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Real Assets Quarterly

March Quarter 2019





Real Assets: Frontier Advisors

We constantly monitor events in real assets markets around the globe and apply our insights to advise clients on opportunities and risks facing their investment portfolios. International trends and developments, as well as those here in our own market, continually shape our opinions around portfolio management and opportunities. This quarterly review provides our summary of recent developments concerning real assets markets globally, our current investment outlook and a round-up of transactions.

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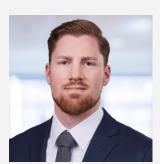
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Retail—Metamorphosis or Apocalypse?

Constrained discretionary consumption and increasing online competition are threatening the Australian retail property market (Retail). To counter these challenges, domestic investment managers are deploying a variety of techniques to improve centre appeal and drive sales growth. However, these initiatives often entail increased capital expenditure and do not always achieve higher rents, culminating in lower expected returns.

While change is afoot, the shifting Retail landscape is better characterised as a metamorphosis than an apocalypse. Dominant assets managed by high-calibre professionals continue to maintain relevance within Australian society. For the time being, Retail remains appropriate for institutional portfolios, with a cautionary caveat that only the best will thrive.

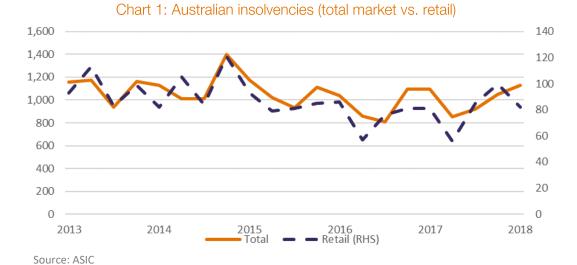
Frontier travelled to Queensland to see firsthand how four leading investment managers are adapting assets to the changing environment.





Introduction

Much has been written about Retail in recent times. High household debt, limited wage growth, increasing non-discretionary expenses and the omnipresent threat of online competition has prompted media attention towards the impending "Retail Apocalypse". Indeed, several prominent and well-known retailers have entered administration in recent years. While it is not clear if the insolvency trend in the Retail market is distinguishable from the broader Australian economy (see Chart 1), persistent negative rent reversions, soft retail sales growth, increasing online penetration and international experience suggest that Retail faces challenges.



¹The U.S. and Australian Retail market differ significantly. US Malls typically feature 57% apparel, whereas Australia is estimated to be 29%. Similarly, the US allocates 14% to non-durable items, compared to Australia's 22%. Lastly, the US has 2.19 square meters of retail space per capita to Australia's 0.94 sqm (Charter Hall)



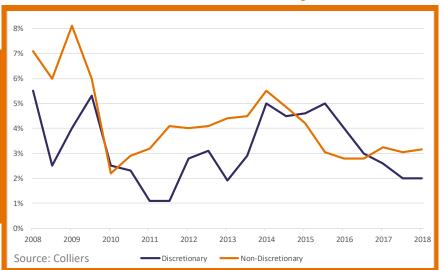
Researchers have produced extensive rhetoric in defence of the category long-believed to be the most defensive of the property sub-sectors. Phrases like "fortress mall", "community infrastructure" and "town centre" are commonly paired with emotive concepts such as "leisuretainment", "experiential retail" and "eat, live, play". While these notions have intuitive appeal, questions remain over how they are reflected in physical space and translated into moving annual turnover (MAT).

To understand how active management strategies are being implemented in client portfolios and the subsequent impact on centre performance, Frontier travelled to Queensland to see firsthand how four leading investment managers are adapting assets to the changing environment.

A cross-section of nine assets were chosen to provide a representative sample of the Retail hierarchy according to size, catchment and demographic. Asset tours were complemented by i) a survey which provided insight into trading performance; and ii) a survey of past and future trends of tenant mix.

Chart 2: Australian retail sales growth

Assisted by population growth, retail sales growth remains reasonable. It is interesting to note that this is not the only period in recent history with tempering growth momentum. However, capturing non-discretionary sales is becoming increasingly important for Retail managers.





Frontier's observations

Active management

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Our tours highlighted the importance (and varying quality) of active asset management. Pro-active and professional asset management translated into productive and high-performing centres. Optimising customer experience through regular maintenance and considered capex, understanding the identity of local catchments and tailoring the retail offering to meet the local demographic drove foot-traffic. An active social media presence, space activation (collaborations with local universities, family photo opportunities, yoga classes) and event hosting (celebrity make-up artists, fireworks, children's discos) are all strategies being employed to engage with local communities.

