



UNMASKING ASIA  
June 2016



Maybank Kim Eng

# THE SINGAPORE FIX



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## Unmasking Asia Thematic Research Series

### **Stress Test Series, September 2015**

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Hong Kong/China: The Devil's in the Details...

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The Philippines: Stress Cuts Profit But FCF Stays Positive

Singapore: The Growth Conundrum

Thailand: Barely Resilient

Vietnam: Timely Deleveraging

**Hong Kong/China Energy: Project Blue Sky, December 2015**

**Hong Kong/China Electric Vehicles: The Green Race, January 2016**

**ASEAN Infrastructure: The New Old Thing, April 2016**

**Singapore: The Singapore Fix, June 2016**

## *Thoughtful solutions...*





# The Singapore Fix

With sub-2% GDP growth expectations and EPS contractions for equities, Singapore is struggling. Some of the attributes that have been responsible for its success so far are, ironically, stifling its further growth. These include appreciating property prices, high wage growth, high savings rates and lower returns from overseas investments. While the government has been evolving steps to address these, we think that radical changes are called for - if not already afoot - to guard against a precipitous loss of Singapore's relevance to global markets.

## Too much property; curbs could turn permanent

Unless property prices plunge suddenly and dramatically, we think that property-cooling measures may not be lifted. Singapore households have SGD840b of capital or 209% of GDP tied up in residential property. This has resulted in lower disposable income which has impeded consumer spending and muzzled entrepreneurship. Another less obvious implication of property "overinvestment" is that home-price appreciation fuels wage inflation, reducing Singapore's cost competitiveness. We think turning property-cooling measures permanent could be an effective way to steer investments away from this asset class to more productive uses in the long run, which may be what the government is contemplating. As this would put developers at the losing end, we turn less bullish on the residential property sector and downgrade it to NEUTRAL. Wing Tai and CityDev are most exposed to Singapore's residential market. Additionally, given the knock-on effects on loan demand, continue to sell banks, which are already grappling with asset-impairment risks and likely fewer lending opportunities. OCBC and DBS are least preferred.

## Wage pressures: we think government will step in

Short-term relief to wage pressures is required, in our view, as wage growth has outpaced productivity gains. Wages now hit 43.4% of GDP. Historically, such levels preceded a recession, as in 1985, 1997 and 2000. Without intervention, retrenchments could rise. Although cutting CPF rates can offer a direct reprieve, it runs counter to concerns about retirement financial security and may be politically unpalatable. We think that the ideal solution may be for the government to co-pay wages and increase social spending. Businesses could receive a shot in the arm, especially those with high labour content.

## Boost consumption!

At 37% of GDP, Singapore's household consumption is one of the lowest among developed countries. What's more, it has been declining. If a diversion away from property investments and wage relief are successful, we foresee a consumption boost. Such domestic-led growth should be more desirable amid rising anti-globalisation sentiment in parts of the world. Consumer staples could offer the best exposure to this, we believe. We recommend Sheng Siong.

## Too little R&D? Expect more spending

The government is not without a long-term strategy. It has long emphasised the need to create value and innovate. Singapore's large pool of reserves painstakingly accumulated over the years makes up for its lack of natural resources. As FY16 is only the first year of the government's new 5-year term, we expect higher public spending ahead. Two initiatives could take centre stage: 1) **R&D support**; and 2) **the development of a Smart Nation**. R&D development would drive demand for business park and high-spec space: buy AREIT and MINT. Telcos should be natural beneficiaries of smart-nation development: buy Singtel and StarHub.

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## Go global: drop growth for yields

Growth aspirations and strong free cash flows have sent Singapore companies investing aggressively overseas since early 2000, with varying results. For instance, SingPost's overseas execution has been patchy. In our coverage universe, 36% of assets are now to be found outside the country. But many may not realise that Singapore's returns are higher than overseas returns, with China assets faring the worst. Beware of concentration risks in China. If Singapore can shed its preoccupation with property, we believe a floodgate of savings will target yields. In which case, Singapore Inc may be better off enhancing the value of existing overseas assets and ensuring future acquisitions generate robust free cash flows. SGX could be the capital market for yields in Asia.

**Fig 1: Valuation summary**

Company	BB Ticker	Rating	Price	TP	MC	ADTV	P/BV	P/E (x)			Dividend yield (%)			Net gearing (%)
			(SGD)	(SGD)	(SGD b)	(SGD m)	(x)	15	16E	17E	15	16E	17E	
Most preferred														
Sheng Siong	SSG SP	Buy	0.89	1.12	1.3	1.0	5.1	23.4	20.5	19.5	4.0	4.4	4.6	(52)
SingTel	ST SP	Buy	4.02	4.50	64.0	77.0	2.6	16.6	15.7	14.7	4.4	4.8	5.1	38
Starhub	STH SP	Buy	3.75	4.15	6.5	8.9	n.m.	17.4	18.3	17.7	5.3	5.3	5.3	n.m.
Ascendas REIT	AREIT SP	Buy	2.44	2.57	6.5	24.0	1.2	17.5	15.4	14.4	6.3	6.4	6.6	62
Mapletree Industrial Trust	MINT SP	Buy	1.74	1.78	3.1	3.7	1.3	16.4	15.6	14.3	6.4	6.4	7.0	39
Least preferred														
Wing Tai	WINGT SP	Hold	1.63	1.71	1.3	2.0	0.4	8.4	62.1	52.2	1.8	1.8	1.8	9
City Developments	CIT SP	Hold	8.23	8.92	7.5	19.0	0.8	9.7	11.4	14.2	1.9	1.9	1.9	27
DBS	DBS SP	Sell	15.54	13.40	39.0	84.0	0.9	8.8	9.1	8.9	3.9	3.9	3.9	n.m.
OCBC	OCBC SP	Sell	8.51	7.20	36.0	51.0	1.0	9.1	9.7	9.6	4.2	4.7	4.7	n.m.
SingPost	SPOST SP	Sell	1.48	1.29	3.0	11.0	2.6	12.8	20.7	18.4	4.7	4.7	4.7	9

Share prices as of 29 Jun 2016

Source: Bloomberg, Factset, Maybank Kim Eng



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The PROBLEM

1. Misallocation of capital to property
2. Wage growth has outpaced productivity gains
3. Consumer spending is too low
4. Mediocre results in value creation & innovation
5. Declining returns from overseas investments

The SOLUTION

1. Property curbs could turn permanent
2. Govt steps in to alleviate wage pressure
3. Consumption would be boosted
4. More public spending
5. Focus on strengthening existing assets. Go defensive

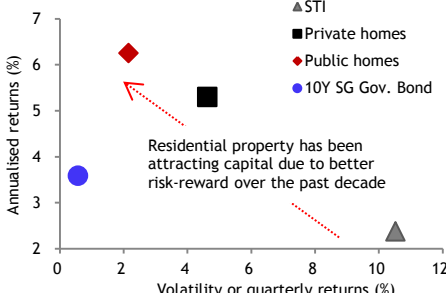
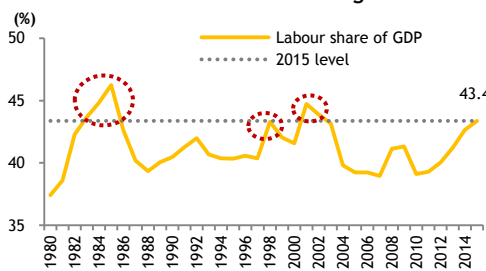
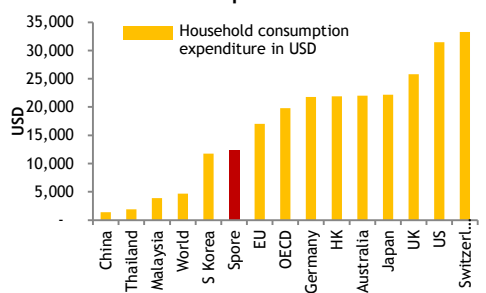
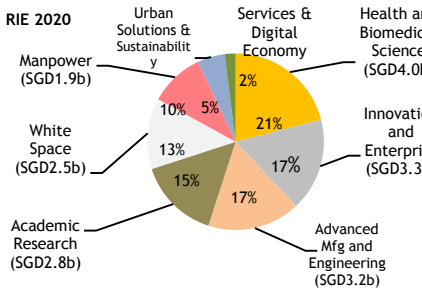
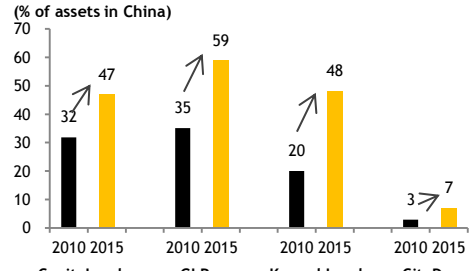
IMPLICATIONS

1. \$\$\$ flows into yield stocks & entrepreneurship
2. Businesses get short-term reprieve from lower wage costs
3. Consumer staples to get a boost
4. More spending on R&D and Smart Nation
5. Mature assets with steady cashflows & yields would be sought after

- x Cut back on PROPERTY stocks
- x Sell BANKS
- o Buy YIELD stocks
- o Buy CONSUMER stocks



Fig 2: Investment themes, implications and opportunities

Singapore's structural problems	Radical changes called for	Implications	How to play this?
<p><b>1: Property is attracting too much capital. At what expense?</b></p>  <p>Source: Bloomberg, URA, HDB, Maybank Kim Eng</p>	<p>➤ <b>Property cooling measures could be made permanent.</b></p> <p><u>Why?</u></p> <ul style="list-style-type: none"> <li>Over-allocation to property deters entrepreneurship and private consumption spending.</li> <li>Appreciating asset prices inflate wages, raising business costs and worsening rich-poor divide.</li> <li>Making property curbs permanent would suppress property prices and channel investments to more constructive areas.</li> <li>Banking-system robustness suggests softer property prices could be tolerated without inducing systemic risks.</li> </ul>	<ul style="list-style-type: none"> <li>Residential property prices could fall for a prolonged period of time</li> </ul>	<p><b>Positive:</b> Yield-centric capital markets in Asia</p> <p><b>Negative:</b> Property developers, banks</p>
<p><b>2: Labour's share of GDP is too high</b></p>  <p>Source: SingStats</p>	<p>➤ <b>Government could step in to alleviate wage pressures through co-payments</b></p> <p><u>Why?</u></p> <ul style="list-style-type: none"> <li>Productivity lags wage growth.</li> <li>Labour's share of GDP now at pre-recession levels.</li> <li>Direct CPF cuts not politically palatable.</li> <li>Lower rents may not provide sufficient relief.</li> <li>Limited scope for weaker SGD as that may trigger capital flights.</li> </ul>	<ul style="list-style-type: none"> <li>All businesses will get a short-term cost reprieve.</li> <li>Those with high labour content should benefit more.</li> </ul>	<p><b>Positive:</b> Companies with high labour content</p>
<p><b>3: Household consumption is too low</b></p>  <p>Source: SingStats</p>	<p>➤ <b>Consumer spending will be boosted.</b></p> <p><u>Why?</u></p> <ul style="list-style-type: none"> <li>Private consumption among lowest in developed countries.</li> <li>Boosting consumption and domestic-led economic growth is more desirable, amid growing anti-globalisation sentiment.</li> </ul>	<ul style="list-style-type: none"> <li>Money could be diverted to basic consumption spending.</li> </ul>	<p><b>Positive:</b> Consumer staples</p>
<p><b>4: Continued focus on R&amp;D &amp; innovation</b></p>  <p>Source: National Research Foundation</p>	<p>➤ <b>More public spending.</b></p> <p><u>Why?</u></p> <ul style="list-style-type: none"> <li>Singapore's huge reserves make up for lack of resources.</li> <li>R&amp;D &amp; innovation will keep Singapore relevant in an increasingly digital &amp; automated world.</li> <li>Could raise productivity and long-term competitiveness. Plus cut its reliance on unskilled foreign labour.</li> <li>Spending tends to be back-end loaded in the government's 5-year term.</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D focus may drive demand for industrial space.</li> <li>Telcos should benefit from smart-nation infrastructure development.</li> </ul>	<p><b>Positive:</b> Industrial REITs, Telcos</p>
<p><b>5: Overseas investments: concentration risk in a low returns country</b></p>  <p>Source: Companies, Maybank Kim Eng</p>	<p>➤ <b>Corporates should focus on enhancing existing assets and take less risk.</b></p> <p><u>Why?</u></p> <ul style="list-style-type: none"> <li>Overseas assets now make up 36% of overall assets.</li> <li>Singapore Inc.'s traditionally strong balance sheet has been compromised by hefty overseas investments.</li> </ul>	<ul style="list-style-type: none"> <li>Companies with quality assets, good cashflows and good yields will be sought after.</li> </ul>	<p><b>Positive:</b> REITs</p> <p><b>Negative:</b> Developers, conglomerates</p>

