9	6.0	11.2	13.1	13.3	11.5	10.8	10.1	9.8	130	42,838	22
Grade B CBD	5.0	8.1	13.5	14.6	15.4	12.1	11.5	11.2	10.4	25	2,572	1
Non-CBD	5.6	4.7	10.6	12.8	13.1	11.5	10.3	2.5	2.8	125	18,287	9
Industrial -												
Warehouse	5.5	5.4	11.2	12.2	12.9	12.7	11.2	11.4	11.7	157	6,687	3
Distribution	6.0	6.0	12.3	11.9	11.9	11.5	10.7	11.2	11.2	125	8,337	4
Industrial estate	6.2	5.0	11.4	13.1	13.1	11.4	9.4	10.1	11.4	34	2,172	1
International												
IPD UK All Proper-	5.2	-4.7	0.3	5.5	6.4	8.2	5.8	7.2	6.0	N.A.	N.A.	N.A.
IPD Europe Ex-UK	3.9	5.3	9.3	9.1	8.8	7.1	6.9	6.4	N.A.	N.A.	N.A.	N.A.
NCREIF US NPI	N.A.	N.A.	5.3	6.4	7.6	10.2	8.1	8.6	9.3	N.A.	N.A.	N.A.
Listed												
S&P/ASX 300	N.A.	N.A.	-31.3	-4.8	0.5	7.2	2.2	5.4	6.4	N.A.	N.A.	N.A.
FTSE EPRA GREIT $A (H)	N.A.	N.A.	-24.5	-3.9	-1.5	6.5	5.2	N.A.	N.A.	N.A.	N.A.	N.A.

Infrastructure

Quarterly transaction overview

Region	Transaction	Sector	Vendors	Acquirers	Transaction size (m)	Comment
Asia	Daesung Industrial Gases Sale	Energy	MBK Partners	Macquarie Asia Infrastructure Fund 2	AUD 3,807	Daesung Industrial Gases supplies Korean semiconductor manufacturers in long term deals.
Asia	Sadbhav Engineering Eight Road Project Sale	Transport	Sadbhav Engineering	CPPIB	AUD 1,430	Sale of Sadhbav Engineering's eight road projects in India.
Australia	Changhua 1 & 2 - 180MW Floating Solar Project	Renewables	NA	I Squared Capital	AUD 523	Development of a 180MW floating solar farm located off the coast of Taiwan's northwestern Changhua county.
Australia	Auckland South Corrections Facility (Wiri Prison) (40% stake)	Social Infrastructure	InfraRed Infrastructure Fund III	AMP Community Infrastructure Fund	AUD 101	The 960-bed Wiri Prison is New Zealand's first privately owned prison. The 25-year concession contract expires in 2040.
Australia	Oceania Healthcare (41% Stake)	Social Infrastructure	Macquarie Infrastructure and Real Assets		AUD 292	Sale of 41% holding in NZX-listed aged care business Oceania Healthcare via a market block trade to a range of Australian and New Zealand institutional and New Zealand retail investors.

Infrastructure
Quarterly transaction overview

Region	Transaction	Sector	Vendors	Acquirers	Transaction size (m)	Comment
Europe	Currenta Acquisition	Other	Bayer, Lanxess	Macquarie European Infrastructure Fund 6	AUD 5,857	Currenta is a German chemicals company and operates and services Chempark, the largest chemical park in Germany, and its three sites in Leverkusen, Dormagen and Krefeld-Uerdingen.
Europe	Deutsche Glasfaser (Majority Stake)	Telecomms.	KKR Global Infrastructure Investors II, Reggeborgh Group	OMERS Infrastructure, EQT Infrastructure IV	AUD 4,667	Sale of a majority stake in German fibre-optic network business Deutsche Glasfaser.
Europe	Altice Portugal Fibre Sale (49.99% Stake)	Telecomms.	Patrick Drahi	North Haven Infrastructure Partners III	AUD 3,957	Minority stake in a Portuguese fibre optic network.
Europe	Kellas Midstream (Central Area Transmission System) Sale	Energy	Antin Infrastructure Partners II	GIC, BlackRock Global Energy and Power Infrastructure Fund III	AUD 2,931	North Sea gas transmission and processing asset.
Europe	EWE (26% Stake)	Power	Energie Baden - Württemberg, EWE Group, EWE-Verband	Ardian Infrastructure Fund V	AUD 2,731	EWE is one of the largest utility companies in Germany.
Europe	European Locomotive Leasing Sale	Transport	KKR Global Infrastructure Investors	Credit Agricole, AXA	AUD 1,774	Austria-based European Locomotive Leasing leases around 130 Siemens Vectron electric locomotives to freight and passenger rail operators across Europe.

