September 12, 2017

Australia Small and Mid Cap

Equity Research

Residential Land Lease Comms: Already built to rent; Buy LIC / INA

The RLLC sector is a low risk "build to rent" model

In the wake of increasing house prices and falling housing affordability there have been calls for new housing models in Australia with the "build to rent" (BTR) or multi-family sector of the UK and US highlighted as potential options for Australia.

In this report we explore the attractiveness of the Residential Land Lease Communities (RLLC) sector as a proxy for BTR. In our view, RLLCs offer investors very similar exposure to BTR with guaranteed residential rental yield. In fact, we argue RLLCs offer lower risk and current valuations are very compelling compared to the 4.5-5% yields (according to the AFR of Sept 1, referencing Mirvac) being targeted for BTR projects. The other key attraction of an RLLC is that all the capital can be recycled from the sale of a home. We rate as Buy both LIC.AX (Conviction List) and INA.AX. We are Neutral on GTY.AX.

Cap rate compression likely to continue for RLLCs

Independent valuers currently value mature RLLC assets at cap rates of 7.75% or greater. There have been some transactions around 6% recently, according to data provided with recent FY17 results. As we wrote in January 2017, we see the corporatization of the RLLC sector as a key catalyst for cap rate compression.

Catalysts for cap rate compression

We see a few emerging catalysts for cap rate compression of the RLLC sector. First, as stated by INA in its FY17 result briefing, there is increasing offshore, sovereign wealth fund, and family office interest in the sector, which in our view could set new benchmarks for valuation. Second, the BTR model looks likely to emerge in Australia with expectations of c. 5% stabilized yields. We think RLLCs offer similar exposure as (ie, guaranteed residential rental yield) the proposed BTR models, arguably with lower capital employed and lower risk

Adjusting target prices for cap rate compression

We adjust our price targets for LIC and GTY for the likelihood of lower cap rates. Our INA TP is unchanged due to its lower proportion of permanent occupied sites and offsetting changes in the mix.

RLLC STOCK SUMMARY

	LIC.AX	INA.AX	GTY.AX
Rating	CL-Buy	Buy	Neutral
Target Price	$5.30	$3.00	$2.20
Upside potential	23%	18%	10%
FY18E Yield	1.5%	4.6%	4.5%
FY18E AFFO (A$mn)	26.7	32.3	42.4
FY18E AFFO/share (Acps)	25.4	15.6	14.2
FY18E P/AFFO (x)	17.0	16.3	14.1
3 Yr AFFO CAGR ('17-'20)	16.8%	18.4%	5.0%
FY18E DPU (Acps)	6.5	11.7	8.9

Source: Goldman Sachs Global Investment Research.

WHAT ARE RLLCS?

RLLCs are affordable housing communities for over 50s. Residents buy a home for c. 75% of the local median house price and rent the land from the community owner. Residents sign a lease and have the right to occupy the site in perpetuity assuming they pay the rent (c. A$140-200/wk) and abide by the site agreement.

WHY ARE RLLCS AN ATTRACTIVE INVESTMENT?

We estimate IRRs on RLLCs can exceed 20% on greenfield projects. All capital is generally recycled making the model self-funding. Once homes are fully sold the community owner collects rent on the land in perpetuity. In theory there are no vacancies and rent usually rises at CPI. This makes an RLLC higher returning and lower risk than a traditional residential rental property or BTR development.

RELATED RESEARCH

June 5, 2017 "Build it and they will rent" and November 4, 2016 "Significant cap rate compression still to come in the RLLC industry"

Michael Peet
+61(2)9321-8528 michael.peet@gs.com Goldman Sachs Australia Pty Ltd

Julius Bleinroth
+61(2)9320-1028 julius.bleinroth@gs.com Goldman Sachs Australia Pty Ltd

Laurence Parisi
+61(3)9679-1037 laurence.parisi@gs.com Goldman Sachs Australia Pty Ltd

Rohan Koreman-Smit, CFA
+61(2)9320-1029 rohan.koremansmit@gs.com Goldman Sachs Australia Pty Ltd

RLLCs offer value and a low risk way of playing the "BTR" theme

We have increased our target prices on the three RLLC stock to reflect our expectations of a narrowing in cap rates:

- 5.0% cap rate (previously 6.5%) for A-grade mature, permanent-resident assets in Metro areas.
- 6.5% for B-grade assets, mostly coastal (previously 7.5%).
- 8% for C-grade/Regional (previously 9%).

This lifts out 12-month target prices for LIC (Buy, CL) to A$5.30 (from A$4.90), and GTY (Neutral) to A$2.20 (from A$2.10). Our 12-month target price on INA (Buy) is unchanged at A$3.00 due to rounding.

All three stocks have excellent development pipelines. LIC remains our top pick given its longer track record and pure greenfield model. INA and GTY offer better liquidity for investors and appealing exposure to the RLLC asset class.

LIC and INA offer the best value of the RLLC stocks our view. LIC's greenfield model generates higher IRRs than conversions and expansions. We forecast LIC to deliver 17% three-year CAGR (FY17-FY20E) in AFFO per share. INA has strong growth in new home settlements fueling a three-year CAGR of 18% from FY17-FY20E. GTY settlements are forecast to be flat over the next three years delivering a modest AFFO CAGR of 5%. Any pick up in settlements could be a catalyst for stronger growth but at this stage its settlement growth profile is flat vs LIC 11% and INA 29%.

Could RLLCs become all age and help solve the housing affordability crisis

The US multi-family sector is broadly similar to the Australian RLLC sector. The key differences are: many of the US assets are all ages and mortgages are allowed against the home. In Australia the RLLC model is built around affordable housing for the over 50s / retirement sector. Australian banks do not currently offer mortgages against an RLLC home given the resident does not own the land and up until recently there has been a relatively uncertain resale market for RLLC houses.

Could residents get a loan? We think on a case by case basis a mortgage product might one day be available on a new RLLC home provided the resident was employed. The LVR is likely to be fairly low (possibly c. 50% to be conservative vs traditional real estate as the home owner doesn't own the land) vs a traditional mortgage LVR of 80-90%. For the same reason, the interest rate is also likely to be higher than a traditional mortgage and we assume 6% which is c200bps higher than the average current mortgage interest cost. The lower LVR would minimize risk on resale or default given the borrower is likely to be a low income earner given the nature of RLLCs and the demographic of those who purchase them.