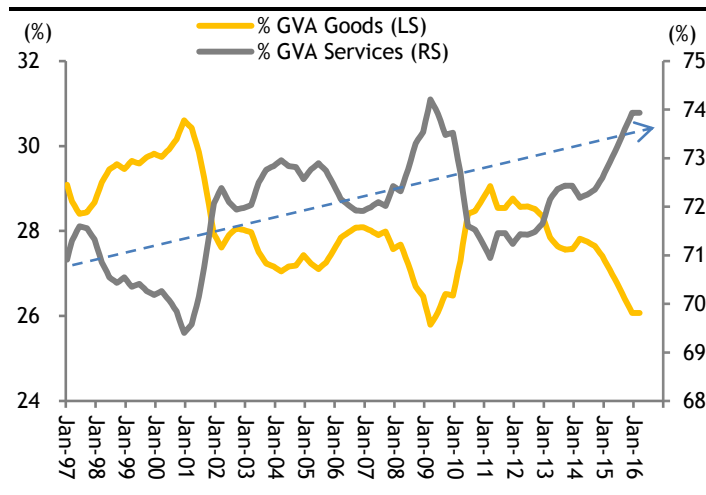
# 1. Economy & Equities: On A Slippery Slope

Singapore's economy has hit a wall. True to its tradition, the government has responded by convening a Committee of Future Economy to work out the best way forward. Recall previous task forces headed by Mr Lee Hsien Loong in 1985-86 & 2001-03 and Mr Tharman Shanmugaratnam in 2010, all of which were instrumental in proposing directional changes in government policies. This time around, Singapore's traditional economic engines are running out of steam. Seemingly more structural than cyclical, this is troubling.

## 1.1 Spate of downgrades in GDP forecasts...

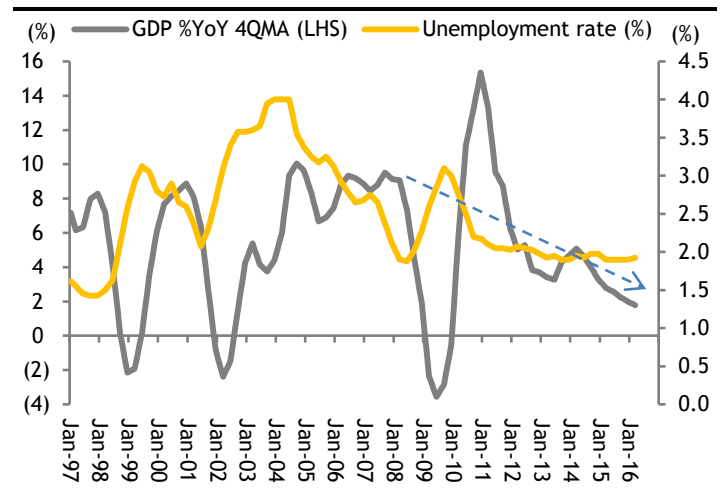
The Monetary Authority of Singapore's (MAS) Jun 2016 quarterly poll of 22 private-sector economists projects GDP growth of 1.8% for this year. This is down from 1.9% in Mar 2016. It is also the fifth downgrade in as many quarters: 2.2% in Dec 2015, 2.8% in Sep 2015, 3% in Jun 2015 and 3.1% in Mar 2015.

Fig 3: Transformation to a service economy



Source: SingStats, Maybank Kim Eng  
GVA = gross value add

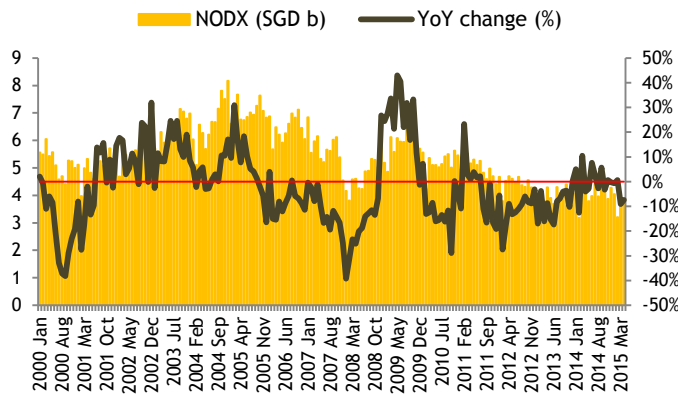
Fig 4: GDP YoY on a tapering trend



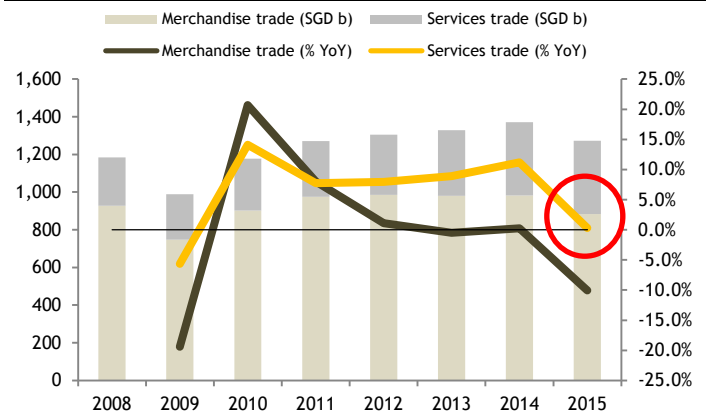
Source: SingStats, Maybank Kim Eng

## 1.2 ... whipsawed by exports

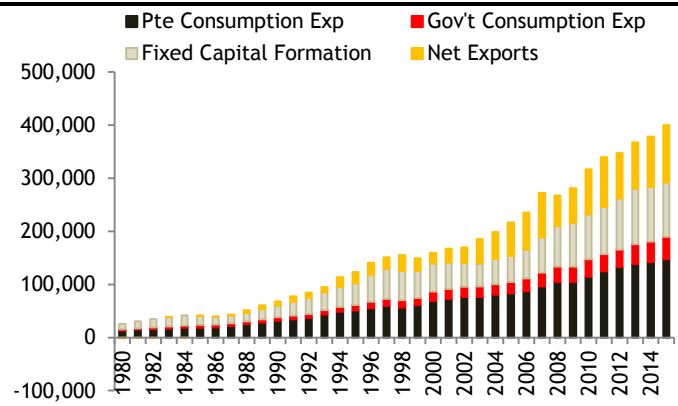
From the 1980s to the GFC, the Singapore economy was largely powered by its export sector. But paltry global demand after GFC has tamed its non-oil domestic exports. The recent collapse in commodity prices has also compressed trading values. Since 2007, exports have dropped to 24-27% of Singapore's GDP from their peak of 31%. Non-oil domestic exports after 2007 have been contracting more often than growing. Service trade, which has been taking up part of the slack, is petering out as well.

**Fig 5: Monthly NODX***More often contracting than growing*

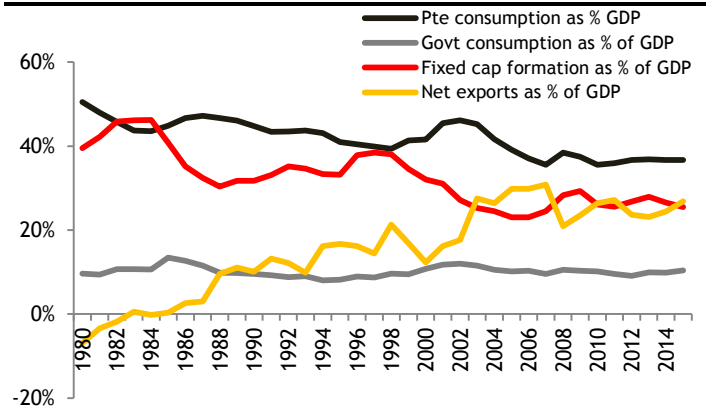
Source: SingStats

**Fig 6: Total trade***Service trade, which compensates for stagnant merchandise trade, is plateauing*

Source: SingStats

**Fig 7: GDP components by expenditure***Net exports and capital formation were increasingly large drivers of GDP, until GFC.*

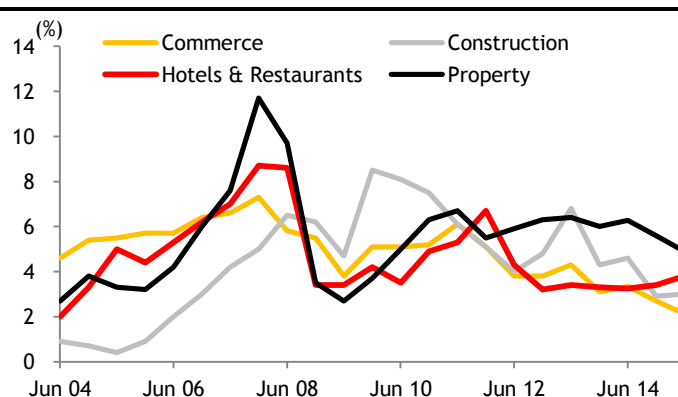
Source: SingStats

**Fig 8: Expenditure components as a percentage of GDP***Net exports have succumbed to flagging global growth and rising business costs.*

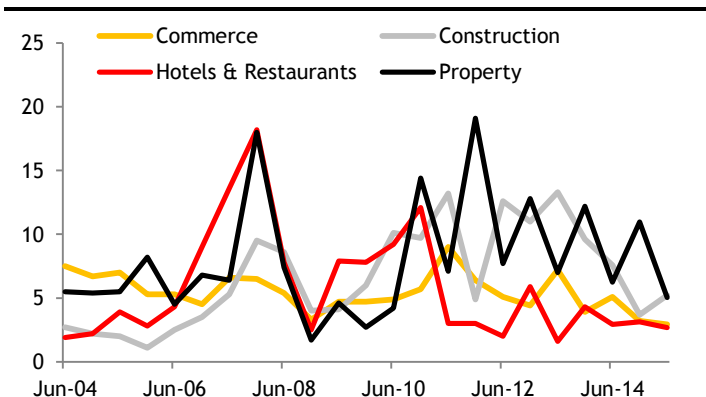
Source: SingStats

### 1.3 Pain felt in corporate sector

Scant revenue growth has been reflected in returns on assets and margin pressure in corporate Singapore for several years now. Declining ROAs and margins will affect ROEs. Not surprisingly, they are a disincentive to capital investments. Corporate liquidity has also tightened and interest coverage ratio slipped, suggesting asset-quality deterioration for the banking sector.