To attract tourists, some centres are working with state tourism agencies and international tour operators to gain global visibility. Tourist reception areas and shuttle buses are employed to enhance guest experience.

While active asset management is not a new concept, the quality, care and commitment of centre management varied noticeably across assets. In an age of online competition, the days of laissez faire Retail management are behind us.

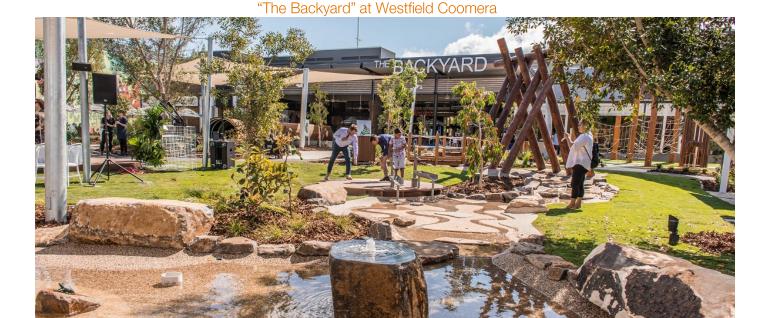
Centre design and development

We also observed an increasingly risk-conscious program of capital expenditure. The text-book development approach to value creation by expanding gross lettable area (GLA) and leasing to specialty apparel operators is no longer viable. Managers are focused on delivering enhanced experience, improved connectivity and a retail offer in line with consumer preferences.

Increasingly, capex is spent on defensive initiatives to improve the long-term resilience of cashflows and preserve value. Experiential offers and innovative food precincts require large capex commitments. When combined with shifting consumer preferences, returns are likely to be eroded.

Risk management is at the forefront of the process. While budgets are growing, capex programs are broken down into distinct segments, allowing each phase to be properly identified, evaluated and executed. Assets are future proofed through long-term master planning that identifies future capital programs.

Contrasting new and old centres gave great insight into the design of the future. Convenience, accessibility, ease of movement and navigation are core design concepts. Higher roofs, more natural light, improved traffic flow (for both vehicles and pedestrians) and less transit time between carparks and key tenants reduces friction costs for customers.



The needs of young families are also drawing a strong focus from retail managers, with expanding outdoor play areas (one resembling a water park) skirted by casual dining offers. In addition, several centres now offer free childcare services. For the older kids, new arcade-style operators are emerging with zip-line courses and next-generation rock-climbing enclosures. Next door, adult kids are also catered for, with adult leisure areas featuring licensed cinemas, live music, minigolf, bowling and beer gardens. "Man caves" are making a comeback, offering specialist barber and grooming services, drinks and snacks, and kids' corners for dads with parenting responsibilities. A key question is how much capex is enough? Experiential offers and innovative food precincts are capital hungry initiatives.

As can be seen in Chart 3, increased capex has a meaningful impact on income, and therefore, returns.

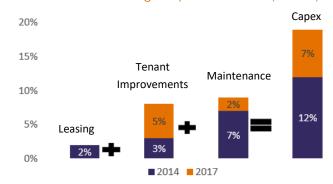
Changing retailer mix

While some managers are more advanced in reconfiguring centres, it's clear that the Retail mix is changing.

Online retailers and mini majors have grown at the expense of department stores (DS).

Valued for the characteristics that provide digital resilience, health, wellbeing and leisure are increasing segments. Invesco's research shows that in the last 3 years, 60% of Australian shopping centres have increased health and wellness space.

Chart 3: US mall average capex estimates (% NOI)



Source: Invesco Real Estate

Chart 4: The changing Retail mix (indicative fund by GLA)





Food and beverage (F&B)

To capture a rising share of consumer expenditure, while also increasing centre appeal and dwell time, food and beverage (F&B) is a growing focus for many managers. Although lagging the UK and Asia, domestic F&B exposure continues to increase, ranging from 5% to as much as 20% of lettable area.

Food courts have evolved into food halls. Fast, casual and fine dining "precincts" deliver destination appeal and improve dwell time from patrons. Interestingly, strong retailers with attractive offers (e.g. Betty's Burgers) are emerging as informal anchor-tenants, generating circa \$4 million in revenue per annum in certain centres.