Exhibit 1: Serviceability of a mortgage against an RLLC home for an individual earning $80,000 per year
Principal and interest payments across various purchase prices

House price (A$)	250,000	300,000	350,000	400,000	450,000
Loan-to-value (LVR)	50%	50%	50%	50%	50%
Mortgage principal	125,000	150,000	175,000	200,000	225,000
Deposit	125,000	150,000	175,000	200,000	225,000
Mortgage rate (p.a.)	6.00%	6.00%	6.00%	6.00%	6.00%
Mortgage term (years)	15	15	15	15	15
Monthly payment (A$, principal and interest)	1,055	1,266	1,477	1,688	1,899
Est. annual payments (A$, principal and interest)	12,658	15,189	17,721	20,253	22,784
Estimated annual rent (A$)	7,800	7,800	7,800	7,800	7,800
Total rent + annual payments (A$)	20,458	22,989	25,521	28,053	30,584
Average income (A$)	80,000	80,000	80,000	80,000	80,000
Percentage of annual income	26%	29%	32%	35%	38%
Debt to income	1.6	1.9	2.2	2.5	2.8

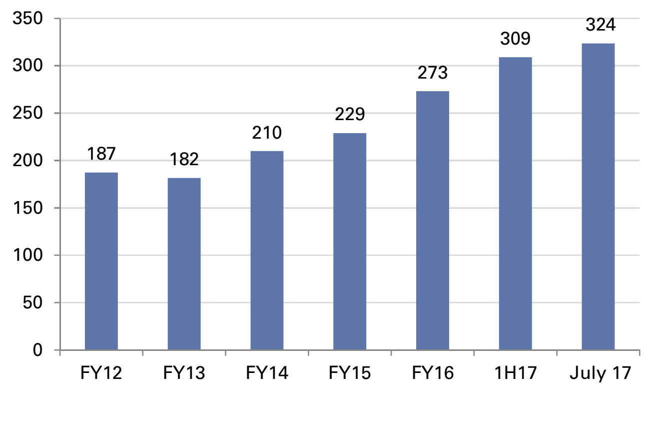
Source: Goldman Sachs Global Investment Research.

Extending RLLCs is one potential way to help address the lack of affordable housing in Australia. For example, INA has a couple of all-ages assets that are "build to rent" communities. In these communities residents simply rent the house and land vs an RLLC where the resident buys the home and rents the land. There is generally a minimum age limit as in RLLCs. These have proved to be popular (with high occupancy) and good yield generators (INA is collecting average rent of A$275/wk from c. $60k homes, equates to c.15% net yield). In the right geographic area, all-ages communities could provide a strong long term return. In our view they are higher risk than a mature RLLC as leases are shorter and the residents more transient leading to greater vacancies. Mature RLLCs in theory have no vacancies.

RLLC house prices have moved in line with the broader residential market

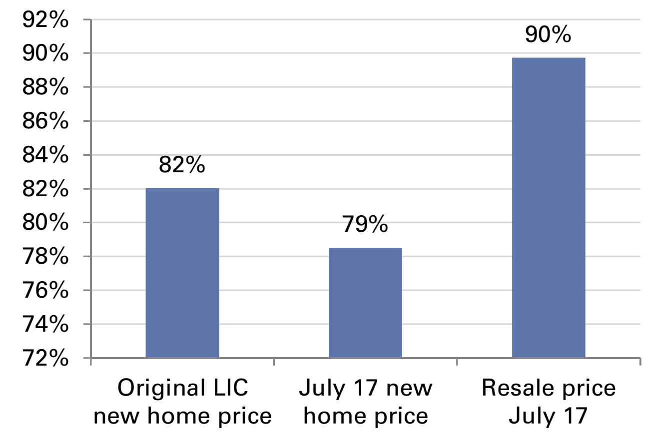
One of the key concerns investors have about this sector is that the house purchased in a RLLC community is a depreciating asset. Therefore, why would you purchase one as an incoming resident? The short answer to this question is incoming residents are usually buying to release equity in their existing home (to put money in the bank). Moreover, contrary to some concerns that a house in an RLLC community is a deprecating asset, we have seen prices rise in many communities that are broadly in line with property prices (Exhibits 3 and 4).

Exhibit 2: LIC's group avg. new home prices have grown steadily since FY12…
Average new house price (A$'000, incl. GST)



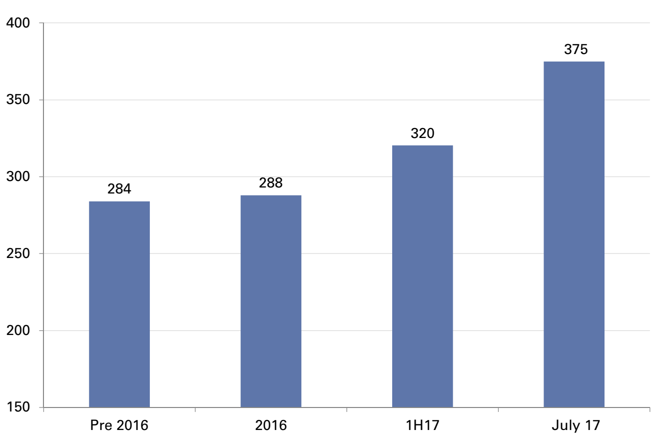
Source: Company data, Realestate.com.au, Goldman Sachs Global Investment Research

Exhibit 3: … while still being affordable (priced at 79% of median house prices)
Percentage of median house price



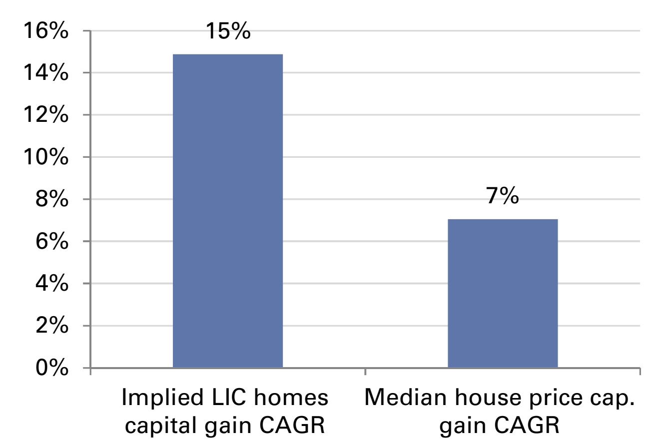
Source: Company data, Realestate.com.au, Goldman Sachs Global Investment Research

Exhibit 4: LIC's avg. resale price has grown from A$284k to A$375k in July
Resale community ASP (A$000's)



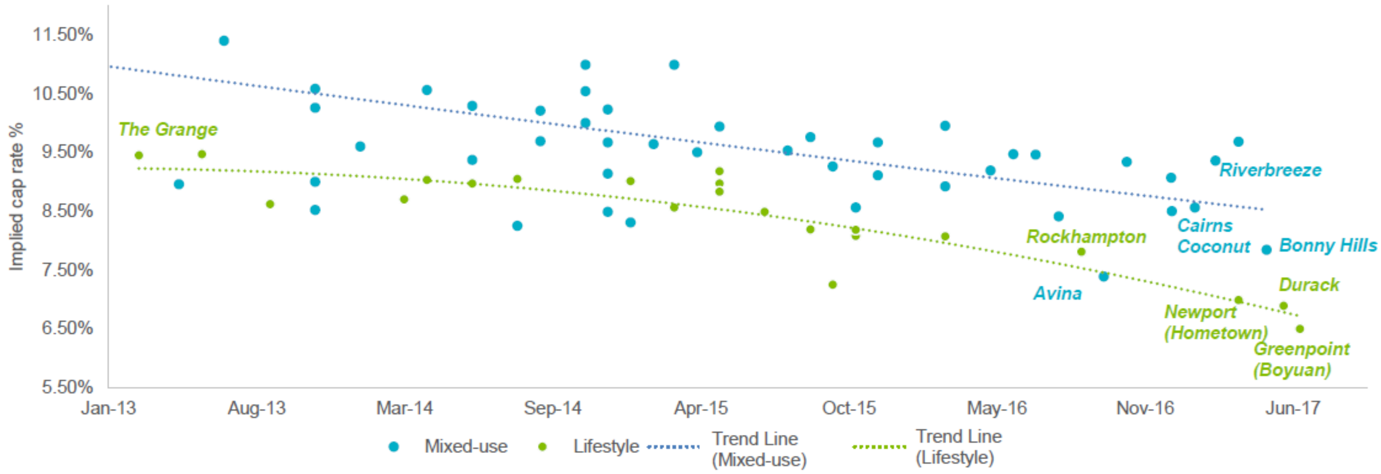
Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 5: LIC homes have appreciated faster in value vs median home prices in the same period and area