**Fig 9: Median ROAs**

Source: MAS, Maybank Kim Eng

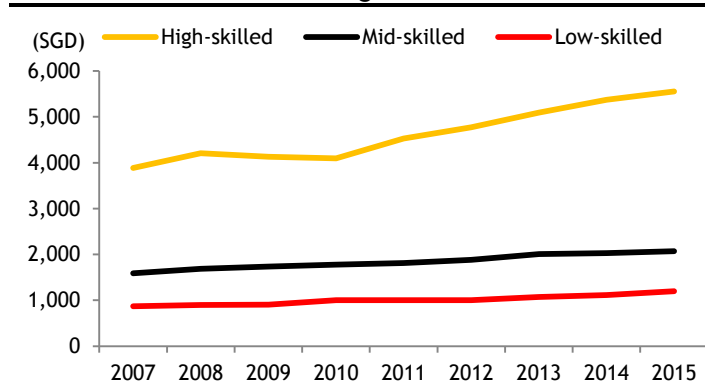
**Fig 10: Median interest coverage ratios**

Source: MAS, Maybank Kim Eng

## 1.4 Transformation journey begins

As with almost every open economy in the world after GFC, Singapore is now staring at a cocktail of cyclical and structural headwinds. Brexit will accentuate its risks and uncertainties. Sweeping changes in technology, particularly the emergence of disruptive technologies, have generated more volatilities and shortened business cycles. They throw up challenges and opportunities. Yet, anti-globalisation sentiment is on the rise, a decided threat to Singapore's open economy. A more nationalistic and confrontational China could also shape a different Asia. Unlike previous recessions, Singapore has to confront a new social paradigm, namely a rapidly greying population and a widening income disparity, with no easy and quick solutions in sight.

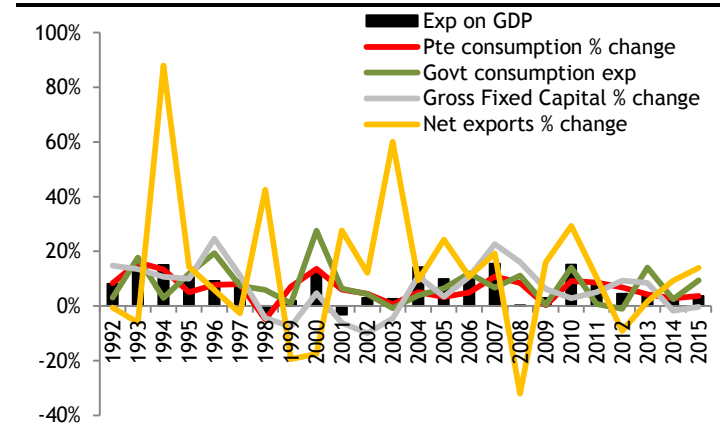
**Fig 11: Weighted gross monthly median wages: gap between skilled and unskilled is widening**



High-skilled comprises managers, professionals, technicians  
Mid-skilled comprises clerical & service workers, craftsmen & related trade workers  
Low-skilled comprises cleaners, labourers and related workers

Source: SingStats, Ministry of Manpower

**Fig 12: Vulnerable to the wild swings of a large external sector**



Source: SingStats

## 1.5 Equity market: nothing to write home about

Arguably, its equity market has fared even worse than its economy. Returns generated by the equity market, as measured by MSCI Singapore, have been shrinking. Recent returns are possibly below the yields of Singapore government securities with far higher risks and volatility to boot.

**Fig 13: MSCI Singapore's total returns since 1985, including dividends**

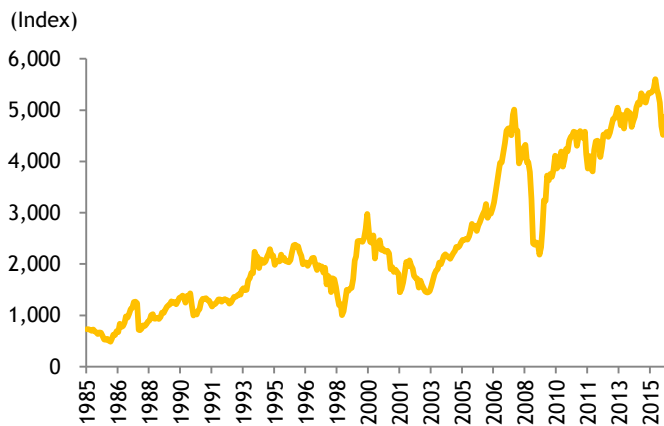
	1985-2015	1990-2015	1995-2015	2000-2015
MSCI Total Returns	6.54%	5.14%	3.95%	3.08%

Source: Bloomberg

In fact, equities as a whole should have fared much worse than index returns. Two episodes not captured by the index that massively destroyed wealth were the CLOB International debacle in 1998 and S-Chip rout in 2008.

## 1.6 EPS of index stocks weak since 2011

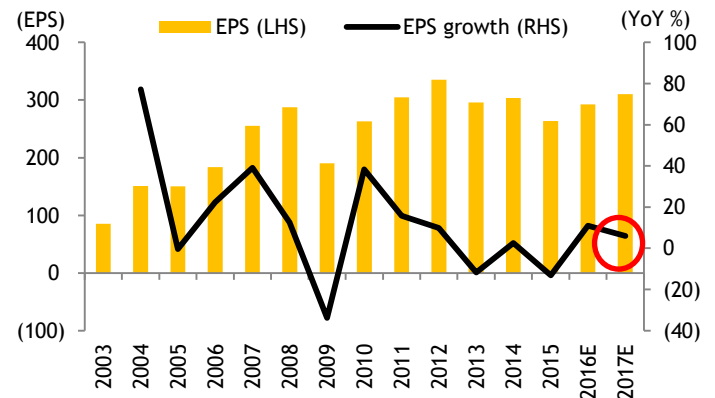
Using MSCI Singapore stocks as proxies, Bloomberg data show EPS contractions for Singapore Inc since 2013. This is despite the strong growth of banks which comprise 36% of the index by weight. In our view, the turnaround that consensus is expecting in 2017 is tenuous, suggesting more earnings downside.

**Fig 14: MSCI Singapore's total returns**

Source: Factset

**Fig 15: EPS trajectory of MSCI Singapore stocks**

Contracting since 2011. Consensus expects growth in 2017. We are not so sure.



Source: Factset

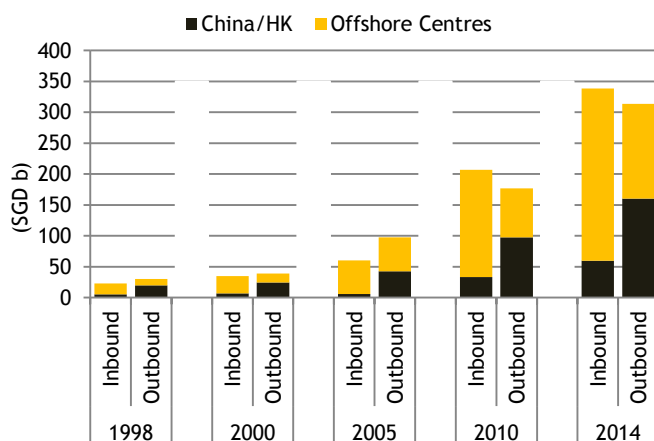
## 1.7 China headwinds for equities...

Beware China-concentration risks. In ASEAN, Singapore arguably has the most intricate linkages with China. Their close government-to-government ties filter all the way down to national and provincial levels. Singapore's GDP growth is closely intertwined with China's economic output. Its direct investments in Hong Kong / China are 26% of its outbound FDIs. More could be routed through offshore centres. Since 2013, Singapore has become the largest foreign investor in China.

In the other direction, China accounts for 6% of FDIs in Singapore. An additional one quarter of inbound FDIs is from various offshore centres, some of which may have originated in China.

**Fig 16: Inbound and outbound dollar investments from or to HK / China and offshore centres...**

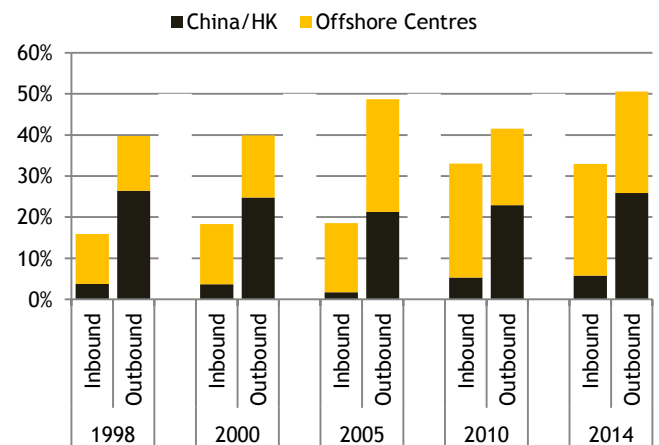
Singapore investments in HK / China and offshore centres with China as their final destination have grown by leaps and bounds



Source: SingStats

**Fig 17: ... and their percentage investments**

HK / China investments in Singapore appear small but a chunk is likely buried under investment holding companies in offshore centres



Source: SingStats

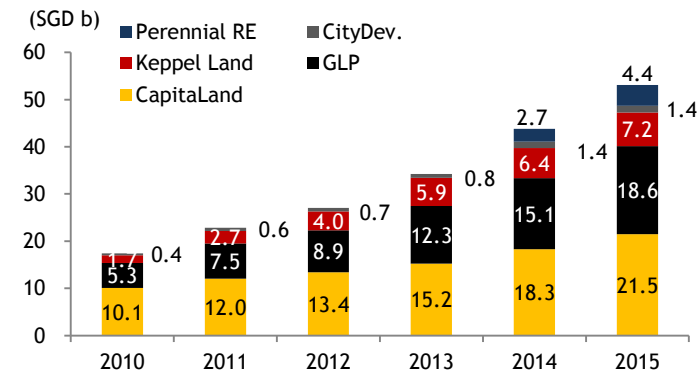
Developers, in particular, have disproportionately large exposure. Five in Singapore - CapitaLand (BUY, TP SGD3.93), GLP (Not Rated), Keppel Land (Private), Perennial RE (Not Rated) and CityDev (HOLD, TP SGD8.92) - had combined exposure of SGD53b to China as at end-2015. This dwarfed 2010's SGD17b. The actual amount was probably larger due to assets held off balance sheets in joint ventures.



For instance, Raffles City China Fund, which holds CapitaLand's developed integrated projects in China, is held off balance sheet. CapitaLand makes the best disclosures on its exposure to China, which had increased from SGD1b or 6% of its total in 2001 to over SGD21.5b by 2015 or 47% of its total.

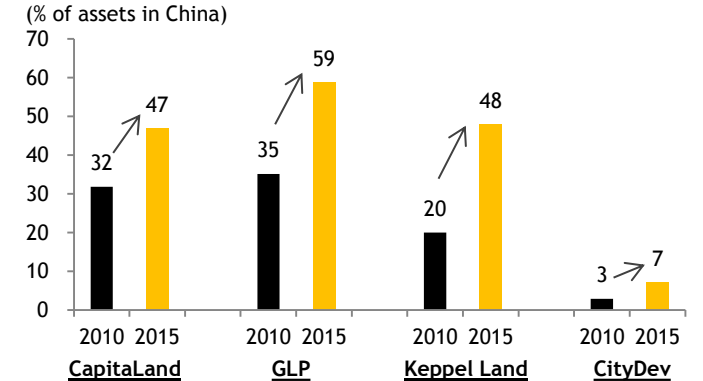
Conversely, Chinese companies have been snapping up Singapore listed companies, participating in government land sales and purchasing residential properties. But Singapore's outbound investments are more significant. We discuss some of the implications in subsequent sections.