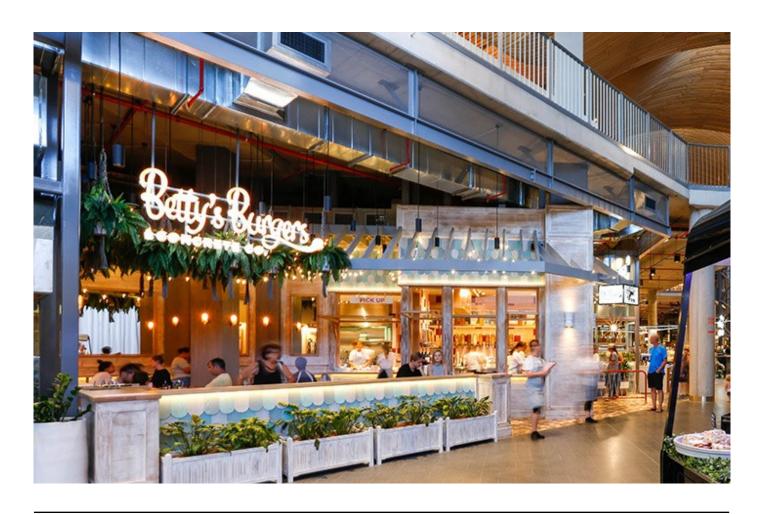
Equally, the emergence of fresh food precincts (a common concept in the UK) has seen the re-emergence of green grocers, bakers and butchers alongside traditional supermarkets, often generating in excess of \$7 million per annum. in sales. Once "destined" for the dustbin of history, the resurgence of quality operators in this space was not lost on us.

Creating a "one-stop-shop" has proven highly successful, with innovative retailers (such as Millers Gourmet Butchers which has turned dry-aged customized orders into striking displays, or Pure Meats Butchers, which sells porterhouse steak sandwiches out of a shop front) appealing to consumers that seek quality produce, while also benefitting the adjoining supermarkets, which receive greater footfall.

Interestingly, some managers appear to be willing to accept additional risk as they seek to deliver a more enticing offer. Novel and unique F&B merchants are being installed at the cost of decreasing tenor and greater flexibility.

Creditworthiness is being exchanged for cool. How this plays out remains to be seen, but shopping centres are fighting to remain relevant.

While installing more F&B has been a successful strategy so far, care needs to be taken, as continued category expansion could see centres become over catered.





Department stores and discount department stores

The fate of department stores is an ongoing question of great significance to Retail investors. While both Myer and David Jones are clearly reducing store footprint, so far this has largely been achieved through store reductions (and not store closures). There was no clear dominance of either retailer, with both typically maintaining material MAT, although both requiring improvements to productivity and supply chain management to revive their bottom lines. Returned space creates an opportunity for more dominant centres to introduce new retailers increase sales and drive higher rents, while the obsolete centres will struggle.

That said, transitioning department store operating models are both costly and disruptive to Retail centres (without factoring in incentives and downtime, capex estimates for space handbacks range from \$4 to \$15 million). However, for the near-term, department stores will remain formal anchors.

The outlook for discount department stores (DDS) is mixed. While Kmart has pulled ahead of its peers in recent years, managers reported that Big W has shown signs of improvement, with sales growth in several centres outpacing the Wesfarmers-owned brand. Of the centres visited, no DDS was reported to be handing back space, although recently Big W is reportedly expected to close many non-performing stores.

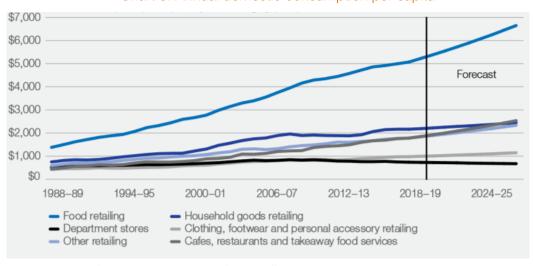


Chart 5: Annual domestic consumption per capita

Source: InvABS, Deloitte Access Economics, Charter Hall



Alternate use

A key premise of the "community infrastructure" concept is the introduction of mixed-use purposes; sales growth can be driven by increasing the usage, relevance and importance of shopping centres. While this approach is common in other geographies, so far, there has been limited evidence in Australia. However, this is beginning to change. Vicinity, Scentre, GPT Group, ISPT and QIC are actively considered mixed-use approaches.