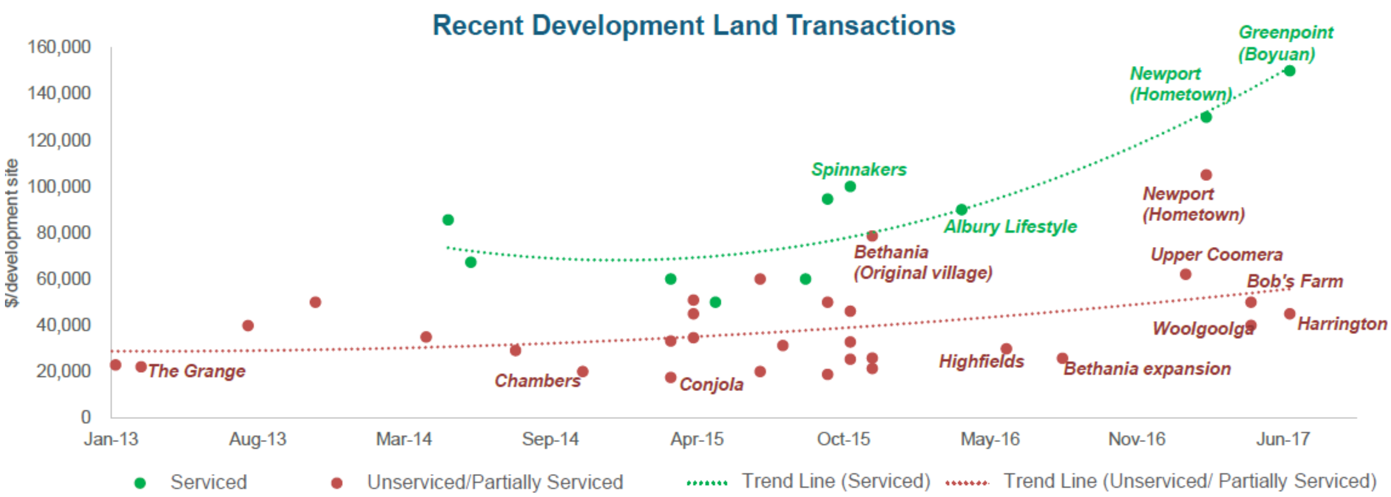
Source: Company data, Realestate.com.au, Goldman Sachs Global Investment Research

Exhibit 6: Cap rates across in the RLLC sector continue to compress…
INA existing site valuations – January 2013 – June 2017



Source: Company data.

Exhibit 7: The price paid for RLLC development sites has also grown
Development site valuations, January 2013 – June 2017

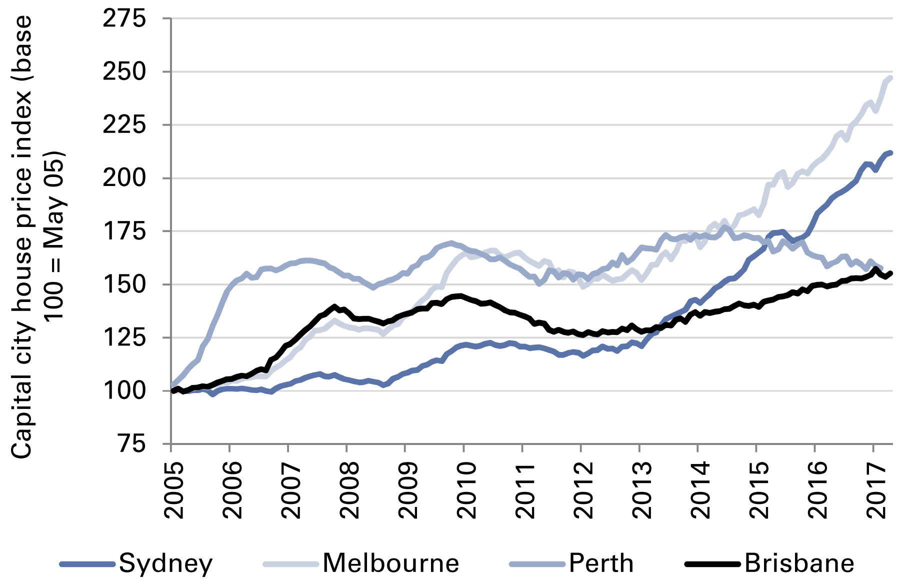


Source: Company data.

A broader house price decline may impact the sector

There has been a relatively strong period of house prices growth over the last 5 years on the East coast, particularly in and around Sydney and Melbourne. Brisbane growth has been less pronounced and Perth has been broadly flat over the last 5 years. The consensus is that house prices growth will at least moderate or prices fall modestly in the short/medium term. The impact this has on the RLLC sector is unclear. It may impact sales volumes and velocity as potential residents take longer to sell their existing home. More directly, as RLLC pricing is broadly pitched at 70-80% of local median house prices, falling median price could directly impact the price of an RLLC home. However, we note LIC has on average sold its homes at 65% (source: LIC) of the local median house price, giving it a buffer of up to 15% if the broader market were to fall. Overall, a falling house price environment may impact gross development margins, sales velocities and earnings forecasts. The IRRs on projects may also be impacted.

Exhibit 8: Capital city house prices



Source: ABS, Goldman Sachs Global Investment Research

RLLC's are higher return and lower operating risk than BTR

In our view RLLCs deliver a higher return and carry a lower operating risk than a BTR project. The catch is the underlying land value for an alternate use is likely to be lower than a BTR given the locations are generally on the outskirts of cites or in coastal/regional areas.

LIC has been able to deliver pre-tax ungeared IRRs of 15% to over 20% on its greenfield projects. A good conversion (short term accommodation to permanent) or expansion (INA/GTY) can deliver a 15%+ IRR. We estimate the IRRs on BTR are c9% (see Exhibits 11 and 12)

Residents typically sign a perpetual site agreement or in the case of LIC, a 90-year lease and can only exit this agreement/lease upon selling their home. This results in virtually 100% occupancy. Thus if we were to experience a significant property downturn, RLLCs' income stream could prove resilient. Rental growth is also consistent with INA and GTY typically moving rents up at or slightly above CPI and LIC at the greater of CPI or 3.5%.