**Fig 18: Value of assets in China**



Note: 1) Perennial RE was listed in 2014; 2) 2014 refers to FY3/15 for GLP  
Source: Companies, Maybank Kim Eng estimates

**Fig 19: Share of total assets in China (%)**



Source: Companies, Maybank Kim Eng estimates



## 2. Beware! Property curbs could turn permanent

- Hefty investments in residential property have fettered entrepreneurship and consumption.
- Also inflated business costs through wage inflation.
- We are increasingly convinced that property-cooling measures may not be lifted, in order to steer investments away from property to more economically-productive uses in the long run.
- Residential developers would be at the losing end & we turn less bullish, downgrading the sector to NEUTRAL.
- Given the knock-on effects on loan demand compounded by existing asset-impairment risks, sell banks too.

### 2.1 Fixation with real estate

Ex-Prime Minister Lee Kuan Yew's purpose of giving every citizen a stake in the country and its future may have served the country too well. Some 91% of Singaporean households now own their homes. Many, in fact, own more than one property.

Of the 50 richest Singaporeans identified by Forbes in its 2015 survey, an overwhelming number made their fortunes in part or in whole from real estate. This testifies that property has been the surest road to affluence, at least until now.

Rank	Name	Wealth (USD b)	Source
#1	Robert and Philip Ng	8.7	Real estate
#2	Kwek Leng Beng	7.2	Real estate
#3	Goh Cheng Liang	6.9	Paints, real estate
#4	Khoo family	6.4	Banking, real estate
#5	Wee Cho Yaw	5.45	Banking, real estate
#6	Eduardo Saverin	5.4	Facebook
#7	Kwee family	5.2	Real estate
#8	Richard Chandler	2.6	Investments
#9	Kuok Khoon Hong	2.55	Palm oil
#10	Raj Kumar & Kishin RK	2.4	Real estate

Source: Forbes, MKE

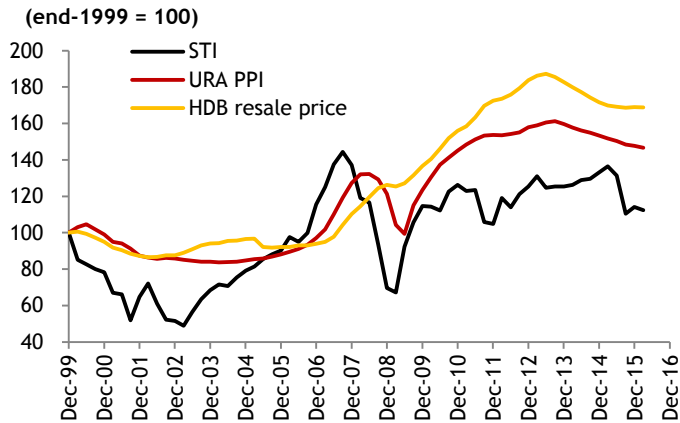
The general perception that residential properties make a good long-term store of value has led to a huge allocation of capital to this asset class. With this, residential properties have outperformed every other investment class, including the stock market, with lower volatility in returns. Investors in this class seem to take comfort that property values almost never fall to zero, unless their underlying leases run out, while the equity value of companies could be wiped out by a market downcycle.

**Fig 20: Physical price performances to end-2015**

Returns since end-	2012	2010	2005	2000	1999
(%)	3 years	5 years	10 years	15 years	16 years
Private homes: URA's PPI	(6)	2	68	49	48
Public homes: HDB Resale Price Index	(8)	8	83	78	69
Stock market: FSSTI	(9)	(10)	26	46	14

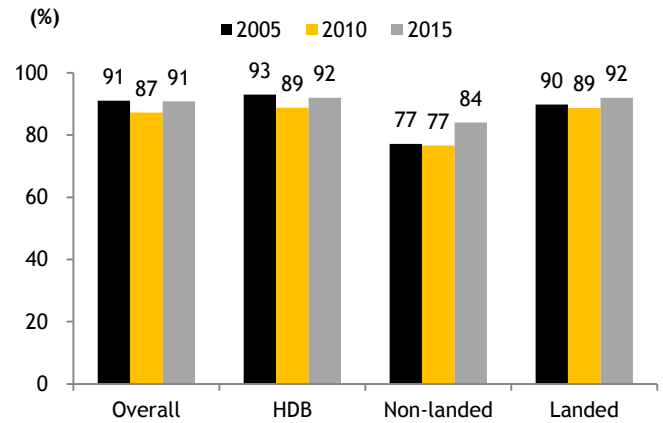
Source: URA, HDB, Bloomberg, Maybank Kim Eng

**Fig 21: Property has been generating positive long-term returns with lower volatility...**



Source: URA, HDB, Bloomberg, Maybank Kim Eng

**Fig 22: ... further encouraging high home ownership among Singaporeans**



Source: SingStats

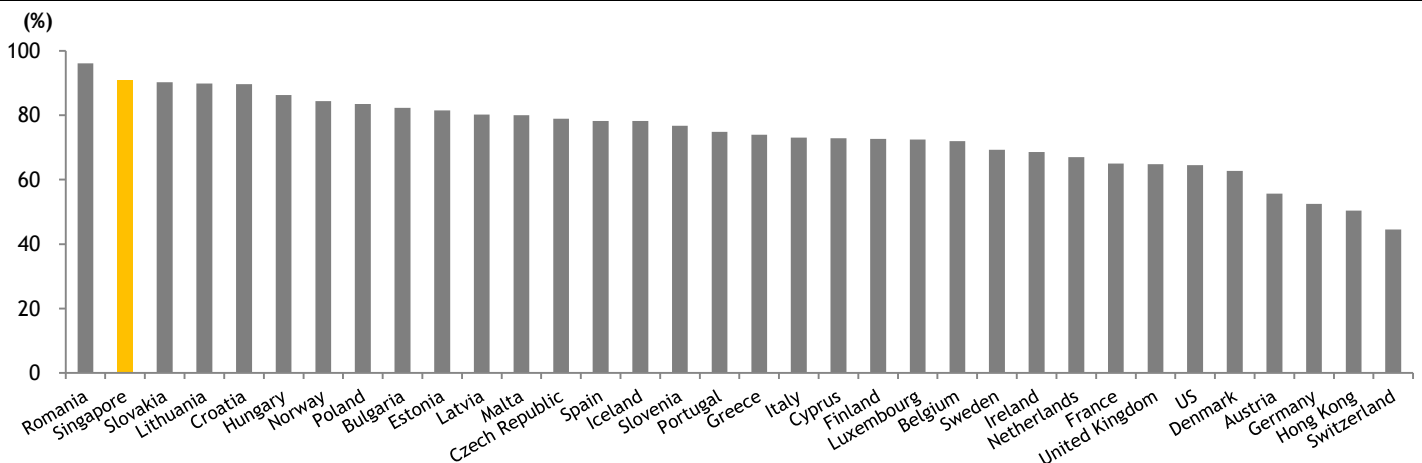
## 2.2 Money flows to assets with highest perceived returns

Singapore already has one of the highest home-ownership rates in the world. As if that's not enough, almost everyone aspires to be a landlord. This has led to the increasing use of residential property as investment assets, which accentuates the long-term uptrend in home prices as surplus capital gets channeled to it.

Despite a weakening rental market and paltry net property yields for this asset class in recent years, investors continue to buy into the sector, especially when prices dip. Net property yields for residential properties have not been great in recent history. The best yields were only 3.5% for prime homes, even when prices collapsed during GFC. They are currently at 2.63% for prime homes and 1.61% for luxury homes.

We believe that investor's willingness to accept such low returns stems from their entrenched belief in their assets' long-term capital-appreciation potential. Without further government intervention, this belief could be tested, as we head further into oversupply.

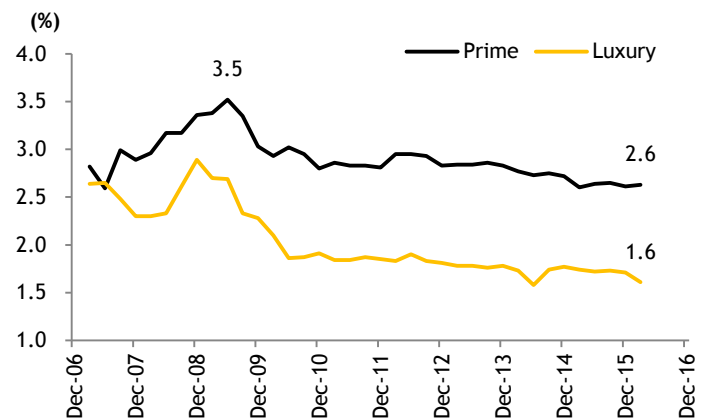
**Fig 23: Singapore has one of the highest home ownership rates in the world**



Source: Eurostats, US Census Bureau, Census and Statistics HK, SingStats, Maybank Kim Eng

**Fig 24: Net property yields**

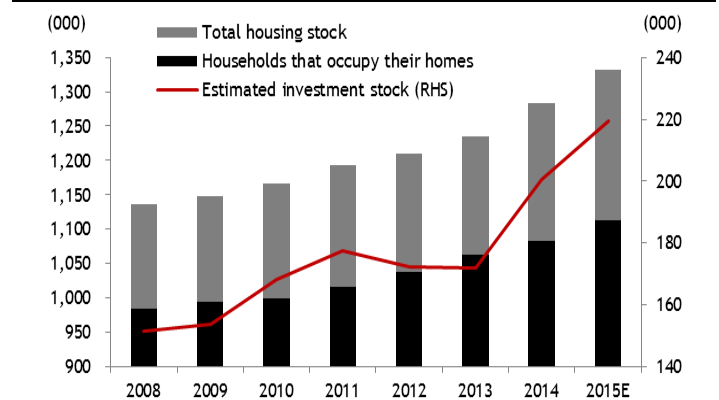
Fixation with property has pressed net property yields down to 2.6% for prime and 1.6% for luxury homes



Source: CBRE

**Fig 25: Estimated housing stock used as investments**

Actual numbers could be larger as each unit may be occupied by more than one household



# Assumes 1 household occupies one housing unit

Source: SingStats, HDB, URA, Maybank Kim Eng

## 2.3 Residential properties as an investment class

There are no public data on housing units held as investments but our estimates suggest a rising number. According to the *Department of Statistics*, 1.1m Singapore households own the homes they occupy. When overlaid against a total housing stock of 1.3m and assuming one housing unit is occupied by one household, our analysis suggests at least 0.2m housing units currently held as investments. The actual number could be larger as one unit can be occupied by more than one household.

## 2.4 CPF system encourages purchases...

Singapore has a state-managed savings plan known as the Central Provident Fund (CPF). All working adults are required to channel a portion of their salaries to this fund as a form of forced retirement savings. This reduces the amount of their disposable income during their working years, with the funds disbursed back to them only after their retirement.

During their working lives, purchasing a property is one of the few ways to access these CPF savings. By tapping into these funds and leasing their properties out, one can gain recurrent cash income throughout one's life. This encourages the use of CPF for property purchases. There are also fewer restrictions on the use of CPF savings for buying properties than other forms of investments. Under the current regime, CPF members can utilise only up to 35% and 10% of their investible savings for stock and gold purchases respectively. And they can only tap the funds after setting aside a minimum of SGD20,000 and SGD40,000 in their CPF's Ordinary and Special Accounts. In contrast, members can utilise all the funds in their Ordinary Accounts for property purchases with little or no restrictions. More capital is thus diverted to property via this system.