Infrastructure
Quarterly transaction overview

Region	Transaction	Sector	Vendors	Acquirers	Transaction size (m)	Comment
Europe	Societe des Autoroutes Paris -Rhin-Rhone (6.14% Stake)	Transport	Macquarie European Infrastructure Fund II	Atlas Arteria	AUD 1,554	Societe des Autoroutes Paris-Rhin-Rhone is Europe's fourth-largest motorway operator.
Europe	Wireless Infrastructure Group Sale (93% stake)	Telecomms.	3i Infrastructure	Brookfield Infrastructure Partners	AUD 778	WIG owns around 2,000 mobile towers in rural and suburban areas across the UK and Ireland.
Europe	Caldic Chemie Europoort Sale	Energy	Caldic	FSI European Diversified Infrastructure Fund II	AUD 320	The Rotterdam chemical facilities operate bioethanol and methanol production and storage.
Europe	Octopus 122.8MW Solar Portfolio Sale	Renewables	Unknown	Octopus Renewables Infrastructure Trust	AUD 290	Acquisition of a 122.8MW Solar portfolio located in the UK. The assets were commissioned between 2013 and 2015.
Europe	Algeciras Terminal Sale	Energy	Royal Vopak N.V., Vilma Oil	FSI European Diversified Infrastructure Fund II	AUD 204	The 403,000m3 Algeciras terminal is used for petroleum products.

Infrastructure
Quarterly transaction overview

Region	Transaction	Sector	Vendors	Acquirers	Transaction size (m)	Comment
North America	Coastal GasLink Pipeline	Energy	NA	AIMCo, KKR, TransCanada	AUD 7,270	Development of the 670km natural gas Coastal GasLink Pipeline and associated facilities.
North America	Pattern Energy Sale	Renewables	Pattern Energy	CPPIB	AUD 5,365	Pattern Energy has 26 wind and solar energy projects in the U.S., Canada and Japan, as well as additional development projects in Mexico.
North America	TRAC Intermodal Sale	Transport	Fortress Investment Group LLC	Stonepeak Infrastructure Fund III	AUD 1,522	TRAC Intermodal owns and operates 180,000 marine chassis worldwide and has a broad operating footprint of over 650 locations.
North America	Generate Capital US Distributed Energy Investment	Power	Generate Capital	QIC, Railways Pension Scheme, AustralianSuper, Andra AP-fonden	AUD 1,487	Generate Capital is a US investment and operating platform for distributed sustainable infrastructure.
North America	AltaGas Canada Sale	Power	AltaGas Canada	Alberta Teachers' Retirement Fund, PSP Investments	AUD 1,205	Acquisition of all outstanding shares of AltaGas Canada, renamed TriSummit Utilities.
North America	Xplornet Communications Sale	Telecomms.	Xplornet	Stonepeak Infrastructure Partners	AUD 1,016	Xplornet Communications' sale of its Canadian broadband operator business.
North America	Project Falcon 2.5GW Energy Storage Portfolio	Power	NA	Capital Dynamics Clean Energy and Infrastructure VII	AUD 846	Development of 2.5GW/10 GWh utility-scale energy storage project portfolio in the San Francisco Bay Area, Los Angeles, San Diego and New York City metro areas.

Infrastructure
Quarterly transaction overview

Region	Transaction	Sector	Vendors	Acquirers	Transaction size	Comment
North America	Eland 400MW Solar/Battery Facility Sale	Renewables	8minutenergy	Capital Dynamics Clean Energy and Infrastructure VII	AUD 430	8minutenergy and Capital Dynamics have also entered a development partnership for the project. Construction has begun, with initial operations expected to begin in 2022 and full operations in 2023.
North America	Traveler Petrochemical Plant	Energy	NA	Energy Capital Partners IV, Next Wave Energy Partners	AUD 429	Development of a petrochemical project in Harris county, Texas.
North America	Fraser Surrey Docks Sale	Transport	Macquarie Infrastructure Partners	DP World, Caisse de dépôt et placement du Québec	AUD 342	Fraser Surrey Docks is a large multi-purpose marine terminal
North America	Patriot Rail & Ports Sale	Transport	First State Global Diversified Infrastructure Fund	SteelRiver Infrastructure Fund North America (SRIFNA)	758	Patriot Rail owns and operates 12 short-line railroads in 14 southern US states.
North America	Bluebird Network Operations and Assets Acquisition	Telecomms.	Macquarie	N/A	AUD 472	Acquisition of the operations and fiber assets of Bluebird Network, a telecommunications company in the US Midwest.

FRONTIER ADVISORS

25 years

About Frontier Advisors: Frontier Advisors is one of Australia's leading asset consultants. We offer a range of services and solutions to some of the nation's largest institutional investors including superannuation funds, charities, government / sovereign wealth funds and universities. Our services range from asset allocation and portfolio configuration advice, through to fund manager research and rating, investment auditing and assurance, quantitative modelling and analysis and general investment consulting advice. We have been providing investment advice to clients since 1994. Our advice is fully independent of product, manager, or broker conflicts which means our focus is firmly on tailoring optimal solutions and opportunities for our clients.

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