Another advantage is the low capex requirements in RLLC communities. Most maintenance capex is opex in the RLLC model and this is built into the cost base and c. 65-70% operating margin assumptions. Once built, maintenance capex is modest, include maintenance of gardens, community facilities, roads and utilities. Probably the biggest potential capital items might be a rebuild of a pool, tennis court or bowling green. Club house rebuilds are rare/infrequent, especially if the facility was purpose built with the community development. Conversion assets may carry more capex risk if infrastructure is old/refurbished. Greenfield capex is generally low for the first 10 years. As the RLLC community owner doesn't own the homes, capex would be significantly lower than for a BTR asset, where the building/asset owner may need to refurbish kitchens and bathrooms every 10 to 15 years. In an RLLC, these capital items are owned by the home owner.

Traditional DMF Retirement headwinds could be a tailwind for RLLCs

We think recent media reports into the Deferred Management Fee (DMF) retirement village sector, which have resulted in state governments making investigations, as a potential positive for the RLLC sector. There have been some media reports about resident dissatisfaction in a traditional DMF retirement village (eg: ABC Four Corners 25th June 2017). Nevertheless, the traditional DMF retirement model is likely to remain a key service provider to the retirement sector, in our view.

We leave the debate over where the current structure of the DMF sector need changing to the respective government enquires. What we do see is that the debate over the traditional DMF retirement model is providing an opportunity for the RLLC sector to differentiate itself while negative sentiment persists. RLLCs tend to cater to a younger and lower-socioeconomic customer base than DMFs. However, there is still broad overlap, and we expect this to spread as the quality of RLLCs rises and their services improve, allowing people to remain in their own (RLLC) homes for longer.

RLLCs generally have pretty simple site agreements compared to DMF contracts. You buy the house and pay rent on the land that house sits on. As a resident you have a right to occupy the house in perpetuity if you comply with the site agreement. You are required to pay rent until you (or your estate) sells the house to the next resident. The community owner is entitled to any rent that is not paid during the period you own the home. Any short fall can be deducted from the sale proceeds.

In the case of LIC and some private operators, mainly in Victoria, a DMF is built into the business model. However, in LIC's case the DMF is modest at up to 20% (4% p.a. over 5 years) and in our view is justified given the level of service and facilities that LIC provides to residents.

Possible structure of INA's fund

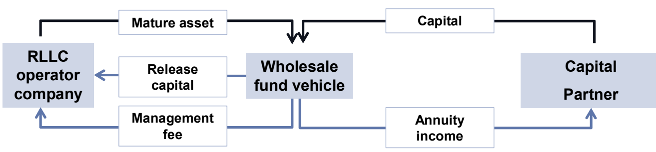
We think comments by INA in its recent result presentation provide an interesting insight into how it could fund its RLLC development pipeline, moving it towards to a "self-funding" position, i.e. not needing to raise further equity.

INA has stated it is "in discussions with aligned parties to explore capital partnering" (see page 9 of INA's FY17 result presentation). One avenue INA may look to explore is to set up a wholesale fund structure. No details are known yet and we would imagine the company is working on a number of options. In our view one option may be to focus on assets that a sovereign wealth fund and/or family office would be interested in participating in to receive a share of the annuity rental income. This avenue could help fund future development projects and recycle capital from existing assets, as capital is released from assets sold into the fund. Selling assets into a wholesale fund could also set a new benchmark for asset values.

This avenue could not only be a way for INA to directly fund its growth but also indirectly fund balance sheet expansion by increasing the book value of its assets (through cap rate compression), allowing it to borrow more money while maintaining a conservative LVR. Arguably GTY and LIC have as much (if not more) to gain from a balance sheet/book value sense given they have a higher proportion of permanent RLLC assets, which we believe will experience greater cap rate compression vs tourism/short term accommodation assets. INA has a larger tourism portfolio which is likely to trade at a valuation discount (higher cap rate) than pure RLLC assets due to higher occupancy risk and operating costs.

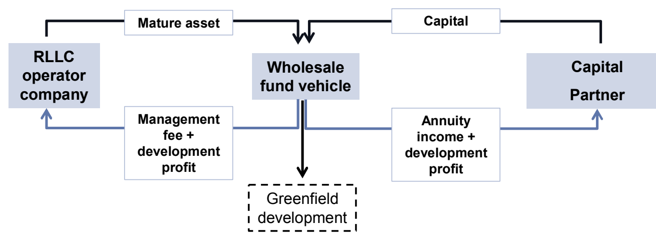
We show two possible options for a wholesale fund below. Exhibit 9 could be a fund that contains existing assets and Exhibit 10 is a possible structure where a wholesale fund could bring other investors in to help fund a greenfield project.

Exhibit 9: Possible wholesale fund structure for mature assets



Source: Goldman Sachs Global Investment Research.

Exhibit 10: Possible wholesale fund for greenfield development projects



Source: Goldman Sachs Global Investment Research.

Below we show the IRRs for a BTR (Exhibit 11) and a greenfield RLLC (Exhibit 12). For the BTR project we assume a project structure of an affordable housing development like an all-ages facility described earlier and loosely based on a RLLC, with a simple clubhouse and more basic accommodation. We assume 95% occupancy could be achieved (based on the occupancy INA is experiencing in its all-ages rental villages).

Exhibit 11: BTR scenario IRR c.9%
Example community IRR (A$mn)

Year	units	1	2	3	4	5	6	7	8	9	10
Total land acquisition cost	$m	**-11.5**									
Home build costs	$m	-7.3	-7.5	-7.7							
Infrastructire spend	$m	-4.0	-4.0	-4.0	0.0						
Capex (maintenance)	$m	0	0	0	0	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Community (rental) operating profit	$m	0.1	0.7	2.0	3.5	3.6	3.7	3.7	3.8	3.9	4.0
Total cash flow	$m	-22.7	-10.8	-9.7	3.5	3.0	3.1	3.2	3.3	3.4	3.5
IRR		**9%**									
Drivers											
Build cost inflation		2.5%									
Rental per week ($/week)	$	350	359	368	377	386	396	406	416	426	437
Rent increase (CPI)		2.5%									
Occupancy		33%	67%	95%	95%	95%	95%	95%	95%	95%	95%
Operating margin		10%	25%	50%	85%	85%	85%	85%	85%	85%	85%
Number of lots	#	220									
Club house cost ($m)	$m	1.0									
Club house per lot ($m)	$m	0.005				c$5k/lot club house, basic compared to RLLC					
Infra per lot ($m)	$m	0.050				$50k/lot civils and infrastructure					
Increse in occupied homes		73	73	73							
Build cost of house $m	$m	0.100	0.103	0.105							

Source: Goldman Sachs Global Investment Research.