## 2.5 ... while sub-letting of public housing encourages property investments

We believe a policy change prior to the GFC encouraged residential property investments by HDB flat owners. In 2007, the government liberalised regulations to allow Singaporean HDB owners to lease out their entire flats after a minimum occupation period of 3-5 years. Many owners subsequently bought private properties while retaining their public housing for rental. In the eight years since the regulatory change in 2007, more than 51,000 HDB homes have been approved for leasing. While this

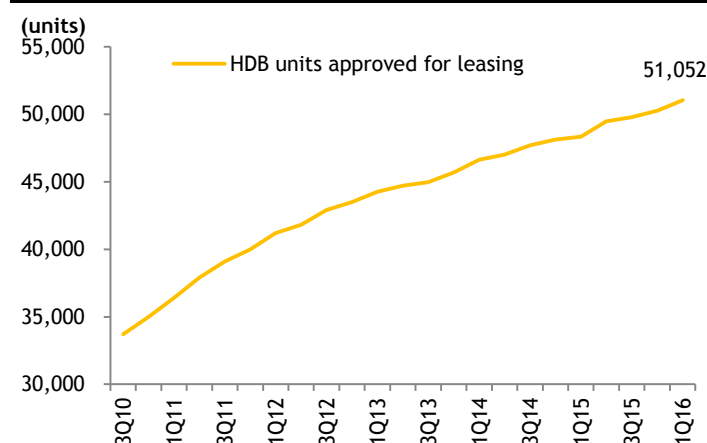


translates to just 4% of HDB stock, it accounts for a good 15% of total private-housing stock - the traditional investment class.

The ability to lease out entire HDB flats gives HDB owners the option to buy / live in a private property. On one hand, limited sellers in the HDB resale market have buoyed such resale-flat prices, up 49% from bottom to peak. This has been supported by upgrading and investment demand from HDB owners. As some HDB owners turn to private properties, mass-market private home prices also jumped 71% from bottom to peak. Prime home prices rose by a more moderate 41%.

**Fig 26: Over 51,000 HDB units have been approved for leasing today**

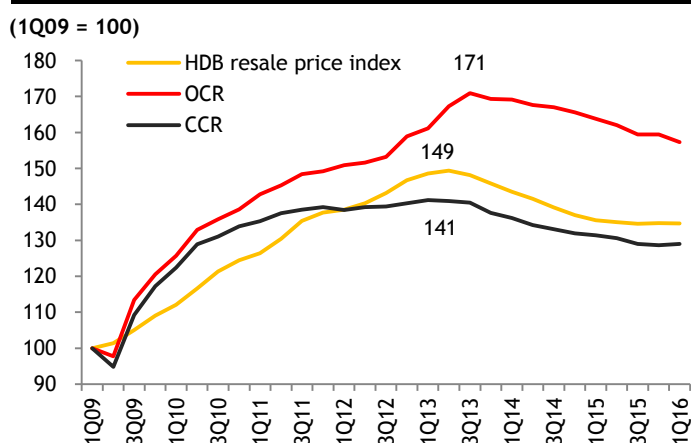
*Comprising 4% of HDB stock and equivalent to 15% of private stock*



Source: HDB

**Fig 27: Home-price trends**

*The ability to lease out HDB units has contributed to the strength of mass-market and HDB home prices after GFC*



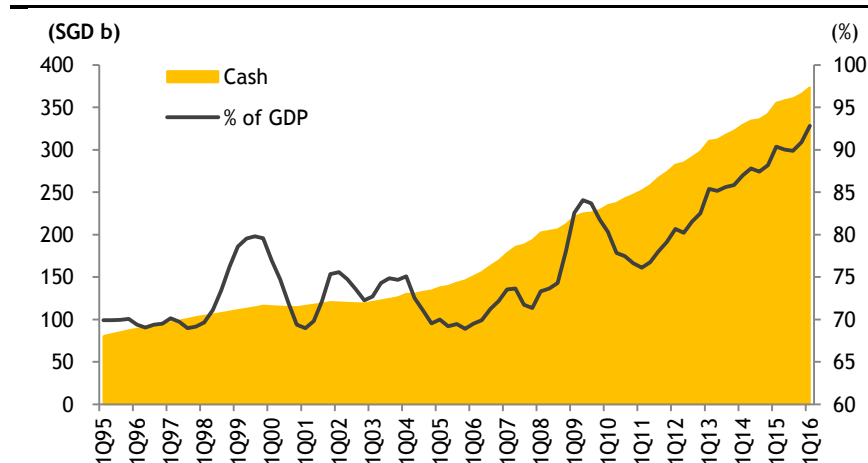
OCR = Outside Central Region, CCR = Core Central Region

Source: URA, HDB, Maybank Kim Eng

## 2.6 Cash stashed away for eventual plunge

Surplus cash is being stashed away for the day when property prices bottom. Singapore households are sitting on a cash pile of SGD374b, which has surged since property curbs were rolled out in 2009. We believe that residential properties are sucking in surplus capital, with an increasing number of Singaporeans buying their second and third properties. This is economically non-productive.

**Fig 28: Singapore households hold SGD374b of cash or 93% of GDP**



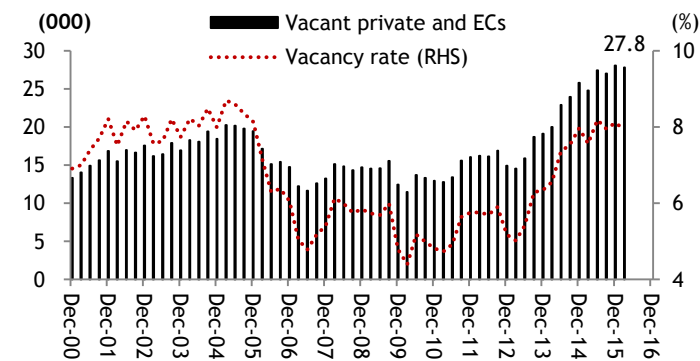
Source: SingStats, Maybank Kim Eng



## 2.7 Unproductive use of capital

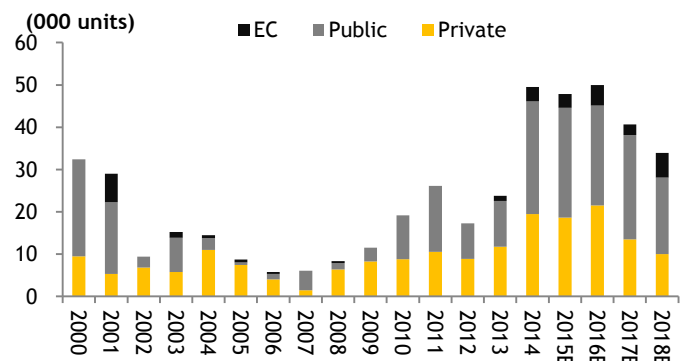
**Not just homes, but *vacant* homes!** The rising number of vacant homes in Singapore's residential market represents increasing wastage, in our view. Even before considering the large number of homes that would be completed in the next few years, Singapore already has a record number of private homes and ECs lying vacant. While no vacancy statistics are available for public housing, indicators for the broader market mirror this rising excess. Singapore's residential population to housing stock ratio is expected to plunge over the next few years. While part of this may be attributed to decreasing household sizes, the steep gradient of the decline also points to rising surplus, in our view.

**Fig 29: Rising vacancy in residential market**  
Almost 28,000 private homes and ECs are vacant now



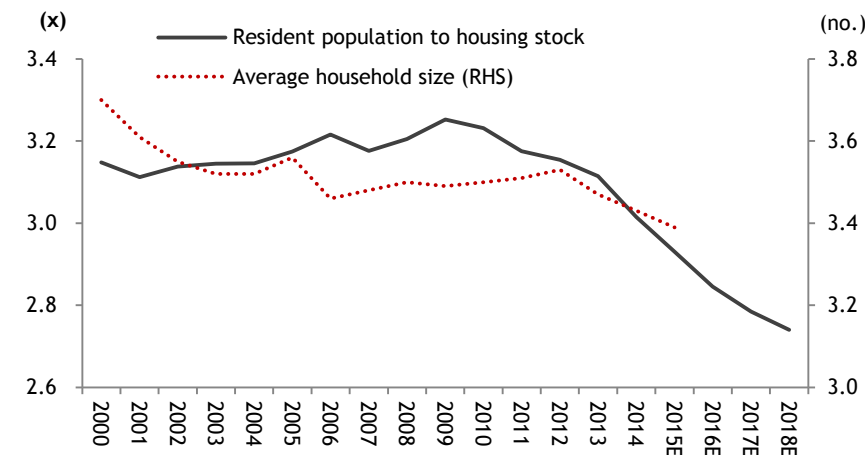
Source: URA, Maybank Kim Eng

**Fig 30: Net increase in housing stock**  
Vacancy should continue to rise as we build homes at record rates



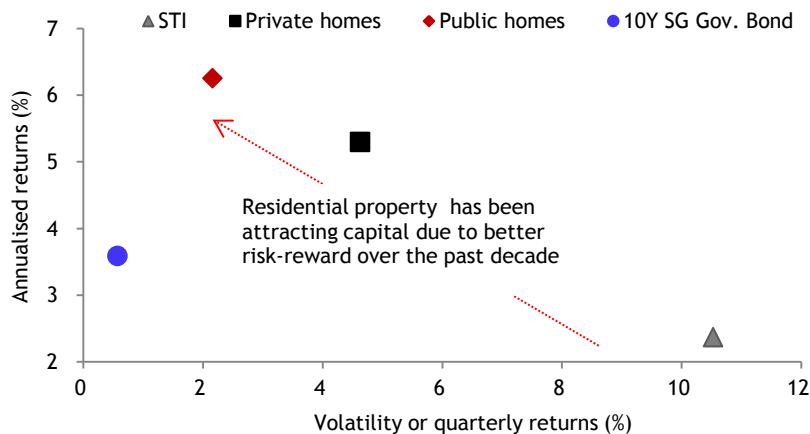
Source: URA, HDB, Maybank Kim Eng

**Fig 31: Residential population to housing stock**  
Steep decline implies more housing surplus in the next few years



Source: URA, HDB, Maybank Kim Eng

**Capital could rush back into property when cooling measures are lifted.** Another explanation for this country's infatuation with property is a favourable risk-reward trade-off for this asset class. In the past decade, public and private homes were able to generate better returns than the stock market, using FSSTI as a proxy, with lower volatility. This perceived record of good risk-adjusted returns implies that capital could flood back into property when cooling measures are lifted.

**Fig 32: Risk-reward in past decade***Residential properties offer higher returns at lower volatility than stocks**Refers to price returns excluding dividends or rental income for STI and residential properties**Source: Bloomberg, URA, HDB, Maybank Kim Eng*

### 2.7.1 Stranglehold on entrepreneurship

Borrowing for property purchases is easier to access and cheaper than for most other investment assets. If returns exceed those from competing investment assets and are yet accompanied by lower inherent risks as supply is largely regulated by the government, it is no wonder that every Singaporean aspires to put every marginal dollar of savings into properties. The casualty is entrepreneurship. One really cannot blame the pragmatic Singaporean from shying away from starting a business, when generating passive income requires so little effort.