Several centres already feature local libraries (which are reportedly experiencing a resurgence). Some centres host dance schools, cooking schools, commercial kitchens (used for displays, classes and general food preparation), and luxury car show-rooms. While many of these uses do not generate large rents, they diversify the centres' offer and draw patronage.

In terms of new concepts, one manager is executing projects across its portfolio with a well-known hotel operator. Often well-located, with strong transport linkage and direct access to F&B and entertainment, shopping centres reportedly have both the space and appeal for hotel operators, particularly where there is strong tourist appeal. In return, the centre receives a 10 to 15-year lease with a creditworthy counterparty and, importantly, accepts no operational exposure. Conversations are also progressing with universities and medical operators.

Given the long lead time in cultivating both internal and external stakeholder approval, it is apparent that the sector specialist managers in this space are much better positioned to implement alternate uses into portfolios.

Technology

Online sales growth is certain. How online sales are distributed remains less clear. Several managers discussed the opportunity for their centres to capture electronic transactions. Well-stocked, centrally located and with good truck access, one centre now operates as a Target distribution centre. Similarly, dedicated driver zones for food delivery services (Uber Eats, Deliveroo) and pick-up zones for groceries (Woolworths, Coles) also, are beginning to appear. While further work is needed to understand design and facilitation requirements, enabling retailers to capture omnichannel sales is pivotal in the fight for online sales.

% chg.yoy 60 Homewares and Appliances Media 50 40 30 20 10 Dec-15 Jun-16 Dec-16 Jun-17 Dec-17 Jun-18 Dec-18

Chart 6: Online sales growth by category

Source: NAB

The use of other technology appears relatively nascent. Tailoring tenant mix using credit card data is commonplace (Quantium) and some centres are using WiFi to track customer movement (although there was little evidence that WiFi data is being meaningfully used). Similarly, there is no capability to track consumer preferences or to provide targeted specials. Further investment in technology is required if physical retail is to keep pace with its online counterpart.



Conclusion

Retail is evolving, not dying. Online competition and an ominous macroeconomic environment are creating headwinds for traditional retailers that will limit market rent growth in the near term.

However, having learnt from the international experience, Frontier's preferred managers demonstrated that they are both cognisant of, and capable of dealing with, challenges faced by the sector. The unknown factor is if the "Amazonisation" impact will gain enough momentum in the Australian market.

Although sales growth may disappoint, our research indicated that physical Retail will not disappear in the foreseeable future. That said, the need for specialist expertise and high calibre active management cannot be understated. The offer must be tailored to meet the needs of local catchments. Equally, design must consider both experience and convenience. As shopping centres transition from apparel-dominated development plays towards dining, lifestyle and service hubs, long-term strategy and skilful asset management is crucial.

Positively, Frontier observed several examples of new uses, revised designs and refreshed offers that expand centre appeal, solidifying the resilience of future revenues. The opportunity for centrally located and accessible shopping centres to participate in the digital economy was also evident, although further work in this space is required. We also noted the early bifurcation between "haves" and "have nots", as asset quality (and not necessarily asset size) is beginning to translate to consumer and tenant appeal.

While change is afoot, the shifting Retail landscape is better characterised as a metamorphosis than an apocalypse. For the time being, Retail remains relevant in institutional portfolios with a cautionary caveat that only the best will thrive. Frontier will continue to diligently monitor the sector for signs of obsolescence.