Exhibit 12: A Typical RLLC greenfield model – IRR >20%

Year		1	2	3	4	5	6	7	8	9	10
	units										
Total land acquisition cost		-11.5									
Infrastructire spend	$m	-7.7	-4.7	-4.7	0.0						
Development gross profit	$m	0.0	9.7	9.4	9.1						
Community (rental) operating profit	$m	0.0	0.1	0.4	0.8	1.3	1.3	1.0	1.0	1.1	1.1
Total cash flow	$m	-19.2	5.1	5.1	9.9	1.3	1.3	1.0	2.8	2.8	2.8
IRR		**21%**									
Drivers											
Build cost inflation		3%									
Rental per week ($/week)	$	174	178	182	187	192	196	201	206	211	217
Rent increase (CPI)		2.5%									
Operating margin		0%	30%	40%	50%	65%	65%	65%	65%	65%	65%
Number of lots	#	200									
Time to sell out (years)	yrs	3									
Club house cost ($m)	$m	3.0									
Club house per lot ($m)	$m	0.015				c$15k / lot club house					
Infra per lot ($m)	$m	0.050				$50k civils,					
Overhead, marketing, other ($m)	$m	0.020				$20k head office, marketing, interest and other selling costs					
sales per year (No)	#	0	67	67	67						
Build cost of house $m	$m	0.150	0.155	0.159	0.164	0.169					
House selling price net of GST ($m)	$m	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
Gross dev margin		50%	49%	47%	45%	44%					
Net dev margin		22%	20%	18%	17%	15%					
Average stay		15 years									
Homes sold per month		5.6									

Source: Goldman Sachs Global Investment Research.

Valuation – raising target prices on narrower cap rates

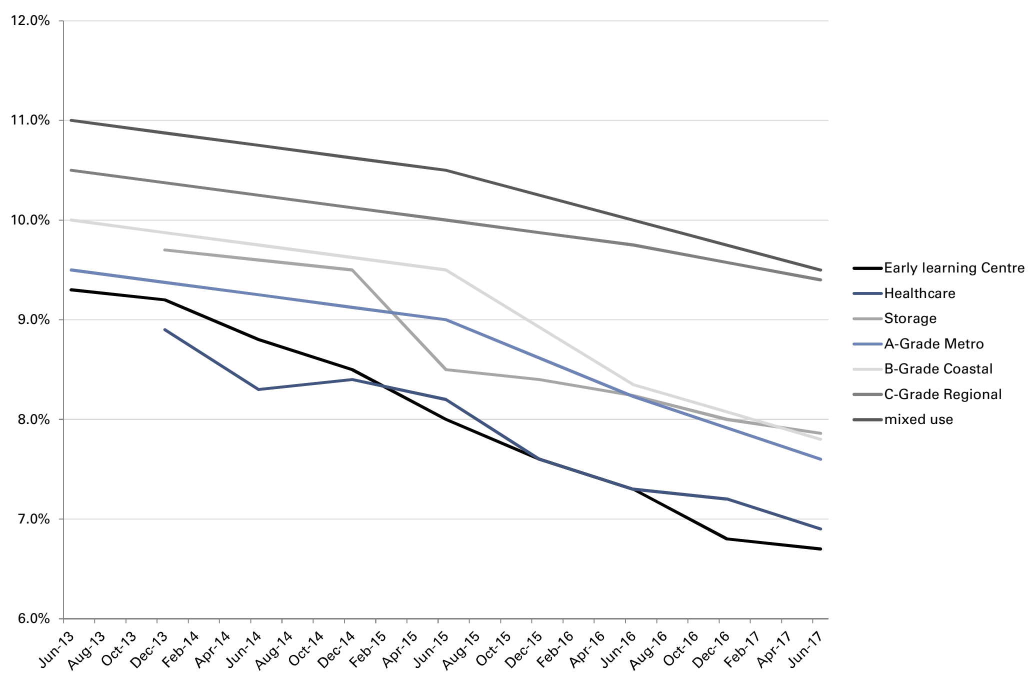
We revise our valuations for the three RLLC stocks to reflect our view of a narrowing in cap rates for A-grade assets to 5% (from 6.5%), which is based on the stabilized yields we believe residential A-REITs may target for BTR in Australia, and is comparable to the cap rates that US multi-family assets are trading on (see A-REITs "Build it and they will come", June 5th 2017). We increase the cap rate of B-grade or coastal RLLCs to 6.5% (from 7.5%) and C-grade or regional RLLCs to 8% (from 9%) – in a comparable narrowing.

Exhibit 13: Changes in cap rates used in our sum of the parts valuations for LIC, GTY and INA

	Current cap rate	Previous cap rate	Rationale/comment
LIC	5.5%	6.5%	A-grade community assets at 5.5%
INA	6.0%	6.5%	6% weighted cap rate of 5% for metro (A-grade) assets (40%), 6.5% for coastal (B-grade) assets (53%) and 8% for regional (C-grade) assets (7%)
GTY	6.0%	6.5%	6% cap rate for mix of A and B grade community assets

Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 14: Comparable assets already trade at significantly lower cap rates
ARF.AX (Healthcare and early learning centre), NSR.AX (storage) and A/B/C/mixed assets avg. portfolio passing yields (%)



Source: Company data, Goldman Sachs Global Investment Research

LIC.AX (CL-Buy) – raising target price 8%

We have updated our LIC valuation and target price to better reflect our view of the market valuation of its assets. We also take the opportunity to introduce the value of franking credits, which we add to our DCF valuation. LIC has a full tax paying company structure, unlike INA and GTY which are stapled securities.

We have changed the cap rate used in our sum of the parts valuation to 5.5% from 6.5%. In our view this is a fairer mark to market valuation of its communities based on 5% for A-grade assets and 6.5% for B-grade assets. We consider LIC to have a 70/30 mix of A-grade vs B-grade based on location and age of the community. LIC has no communities that we would rate as C-grade. **Our 12-month price target increases to A$5.30** (from A$4.90) largely driven by an increase in our SOTP and theoretical M&A value due to the cap rate changes. Our Theoretical M&A value increases to A$5.10 from A$4.80 as we incorporate the changes to cap rate used above to value occupied sites. We have also updated our DMF and value of unoccupied sites to reflect the data provided in the company's FY17 annual report. Our 12m TP is based on an 85% weighted fundamental value (equally blended SOTP, DCF and P/AFFO) and 15% weighted M&A value (now using a 5.5% cap rate applied to a 70% operating margin typical of a mature community). Key risks for LIC: (-) House prices, adverse changes to the age pension or retirement age

Exhibit 15: LIC valuation changes; no change to earnings

	EBITDA (A$ mn)			NPAT (A$ mn)			EPU adj (A¢)			DPU (A¢)		
	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg
FY18E	46.7	**46.7**	0.0%	26.7	**26.7**	0.0%	25.4	**25.4**	0.0%	5.0	**5.0**	0.0%
FY19E	56.0	**56.0**	0.0%	34.0	**34.0**	0.0%	32.4	**32.4**	0.0%	6.8	**6.8**	0.0%
FY20E	60.7	**60.7**	0.0%	35.9	**35.9**	0.0%	34.2	**34.2**	0.0%	11.1	**11.1**	0.0%
CAGR ('17-'20)	**14%**	**14%**		**17%**	**17%**		**17%**	**17%**		**47%**	**47%**	

	Old	New	% Chg
SoTP Valuation (A$/share):	4.05	**5.00**	23.4%
P/AFFO (A$/share):	5.40	**5.40**	0.0%
DCF Valuation (A$/share):	3.80	**4.30**	13.0%
Theoretical M&A Value (A$/share)	4.80	**5.10**	6.2%
Target Price (A$/share):	4.90	**5.30**	8.1%

Source: Goldman Sachs Global Investment Research.