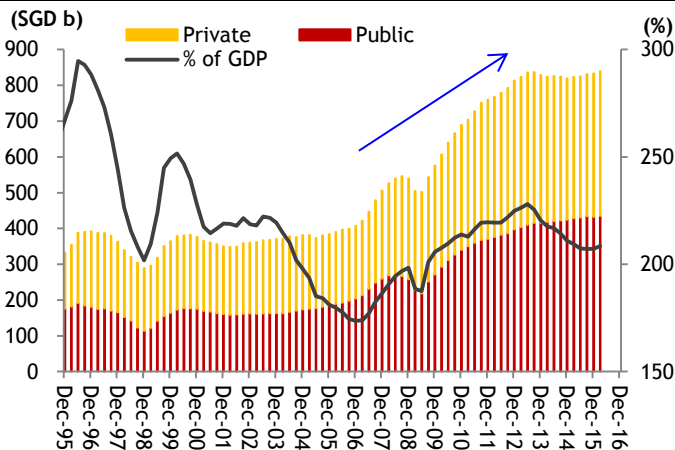
### 2.7.2 Drag on disposable income

Even after the recent retreat in home prices, Singapore households have tied up SGD840b of their capital in residential properties, a relatively illiquid asset class. At 209% of GDP, this seems to us a poor allocation of capital, which can be channelled to more productive uses.

The monthly cost to service property mortgages or pay rents has lowered disposable income for the population. According to the *Household Expenditure Survey 2013/13*, the average Singapore household incurred an occupancy cost of SGD1,181 a month. This comprised imputed rents of SGD1,047 and SGD135 spent on actual rents and translated to 20% of total household spending. Stoked by spiralling rents and property prices over the years, occupancy costs as a part of household spending climbed to 16% in 2007-2008 from just 13% in 2002-2003. This is consistent with our observations on per capita household consumption, which is lower in Singapore than other high-income OECD countries. Disposable income in Singapore appears to be eroded by higher occupancy costs.

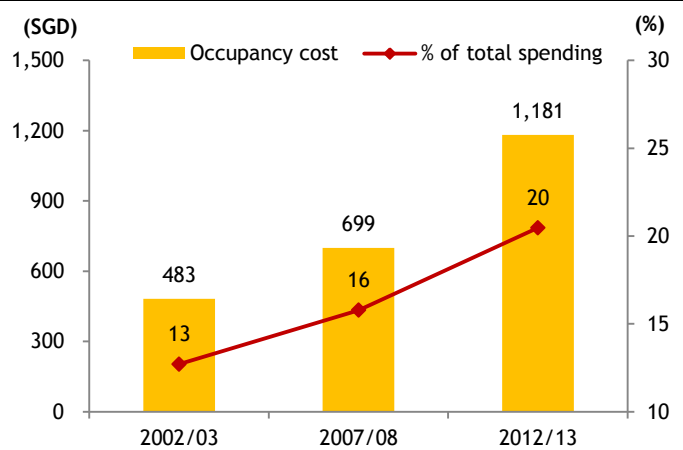


**Fig 33: Singapore households have SGD840b of capital or 209% of GDP tied up in residential properties**



Source: SingStats

**Fig 34: Rising property values have bumped up occupancy costs**



Occupancy costs = rental spending and imputed rents for owner occupiers

Source: SingStats, Maybank Kim Eng

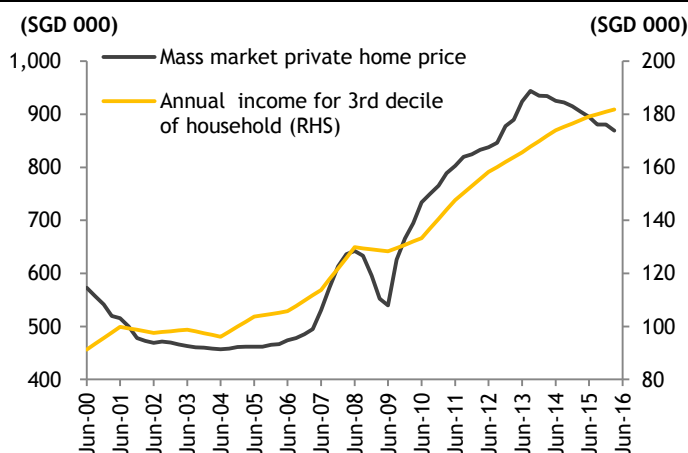
### 2.7.3 Impact on wage inflation

We believe there could be another ramification that may not have been fully appreciated. Conventional thinking suggests that property is derived demand. That is, higher household formation or income would increase its demand. As such, home prices tend to track income growth over time as the population can afford to pay more for their homes.

We believe the reverse is also true: higher home prices can lead to higher wages as well. There are at least three mechanisms for this. Firstly, higher home prices would fuel inflation, accentuating the pressure on nominal wages to keep up with real wages, at the very least. Secondly, income needs to rise for servicing higher mortgages or rents. This applies to both the resident and non-resident workforce as occupancy costs can represent a big bite of their spending. Thirdly, as 90% of households are home owners, a buoyant property market has enabled many young and smart Singaporeans to retire early and live on passive income. While wages need to increase to retain talent, we believe that escalating property prices impinge on Singapore's labour competitiveness due to the inflationary wage effects.

**Fig 35: Home prices vs household income**

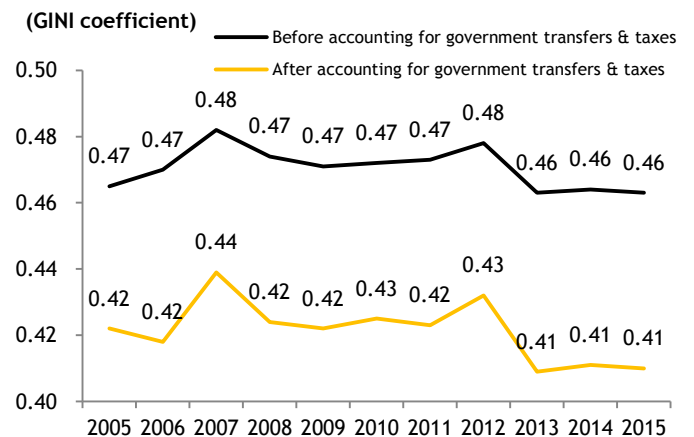
Did home prices rally in response to higher wages, or did higher home prices put upward pressure on wages?



Source: URA, SingStats, Maybank Kim Eng

**Fig 36: Stable GINI coefficient**

Does not explain wealth disparity, which can result from long-term increases in property prices



Source: SingStats



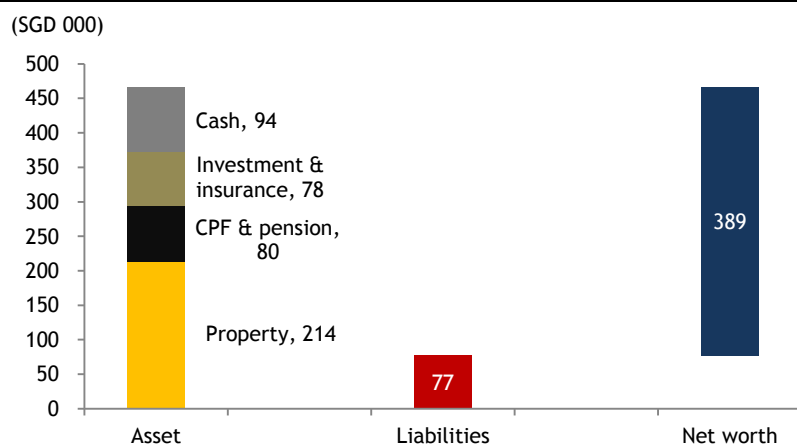
### 2.7.4 Could worsen rich-poor divide

The GINI coefficient measures the rich-poor divide in a country. Singapore's GINI stability suggests that its rich-poor divide has not changed much over time. While true, we believe the data only take into account income disparity and do not measure differences to wealth.

We believe that an ever-rising property market could exacerbate the rich-poor divide. If property is the asset class that generates the best returns, the average man on the street who struggles to own his home will be disadvantaged vs the rich who can afford multiple properties. The effects are self-perpetuating, as such assets are usually transferred to subsequent generations, widening the wealth gap in the long term.

**Fig 37: Net worth of an average resident**

*Residential property is a notable source of wealth, at almost half of Singaporeans' total assets*



Source: SingStats, Maybank Kim Eng

## 2.8 Our view: to fix capital misallocations, property-cooling measures should stay

To conclude, we believe that the prevalent use of residential properties as investment assets may reinforce a long-term uptrend in home prices. We also believe that the latter may lead to rising wage expectations that could impair our labour competitiveness and potentially widen the rich-poor divide.

To ensure Singapore's long-term survival, we believe that the government should not remove property-cooling measures. A sustained and gradual easing of property prices is necessary to restore business competitiveness, in our view. More crucially, Singaporeans need to be weaned from: 1) their age-old aspirations of becoming landlords earning passive rental income; 2) their entrenched belief that investment properties are the best asset class to hold; and 3) an assumed government "put option" on residential properties. If part of the monies that has been locked away in anticipation of a bottoming of the property cycle flows towards productive assets or even consumption, we believe entrepreneurship can be enhanced and thrive. The scenario we sketch above assumes that world economies do not sink into a deep recession and residential property prices do not tank precipitously. If they do, the government may have no choice but to lift its property curbs, to prevent systemic or contagion risks.



ABSD and various loan-to-value limits since 2010 for the purchase of second and subsequent homes were meant to curb the excessive use of residential properties as investments. At the time of their implementation, they were meant to be temporary. The TDSR framework introduced in 2013 to cap mortgage servicing at 60% of income is more widely expected to be a permanent feature. With softening home prices, the market has been calling for a review of the above. If the government shares our concerns and decides to discourage the use of residential properties as investments permanently, expectations of a lifting of cooling measures will not be met. While we believe property developers under our coverage have amply diversified their income sources and should be able to weather this, private and foreign developers that had bought land at elevated prices in recent years could take a bigger hit.

Refer to Appendix 2 for property-cooling measures.

### 3. Government to Alleviate Business Costs

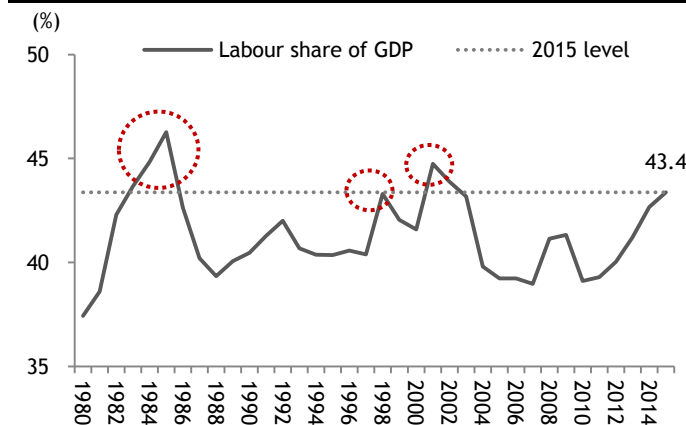
- Labour costs have hit 43.4% of GDP. Historically, this preceded a recession. Short-term relief for businesses may be needed.
- Scope for a weakening of the SGD nominal effective exchange rate to combat a loss of competitiveness is limited. We think MAS prefers a stable SGD to safeguard Singapore as a financial centre.
- Government may have to step in soon to alleviate business costs. Ideal solutions could be co-payment of wages and increased social spending..