Property Index performance to 31 Dec 2018

		1 Year		Total returns					Index composition			
	Income	Capital	Total	3 Yr (%p.a.)	5 Yr (%p.a.)	10 Yr (%p.a.)	15 Yr (%p.a.)	20 Yr (%p.a.)	25 Yr (%p.a.)	Assets	Capital value \$m	Weight %
All property - Australia	5.5	4.6	10.3	11.4	11.7	9.4	10.5	7.4	7.9	1,422	192,100	100
Retail	5.4	0.6	6	8.7	9.7	8.7	10.1	8	8.5	506	81,496	42
Office	5.4	7.9	13.7	13.4	12.8	9.6	10.7	6.8	7.3	352	82,899	43
Industrial	6.1	8.2	14.8	12.2	13.5	10.1	10.7	7.4	8.9	374	19,203	10
Other (inc. hotels)	6.9	1.6	8.6	14	15	12.3	12.3	-	-	190	8,502	4
Retail— Australia												
Super/major regional	4.8	0.8	5.6	8.2	8.4	8	9.8	10.5	10.4	61	39,557	21
Regional	5.7	-1.4	4.3	7.2	8.8	8.5	10	10.1	10	33	8,122	4
Sub regional	6.1	-0.8	5.2	8.3	10.4	9	10.4	11.2	11	106	15,101	8
Neighbour- hood	5.8	-1.2	4.6	8.7	11	9.1	9.7	10.9	11.3	72	3,758	2
Other	5.7	3.8	9.7	11.1	12.4	10.3	10.9	-	-	126	11,200	6
Office - Australia												
Premium grade CBD	5.3	7.4	13.2	12.2	12.1	9.5	10.8	10.2	9.9	60	26,953	14
Grade A CBD	5.3	8.2	13.9	13.9	12.9	9.6	10.7	9.9	9.9	123	36,410	19
Grade B CBD	5.6	6.3	12.2	16.4	14.9	9.8	11.4	11	10.2	35	3,699	2
Non-CBD	5.8	8.5	14.7	13.6	13.2	9.9	10.2	2.4	2.8	129	15,752	8
Industrial - Australia												
Warehouse	5.7	9.1	15.4	12.5	15.4	11.4	11.7	11.6	12.3	144	5,902	3
Distribution	6.2	7.2	13.9	11.8	12.5	10	11.1	11.3	11.3	131	8,400	4
Industrial estate	6.4	9.5	16.5	13.3	13.2	9	9.7	10.9	11.4	23	1,678	1
International												
IPD UK All Property	5.1	2.1	7.4	7	10.5	8.8	7.1	8.1	8.7	N.A.	N.A.	N.A.
IPD Europe Ex -UK	4.3	4.7	9.1	8.7	7.4	5.3	6.5	N.A.	N.A.	N.A.	N.A.	N.A.
NCREIF US NPI	N.A.	N.A.	6.7	7.2	9.3	7.5	8.9	9	9.3	N.A.	N.A.	N.A.
REITs												
S&P/ASX 300 AREIT	N.A.	N.A.	3.3	7.6	12.5	10.7	5.6	6.5	7.5	N.A.	N.A.	N.A.
FTSE EPRA GREIT \$A (H)	N.A.	N.A.	-4	3.3	7.1	11.7	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.



Infrastructure Quarterly transaction overview

Region	Transaction	Sector	Transaction Size	Vendor/ grantor	Acquirer	Comment
Asia	Ramky Enviro Engineers Limited (REEL) Sale (60%)	Environment	USD 925.00	Ramky	KKR	Ramky Enviro Engineers Limited (REEL) provides collection, transport and processing of hazardous, municipal, biomedical and e-waste.
Australasia	AGL Energy 81MW National Assets Power Generation Portfolio Sale	Power	AUD 74.00	AGL Energy Limited (AGL)	MTAA Superan- nuation Fund, Commonwealth Bank Group Super	Portfolio of small generation and compressed natural gas refuelling assets.
Australasia	Vic Land Titles Registry	Social Infra.	AUD 2,960.00	Victorian Government	First State Super	Privatisation of Victoria's land titles registry.
Australasia	Warradarge 180MW Wind Farm	Renewables		n.a.	CBUS (40.05%), Synergy (19.9%),DIF Infrastructure V (40.05%)	Development of the 180MW Warradarge wind farm in Western Australia.
Australasia	Kwinana 36MW Energy from Waste Project	Renewables	AUD 698.00	Government of WA	Macquarie (40%),DIF Infra- structure V (60%)	Development of a waste to energy renewable project facility in Perth. 20-year waste supply agreement.



Infrastructure Quarterly transaction overview (cont.)