Exhibit 16: LIC sum of the parts valuation

LIC Sum of the Parts FY18E	No of sites	Revenue	EBITDA	Multiple	**Value**	Earnings yield	% of total EV	A$/ share
Community Management (Rental Income)	1,916	18.4	12.0	18.2x	217.3	5.5%	37%	$2.07
DMF	1,916	7.1	7.1	9.1x	64.5	11.0%	11%	$0.61
Development Income *(adjusted - infrastructure costs)*	290	86.7	32.8	10.0x	327.7	10.0%	55%	$3.12
Corporate overheads			-6.2	10.0x	-61.5	10.0%	-10%	-$0.59
Rental from future development pipeline	1,034	9.9	6.9	7x	46.3	15.0%	8%	$0.44
Total		**112.2**	**45.7**		**594.3**		100%	$5.66
FY17 net debt					(61.2)			-$0.58
No. of Shares on issue					105.0			
Valuation per share					**$5.00**			

Source: Goldman Sachs Global Investment Research.

INA.AX (Buy) – target price unchanged on rounding

We have updated our INA valuation and target price to better reflect our view of the market valuation of its assets. We have changed the cap rate used in our sum of the parts valuation to value the RLLC sites to 6.0% from 6.5%. In our view this is a fairer mark to market valuation of its communities based on 5% for A-grade communities (Metro 40%) and 6.5% for B-grade communities (Coastal 53%) and C-grade communities (Regional 7%).

As a result our SOTP valuation increases by 1.9% to A$2.85 per share. The changes are less than the other two RLLC stocks due to its lower proportion of permanent occupied sites. INA has a relatively large portfolio of short term tourism sites. There is no change to the other valuation methodologies. Our M&A value is unchanged as the cap rate changes are offset by minor adjustments to our land bank and development profit assumptions post the FY17 result. **Our A$3.00 target price is unchanged** due to rounding. We maintain a Buy rating. Key risks for INA: (-) House prices, execution risk and risk of adverse changes to the age pension or retirement age

Exhibit 17: INA earnings and valuation

	EBITDA (A$ mn)			NPAT (A$ mn)			EPU (A¢)			DPU (A¢)		
	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg
FY18E	46.8	**46.8**	0.0%	32.3	**32.3**	0.0%	15.6	**15.6**	0.0%	11.7	**11.7**	0.0%
FY19E	59.3	**59.3**	0.0%	38.4	**38.4**	0.0%	18.6	**18.6**	0.0%	14.0	**14.0**	0.0%
FY20E	62.6	**62.6**	0.0%	39.0	**39.0**	0.0%	18.9	**18.9**	0.0%	14.2	**14.2**	0.0%
CAGR ('17-'20)	**24%**	**24%**		**18%**	**18%**		**13%**	**13%**		**12%**	**12%**	

	Old	New	% Chg
SoTP Valuation (A$/share):	2.80	**2.85**	1.9%
P/AFFO Valuation (A$/share):	2.60	**2.60**	0.0%
DCF Valuation (A$/share):	3.00	**3.00**	0.0%
Theoretical M&A Value (A$/share)	3.10	**3.10**	0.0%
Target Price (A$/share):	3.00	**3.00**	0.0%

Source: Goldman Sachs Global Investment Research.

Exhibit 18: INA sum of the parts valuation details

INA Sum of the Parts	No of sites	Revenue	EBITDA	Multiple	Value	Earnings yield	% of total EV	A$/share
ALE Long term sites FY18	3,079	24.8	16.1	16.7x	268.6	6.0%	31%	$1.30
Short term sites and other rev FY	2,173	43.5	16.7	11.8x	196.4	8.5%	23%	$0.95
Annuals	911	5.2	3.9	13.3x	52.4	7.5%	6%	$0.25
Development profit	270	91.6	30.4	9.0x	273.8	11.1%	32%	$1.33
ALE overheads			-12.7	10.0x	-127.5	10.0%	-15%	-$0.62
Total ALE		**165.1**	**54.4**	**12.2x**	**663.7**	**8.2%**	**77%**	**$3.22**
rental from future developments	2,485	20.1	14.0	10.0x	140.5	10.0%	16%	$0.68
Garden Villages			11.8	11.1x	130.6	9.0%	15%	$0.63
Settlers DMF			0.4	32.8x	13.5	3.0%	2%	$0.07
Corporate overheads			-9.1	10.0x	-90.8	10.0%	-11%	-$0.44
Total			**57.5**	**14.9x**	**857.4**			
FY18 net debt					(268.5)			-$1.30
No. of Shares on issue					206.4			
Valuation per share					**$2.85**			

Source: Company data, Goldman Sachs Global Investment Research.

GTY.AX (Neutral) – raising target price 5%

We have updated our GTY valuation and target price to better reflect our view of the market valuation of its assets. We have changed the cap rate used in our sum of the parts valuation to value the RLLC sites to 6.0% from 6.5%. In our view this is a fairer mark to market valuation of its communities based on 5% for A-grade communities (Metro) 6.5% for B-grade communities (Coastal), and 8% for C-grade communities (Regional).

Our SOTP valuation increases to $2.25 from $2.00 per share. We apply the changes to cap rat to our theoretical M&A valuation assumptions resulting in an 8% increase to $2.60.

Overall our **12m target price rises 5% to A$2.20** per share and we retain a Neutral rating.

Key risks for GTY: (-) Operating cost increases; a fall in house prices; pension age changes; DA approval delays. (+) Increased demand for affordable housing; Falling cap rates increasing asset values; sector corporate activity.

Exhibit 19: GTY valuation changes; no change to earnings

GTY	EBITDA (A$ mn)			NPAT (A$ mn)			EPS (A¢)			DPS (A¢)		
	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg	Old	New	% Chg
FY18E	49.6	**49.6**	0.0%	42.4	**42.4**	0.0%	14.2	**14.2**	0.0%	8.9	**8.9**	0.0%
FY19E	52.3	**52.3**	0.0%	44.5	**44.5**	0.0%	14.9	**14.9**	0.0%	9.4	**9.4**	0.0%
FY20E	55.1	**55.1**	0.0%	45.8	**45.8**	0.0%	15.3	**15.3**	0.0%	9.7	**9.7**	0.0%
CAGR ('16-'19)		**7%**			**5%**			**5%**			**2%**	

	Old	New	% Chg
SoTP Valuation (A$/share):	2.00	2.25	12.4%
P/AFFO Valuation (A$/share):	2.10	2.10	0.0%
DCF Valuation (A$/share):	1.90	1.90	0.0%
Theoretical M&A Value (A$/share)	2.40	2.60	8.1%
Target Price (A$/share):	2.10	2.20	4.9%

Source: Goldman Sachs Global Investment Research.