#### 3.1 Wage inflation from labour shortages

The ongoing restructuring of the economy to focus on factor productivity rather than inputs has been retarding economic growth. While it is easy to curtail the intake of foreign workers, enhancing workers' productivity is another story. This can be a lengthy and frustrating process. A shift in national income distribution in favour of wages can be discerned but the accompanying productivity increases have not been as obvious. As a result, wage costs as a percentage of GDP have climbed. Gross operating surplus as a part of national income has been depressed to near recessionary levels, triggering concerns about competitiveness and disincentives to invest. Productivity, despite all the government's coaxing and investments, has not budged much. If wages climb some more, the government may be forced to provide cost relief for businesses, possibly through short-term co-payment of low-end workers' salaries.

**Fig 38: Labour's share of GDP is high at 43.4%**

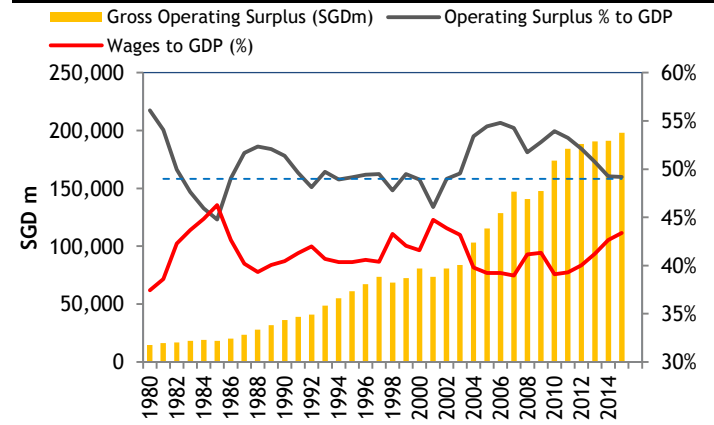
*Such levels in the past tended to precede recessions*



Source: SingStats, Maybank Kim Eng

**Fig 39: Gross operating surplus as a % GDP easing off**

*At 49%, this is at the low end of its historical range*



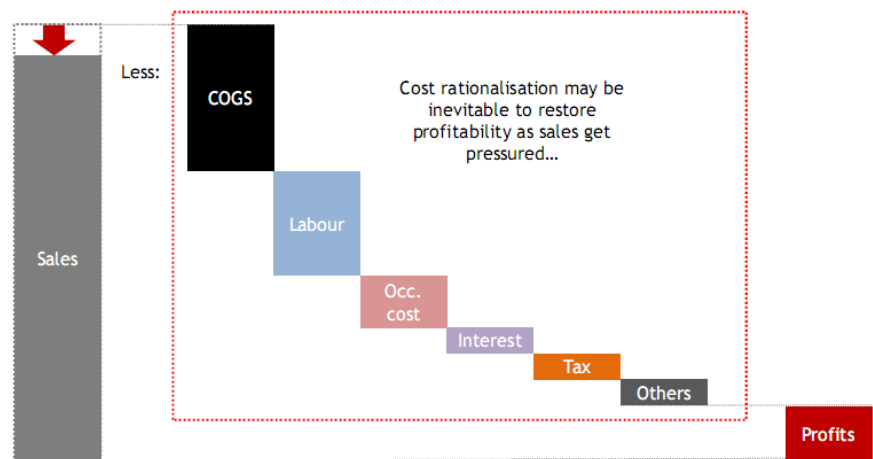
Source: SingStats

#### 3.2 Levers to pull

We investigate the cost composition of 37 companies with predominant exposure to Singapore and the various cost levers that may be pulled if their topline growth decelerates. As most are listed companies, there may be a bias in our analysis. And as the 37 companies are leaders in their fields, the financials of their respective sectors are likely to be worse off.



Fig 40: Given the pressure on their sales, costs need to be rationalised



Source: Maybank Kim Eng

Fig 41: Four ways to restore corporate profitability: which is the most effective?

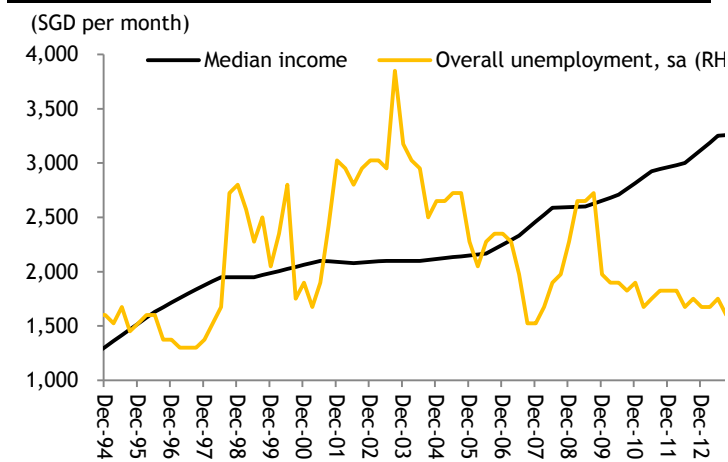
S/N	Actions and reasons	Possible actions	Pros	Cons
1	<b>Lowering labour costs</b> <ul style="list-style-type: none"> <li>Wage cost pressures a recurring theme in recent years.</li> <li>At 43%, labour costs as a share of GDP are high relative to history.</li> <li>84% of companies had higher labour costs to sales in 2015 than 2010.</li> <li>Productivity gains weak in recent years.</li> </ul>	<ul style="list-style-type: none"> <li>Lowering CPF contribution rates by employers could provide relief without hurting cash earnings.</li> <li>Increase factor inputs.</li> <li>Take in more foreign workers.</li> </ul>	<ul style="list-style-type: none"> <li>Immediate cost relief to Singapore Inc.</li> <li>Raise competitiveness.</li> </ul>	<ul style="list-style-type: none"> <li>Backtracking on target to raise wages over time.</li> <li>Potential political backlash.</li> <li>Will affect Singaporeans' ability to save enough for retirement.</li> </ul>
2	<b>Lowering property rents</b> <ul style="list-style-type: none"> <li>Occupancy costs have been trending up for Singapore Inc.</li> <li>Retailers have been hard hit, with many looking for an exit.</li> <li>Occupancy costs for CMT rose 2.7ppts over two years to 18.5% in 2015. Consistent with bottom-up data from retailers.</li> <li>Occupancy costs not that major for other sectors.</li> </ul>	<ul style="list-style-type: none"> <li>Even without intervention, an oversupplied office and retail market should bring rents lower.</li> <li>If government wants to engineer an even greater fall in rents, it may introduce more commercial space in future government land sales.</li> </ul>	<ul style="list-style-type: none"> <li>Cost relief to companies.</li> </ul>	<ul style="list-style-type: none"> <li>Benefits for sectors other than retailing may not be material.</li> <li>Erosion of land value - a key source of nation's wealth.</li> <li>Supply regulation takes too long.</li> </ul>
3	<b>Lowering taxes</b> <ul style="list-style-type: none"> <li>With a strong fiscal position, government has the capacity to lower taxes to provide cost relief to corporates.</li> <li>Income from the sale of government land in recent years is not factored into the typical budget.</li> </ul>	<ul style="list-style-type: none"> <li>Lower corporate income tax rates.</li> <li>Targeted grants or subsidies.</li> </ul>	<ul style="list-style-type: none"> <li>Immediate cost relief to Singapore Inc.</li> <li>Attract foreign investments.</li> </ul>	<ul style="list-style-type: none"> <li>May dip into national reserves.</li> <li>Only helps companies that are making money.</li> <li>Singapore already has one of the lowest corporate tax rates in the world.</li> </ul>
4	<b>Weakening SGD</b> <ul style="list-style-type: none"> <li>SGD strength has made Singapore less competitive than neighbours.</li> <li>Lower inflation provides leeway to weaken the currency.</li> </ul>	<ul style="list-style-type: none"> <li>Adjustments to policy band.</li> </ul>	<ul style="list-style-type: none"> <li>More attractive to foreign capital as a business destination.</li> </ul>	<ul style="list-style-type: none"> <li>Possibility of capital flight from the country.</li> </ul>

Source: Maybank Kim Eng

### 3.3 Wages at 43.4% of GDP a historical high...

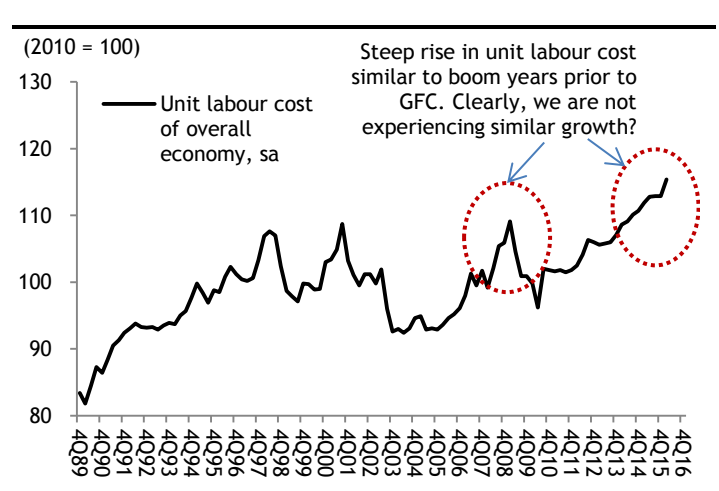
Wage pressures have been plaguing Singapore companies for several years. A lack of revenue-growth opportunities has not helped. In nominal terms, median wages rose by 33% between 2009 and 2015. This led to a higher labour share of 43.4% of GDP by 2015. AFC's level was only 43.3%. This implies that labour may be taking too large a share of the economic value-add relative to taxes and gross operating surplus.

**Fig 42: Median income has risen by 33% since 2009 amid low unemployment**



Source: Ministry of Manpower, Maybank Kim Eng

**Fig 43: Rising unit labour costs in Singapore**

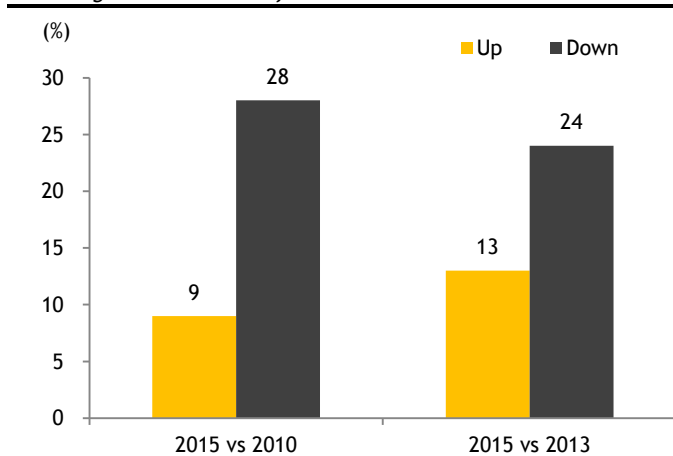


Source: SingStats, Maybank Kim Eng

### 3.4 ... explaining part of the margin pressure

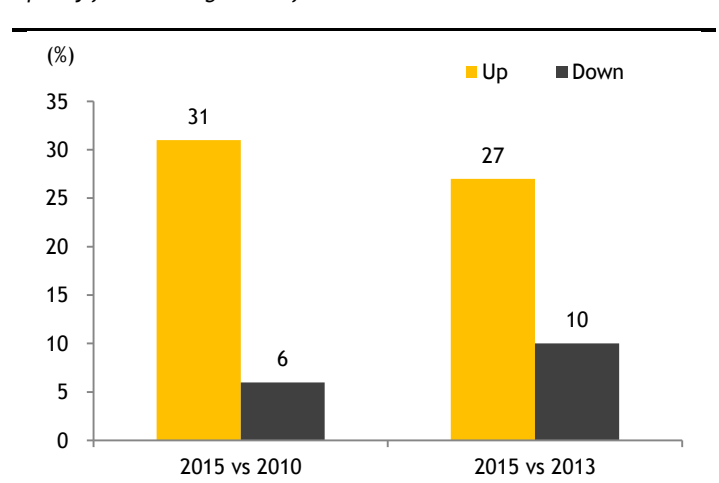
Bottom-up EBIT margins have declined for 76% or 28 of our 37 listed companies since 2010. Recall that these are companies with predominant Singapore exposure. Part of the erosion can be traced to higher labour costs. Some 84% or 31 of our 37 companies reported higher labour costs to sales ratios. With weakening profitability, we believe they will be scrutinising their labour costs more closely in the next few years.