Region	Transaction Sector		Transaction Size	Vendor/ grantor	Acquirer	Comment
Europe	Abertis Acquisition (2018)	Transport	EUR 16,800.00	Abertis	HOCHTIEF(20%), Grupo ACS (30%), Atlantia(50%)	The acquisition and merger of Abertis into Atlantia, Hochtief, and Grupo ACS. Abertis manages toll roads in 14 countries in Europe, the Americas and Asia.
Europe	Open Fiber Italian Broadband Project	Telecomms.	EUR 6,500.00	n.a.	Cassa Depositi e Prestiti (50%), Enel Group(50%)	Roll-out of an ultra fast broadband network across Italy.
Europe	Hornsea One 1.2GW Offshore Wind Project	Renewables	GBP 4,460.00	n.a.	Ørsted (50%), GIP III (50%)	Windfarm underpinned by 15 year Contract for Difference (CfDs).
Europe	Eolia Renovables de Inversion Sale	Renewables	EUR 1,400.00	Oaktree Capital Group	Alberta Investment Management Corporation (100%)	Spanish wind and solar developer.
Europe	Saur Group Acquisition	Environment	EUR 1,400.00	BNP Pari- bas, Groupe BPCE, Na- tixis, Royal Bank of Scotland	EQT Infrastructure Fund II and III, SWEN Capital Partners	French water company which was taken over by its creditor banks in 2013.
Europe	FCC Aqualia Sale (49%)	Environment	EUR 1,190.00	FCC Con- strucción	IFM Global Infrastructure Fund (100%)	Water management business that provides services to 22.5 million people in 1,100 municipalities in 22 countries.
Europe	ASTM Sale (24%)	Transport	EUR 850.00	Gavio Group	Ardian Infrastructure Fund IV	Italy's second largest toll road group, which owns 1,400km of toll roads.
Europe	VTG Rolling Stock Acquisition	Transport	EUR 632.77	Kuehne, Nagel	North Haven Infrastruc- ture Partners II	Acquisition of additional stake in German listed railcar
Europe	Swedegas Acquisition	Power	EUR 581.66	Enagas, Fluxys	First State European Diver- sified Infrastructure Fund II	Operator of Sweden's main gas grid, comprising 600km of pipelines that supply industrial customers and regional gas networks.



Infrastructure Quarterly transaction overview (cont.)

Region	Transaction	Sector	Transaction Size	Vendor/ grantor	Acquirer	Comment
Latin America	Enel Mexico Assets Sale (80%)	Renewables	USD 1,400.00	Enel Green Power	CDPQ (51%), CKD In- fraestructura México (49%)	Eight solar and wind renewable projects, totalling 1.8GW. All of the projects have long-term PPA agreements.
North America	Trans Mountain Pipeline Expansion Acquisition	Power	CAD 4,500.00	Kinder Morgan	Government of Canada	Creation of a new pipeline along the existing one that runs from Alberta to British Columbia, increase daily capacity from 300,000 to 890,000 barrels.
North America	Enercare Acquisition	Telecomms.	CAD 4,300.00	Enercare	Brookfield Infrastructure Fund III	Canadian home services provider Enercare provides electricity, plumbing, water heaters, furnaces, air conditioners, and related services to residential areas.
North America	Enbridge Natural Gas Gathering and Processing Busi- nessl Acquisition	Power	CAD 2,500.00	Enbridge	Brookfield Infrastructure Fund III	Canadian midstream business includes 19 natural gas processing facilities 3,550 kilometers of gathering pipelines.
North America	BridgeTex Pipeline Sale (50%)	Power	USD 1,438.00	Magellan Midstream, Plains All American Pipeline	OMERS Infrastructure	BridgeTex transports oil from the Permian Basin to Midland and Colorado City, Texas.
North America	NRG Yield A cquisition (46.5%)	Renewables	USD 1,375.00	NRG Energy	Global Infrastructure Partners III (GIP III)	5.1GW of capacity in wind, solar and gas.
North America	Fairless 1240 MW and Manchester Street 468 MW Power Station Sale	Power	USD 1,230.00	Dominion Resources Inc.	Starwood Energy Group	Sale of two combined-cycle gas turbine power generation assets in Rhode Island,
North America	Restaurant Technologies Acquisition	Other	USD 1,030.00	Aurora Capi- tal Group	West Street Infrastruc- ture Partners III	Provider of closed-loop automated cooking oil solutions to US restaurant and hospitality markets.
North America	Tunnel Hill Partners Acquisition	Social Infra.	USD 350.00	American Infrastruc- ture Funds	Macquarie Infrastructure Partners IV	US waste management company.





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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