Exhibit 20: GTY Sum of the parts valuation

GTY Sum of the Parts	No of sites	Revenue	EBITDA	Multiple	Value	Earnings yield	% of total EV	A$/ Share
RLLC Home Site Rental	6,789	54.7	35.6	16.7x	592.8	6.0%	70%	$1.98
MHE Development Income	250	61.4	26.9	10.0x	269.5	10.0%	32%	$0.90
Corporate overheads			-14.5	8.0x	-116.0	12.5%	-14%	-$0.39
Rental from future developments	1,948		10.5	10.0x	104.7	10.0%	12%	$0.35
Total	**8,737**		**64.8**	**13.1x**	**851.0**	7.6%	100%	$2.84
FY18 net debt					(171.2)			-$0.57
No. of Shares on issue					299.4			
Valuation per share					**$2.25**			

Source: Goldman Sachs Global Investment Research.

Exhibit 21: RLLC, Multi-Family, Retirement, Residential REITs comps table

Comps table

Ticker	Company name	Year-end	Local Currency	Price (LC)	Mkt Cap (LC mn)	Yield FY1	3-yr EPS CAGR FY0-FY3	P/AFFO FY1	P/AFFO FY2	P/AFFO FY3	P/AFFO Jun Y/E FY18	P/B FY1	PEG FY17 PE / 3yr CAGR
GTY.AX	**Gateway Lifestyle Operations Ltd.**	Jun	A$	2.00	599	4.5%	5.0%	14.1	13.5	13.1	14.1	1.0	2.8
INA.AX	**Ingenia Communities Group**	Jun	A$	2.54	521	4.6%	13.3%	16.3	13.7	13.4	16.3	1.0	1.2
LIC.AX	**Lifestyle Communities Ltd.**	Jun	A$	4.25	444	1.2%	16.7%	16.7	13.1	12.4	16.7	2.9	1.0
	Australian retirement DMF and rental												
AOG.AX	Aveo Group	Jun	A$	2.52	1,461	4.2%	2.9%	12.4	12.3	12.3	12.4	0.7	4.2
EGH.AX	Eureka Group Holdings Ltd	Jun	A$	0.32	72	na	14.9%	9.3	7.7	7.7	9.3	na	0.6
	New Zealand retirement DMF												
RYM.NZ	Ryman Healthcare Ltd	Mar	NZ$	9.11	4,555	2.2%	13.4%	24.6	21.5	19.2	23.8	2.5	1.8
MET.NZ	Metlifecare Ltd	Jun	NZ$	5.95	1,267	1.5%	11.9%	14.0	12.4	11.4	14.0	0.9	1.2
SUM.NZ	Summerset Group Holdings Ltd	Dec	NZ$	5.00	1,112	2.0%	8.5%	14.5	13.0	13.1	13.7	1.5	1.6
	Australian REIT's												
LLC.AX	Lend Lease Group	Jun	A$	16.47	9,610	4.2%	0.8%	11.9	11.4	12.4	11.9	1.6	15.7
MGR.AX	Mirvac Group	Jun	A$	2.33	8,633	4.7%	5.1%	15.0	14.4	13.9	15.0	1.1	2.9
SGP.AX	Stockland	Jun	A$	4.41	10,503	6.0%	4.3%	12.6	11.9	11.7	12.6	1.1	2.9
	US Manufactured Housing Sites												
ELS	Equity LifeStyle Properties Inc	Dec	US$	90.41	7,866	2.1%	7.1%	41.3	36.8	na	39.0	na	5.5
SUI	Sun Communities Inc	Dec	US$	90.65	7,161	2.9%	14.0%	87.2	67.6	57.4	77.4	na	5.5
	US Single Family Rental Owners												
AMH	American Homes 4 Rent	Dec	US$	21.88	5,998	0.9%	13.4%	62.0	40.5	na	51.3	1.3	3.8
SFR	Colony Starwood Homes	Dec	US$	35.83	4,597	2.5%	31.1%	30.8	95.5	na	63.2	1.4	2.0
	US Public Multifamily owners												
AIV	Apartment Investment & Management	Dec	US$	45.84	7,184	3.1%	3.9%	18.6	18.7	17.7	19.6	5.6	5.0
AVB	AvalonBay Communities Inc.	Dec	US$	185.99	25,579	3.1%	4.9%	22.1	20.7	19.5	22.6	2.5	4.6
CPT	Camden Property Trust	Dec	US$	94.29	8,677	3.2%	3.6%	20.5	19.4	18.3	20.6	3.0	5.8
EQR	Equity Residential	Dec	US$	67.72	24,827	3.0%	4.5%	21.6	20.9	20.2	20.5	2.4	4.6
ESS	Essex Property Trust Inc.	Dec	US$	266.05	18,033	2.6%	6.7%	22.3	21.2	19.7	24.8	2.7	3.7
MAA	Mid-America Apartment Communities Inc	Dec	US$	107.03	12,159	3.3%	6.3%	60.4	43.5	34.8	52.0	na	8.2
UDR	UDR Inc.	Dec	US$	39.43	11,705	3.1%	4.9%	21.1	20.3	19.1	22.4	2.8	4.6
Overall Mean						**3.1%**	**9.0%**	**25.9**	**25.0**	**18.3**	**26.1**	**1.8**	**4.1**
Overall Median						**3.2%**	**6.5%**	**18.6**	**16.9**	**13.4**	**18.6**	**1.5**	**3.3**

Source: Bloomberg, Goldman Sachs Global Investment Research.

Disclosure Appendix

Reg AC

I, Michael Peet, hereby certify that all of the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our coverage universe) and its sector peers. The four key attributes depicted are: Growth, Financial Returns, Multiple (e.g. valuation) and Integrated (a composite of Growth, Financial Returns and Multiple). Growth, Financial Returns and Multiple are calculated by using normalized ranks for specific metrics for each stock. The normalized ranks for the metrics are then averaged and converted into percentiles for the relevant attribute. The precise calculation of each metric may vary depending on the fiscal year, industry and region, but the standard approach is as follows:

Growth is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

For a more detailed description of how we calculate the GS Factor Profile, please contact your GS representative.

Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

GS SUSTAIN

GS SUSTAIN is a global investment strategy aimed at long-term, long-only performance with a low turnover of ideas. The GS SUSTAIN focus list includes leaders our analysis shows to be well positioned to deliver long term outperformance through sustained competitive advantage and superior returns on capital relative to their global industry peers. Leaders are identified based on quantifiable analysis of three aspects of corporate performance: cash return on cash invested, industry positioning and management quality (the effectiveness of companies' management of the environmental, social and governance issues facing their industry).

Disclosures

Coverage group(s) of stocks by primary analyst(s)

Michael Peet: Australia-Small & Mid Cap. Laurence Parisi: Australia-REITs. Rohan Koreman-Smit, CFA: Australia-REITs, New Zealand-REITs.

Australia-REITs: Charter Hall Group, Charter Hall Retail REIT, Dexus Property Group, Goodman Group, GPT Group, Hotel Property Investments, Mirvac Group, Propertylink Group, SCA Property Group, Scentre Group, Stockland, Vicinity Centres.

Australia-Small & Mid Cap: A2 Milk Co., A2 Milk Co., Adairs Ltd., Bellamy's Australia Ltd., Blackmores Ltd., Bravura Solutions Ltd., Breville Group, Costa Group, G.U.D. Holdings, Gateway Lifestyle Operations Ltd., IDP Education Ltd., Ingenia Communities Group, Inghams Group, Lifestyle Communities Ltd., MYOB Group, Premier Investments Ltd., Reject Shop, Scottish Pacific Group, Sirtex Medical, Super Retail Group, Tassal Group, Tegel Group.

New Zealand-REITs: Argosy Property Ltd., Goodman Property Trust, Investore Property Ltd., Kiwi Property Group, Precinct Properties New Zealand, Property For Industry, Stride Stapled Group.

Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by the Global Investment Research Division of Goldman Sachs and referred to in this research.

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: Ingenia Communities Group (A$2.54)

Goldman Sachs had an investment banking services client relationship during the past 12 months with: Ingenia Communities Group (A$2.54)

Goldman Sachs had a non-securities services client relationship during the past 12 months with: Gateway Lifestyle Operations Ltd. (A$2.00), Ingenia Communities Group (A$2.54) and Lifestyle Communities Ltd. (A$4.31)

Distribution of ratings/investment banking relationships

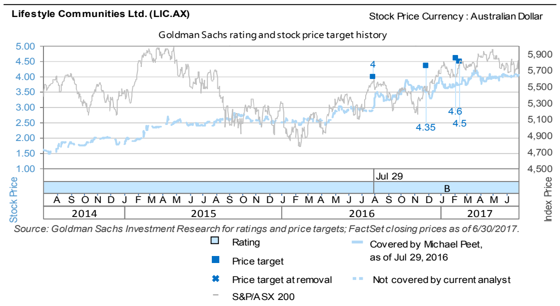
Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution			Investment Banking Relationships		
	Buy	Hold	Sell	Buy	Hold	Sell
Global	32%	54%	14%	65%	56%	49%

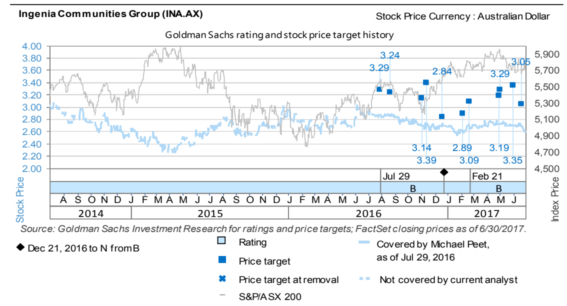
As of July 1, 2017, Goldman Sachs Global Investment Research had investment ratings on 2,753 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by the FINRA Rules. See 'Ratings, Coverage groups and views and related definitions' below. The

Investment Banking Relationships chart reflects the percentage of subject companies within each rating category for whom Goldman Sachs has provided investment banking services within the previous twelve months.

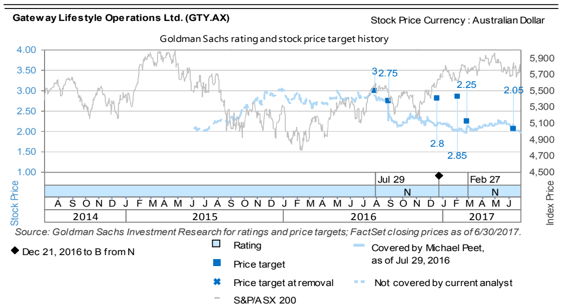
Price target and rating history chart(s)



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman, Sachs & Co. and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Distribution of ratings: See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at http://www.gs.com/research/hedge.html.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. **Australia:** Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of the Global Investment Research Division of Goldman Sachs Australia may attend site visits and other meetings hosted by the issuers the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. **Brazil:** Disclosure information in relation to CVM Instruction 483 is available at http://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 16 of CVM Instruction 483, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. **Canada:** Goldman Sachs Canada Inc. is an affiliate of The Goldman Sachs Group Inc. and therefore is included in the company specific disclosures relating to Goldman Sachs (as defined above). Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research report in Canada if and to the extent that Goldman Sachs Canada Inc. disseminates this research report to its clients. **Hong Kong:** Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. **Japan:** See below. **Korea:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. **New Zealand:** Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. **Singapore:** Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union: Disclosure information in relation to Article 4 (1) (d) and Article 6 (2) of the European Commission Directive 2003/125/EC is available at http://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan and Type II Financial Instruments Firms Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Ratings, coverage groups and views and related definitions

Buy (B), Neutral (N), Sell (S) -Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's total return potential relative to its coverage. Any stock not assigned as a Buy or a Sell on an Investment List with an active rating (i.e., a stock that is not Rating Suspended, Not Rated, Coverage Suspended or Not Covered), is deemed Neutral. Each regional Investment Review Committee manages various regional Investment Lists to a global guideline of 25%-35% of stocks as Buy and 10%-15% of stocks as Sell; however, the distribution of Buys and Sells in any particular analyst's coverage group may vary as determined by the regional Investment Review Committee. Additionally, each Investment Review Committee manages Regional Conviction lists, which represent investment recommendations focused on the size of the total return potential and/or the likelihood of the realization of the return across their respective areas of coverage. The addition or removal of stocks from such Conviction lists do not represent a change in the analysts' investment rating for such stocks.

Total return potential represents the upside or downside differential between the current share price and the price target, including all paid or anticipated dividends, expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The total return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

Coverage groups and views: A list of all stocks in each coverage group is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html. The analyst assigns one of the following coverage views which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and/or valuation. **Attractive (A).** The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. **Neutral (N).** The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C).** The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Not Rated (NR). The investment rating and target price have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. **Rating Suspended (RS).** Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. **Coverage Suspended (CS).** Goldman Sachs has suspended coverage of this company. **Not Covered (NC).** Goldman Sachs does not cover this company. **Not Available or Not Applicable (NA).** The information is not available for display or is not applicable. **Not Meaningful (NM).** The information is not meaningful and is therefore excluded.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce equity research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; in Canada by either Goldman Sachs Canada Inc. or Goldman, Sachs & Co.; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman, Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

European Union: Goldman Sachs International authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman Sachs AG and Goldman Sachs International Zweigniederlassung Frankfurt, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also distribute research in Germany.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman, Sachs & Co., the United States broker dealer, is a member of SIPC (http://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

The analysts named in this report may have from time to time discussed with our clients, including Goldman Sachs salespersons and traders, or may discuss in this report, trading strategies that reference catalysts or events that may have a near-term impact on the market price of the equity securities discussed in this report, which impact may be directionally counter to the analyst's published price target expectations for such stocks. Any such trading strategies are distinct from and do not affect the analyst's fundamental equity rating for such stocks, which rating reflects a stock's return potential relative to its coverage group as described herein.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options disclosure documents which are available from Goldman Sachs sales representatives or at http://www.theocc.com/about/publications/character-risks.jsp. Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data available on a particular security, please contact your sales representative or go to http://360.gs.com.

Disclosure information is also available at http://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.