**Fig 44: Changes in EBIT margins for our 37 listed companies with predominant Singapore exposure**  
EBIT margins have declined for most...



Source: Companies, Factset, Maybank Kim Eng

**Fig 45: Changes in staff costs as a % of sales**  
...partly from a rising share of labour costs



Source: Companies, Factset, Maybank Kim Eng

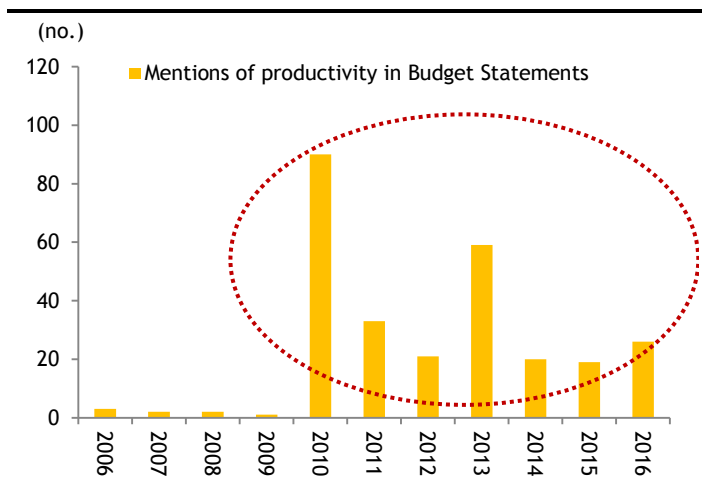
### 3.5 Productivity lags wages

Singapore's productivity efforts in recent years have not been anything to shout about. GDP growth has mostly been supercharged by additional factor inputs rather than factor productivity. But there are limits to such additions and the growth is clearly not sustainable. Compounding the problem has been its aggressive intake of foreigners, with stagnating low-end wages widening its income disparity.

In 2010, the government expressed its intention to lift median wages by 30% in real terms over the next 10 years. It rolled out programmes such as a Productivity and Innovation Credits scheme to spur productivity among Singapore companies. Productivity has remained the buzzword in every budget speech since. However, the results have been less than satisfactory. Apart from a surge in 2010, low productivity growth and even contractions have been observed. Unless productivity keeps up, we are sceptical about further wage growth. The overall wage bill may have to come down.

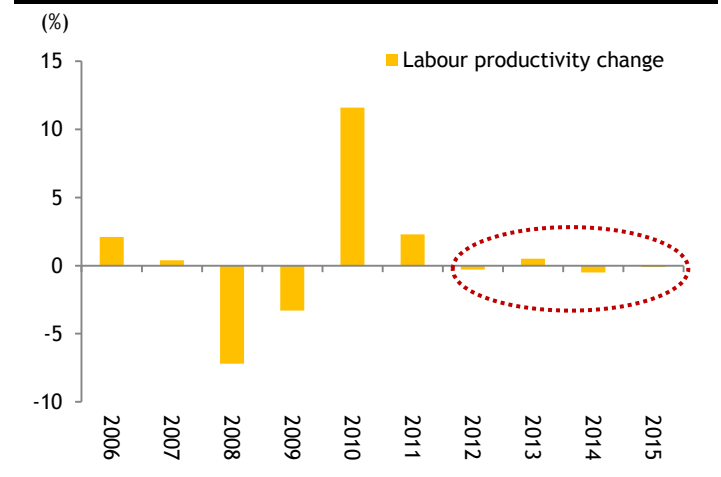
*"Real wage increases over the past few years have benefited workers and households. But unless productivity improves in tandem, we will be less competitive, and both businesses and workers will be worse off."*  
- Singapore Budget 2016

Fig 46: A continued focus on productivity



Source: Parliament of Singapore, Maybank Kim Eng

Fig 47: Low or lower labour productivity could create a ceiling for wages



Source: SingStats

### 3.6 Precision needed to manage problem

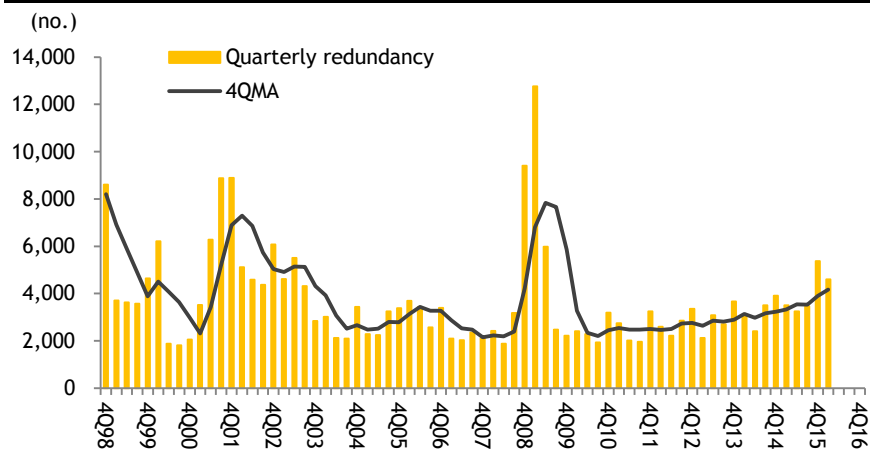
Longer term, Singapore likely has no choice but to raise its productivity to sustain its high labour share of GDP. We see this as the only way it can maintain wages for its people.

To spur innovation and productivity, the government may need to keep spending on R&D. At the same time, it may need to step in to ease current wage pressures, or risk escalating retrenchments if businesses are left to their own devices to adjust. There are various ways to lower wage bills in Singapore. Lowering CPF contributions may be the least painful as it could leave cash earnings intact. We think this remains an option if economic conditions degenerate badly. CPF contribution rates were cut in 1986, 1999 and 2003, about 1-2 years after labour's share of GDP breached current levels.

But cutting CPF rates is politically unpalatable unless an epic global crisis strikes. Direct wage cuts are also deflationary and could curtail disposable income and consumer spending, not desirable when consumer confidence is already fragile. **We believe the co-payment of wages or more social spending are possible, potentially benefiting consumer companies.**

*"The economic restructuring is expected to ultimately raise capital-labor ratios and productivity growth but is subject to transitional costs in the near-term. The magnitude of these transitional costs, and the speed with which long-term gains in investment and productivity are realized, will have an important bearing on potential growth and inflation."* IMF

**Fig 48: More workers could be made redundant if wage pressures are not relieved**

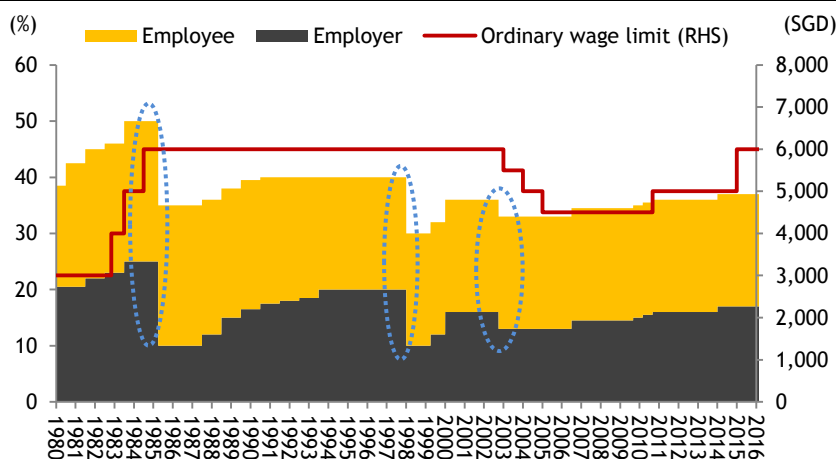


Note: Data from 2006 include public sector.

Source: Ministry of Manpower, Maybank Kim Eng

**Fig 49: CPF contribution rates in the past**

Cuts in 1986, 1999 and 2003 provided breathing space to companies. Cannot be ruled out if economic conditions worsen dramatically.



CPF contribution rates for non-pension employees aged 35 and below

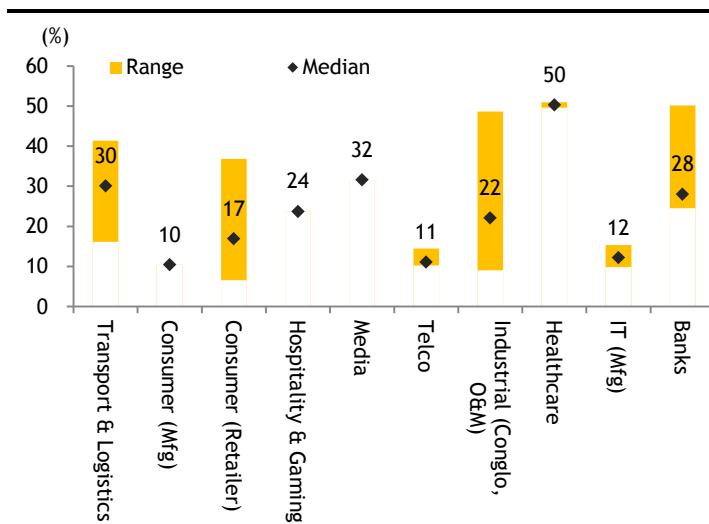
Source: CPF, Maybank Kim Eng

### 3.6.1 Beneficiaries of smaller wage bills

Companies with high labour charge-outs should benefit if their wage bills are cut. These include SMRT with labour charges at 41% of its sales, SIA Engineering at 42% and SATS at 49%. In healthcare, Raffles Medical (50%) could benefit more than Q&M Dental (51%), as Q&M's compensation is commission-based. Elsewhere, the three local banks only spend a quarter of their revenue on labour.



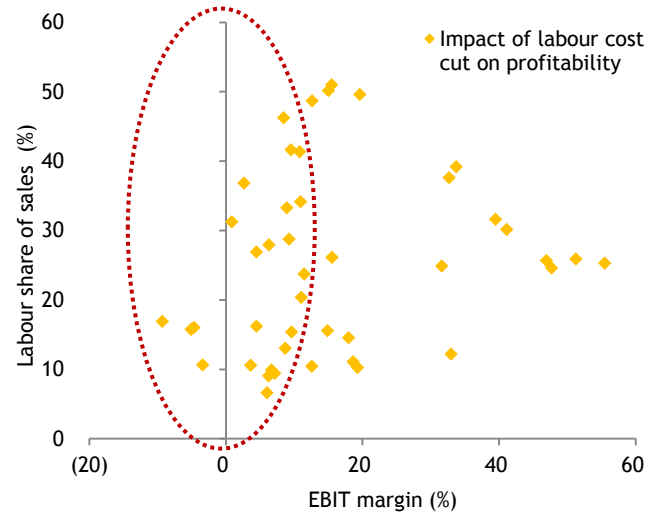
Fig 50: Staff cost as a % of sales



Source: Companies, Factset, Maybank Kim Eng

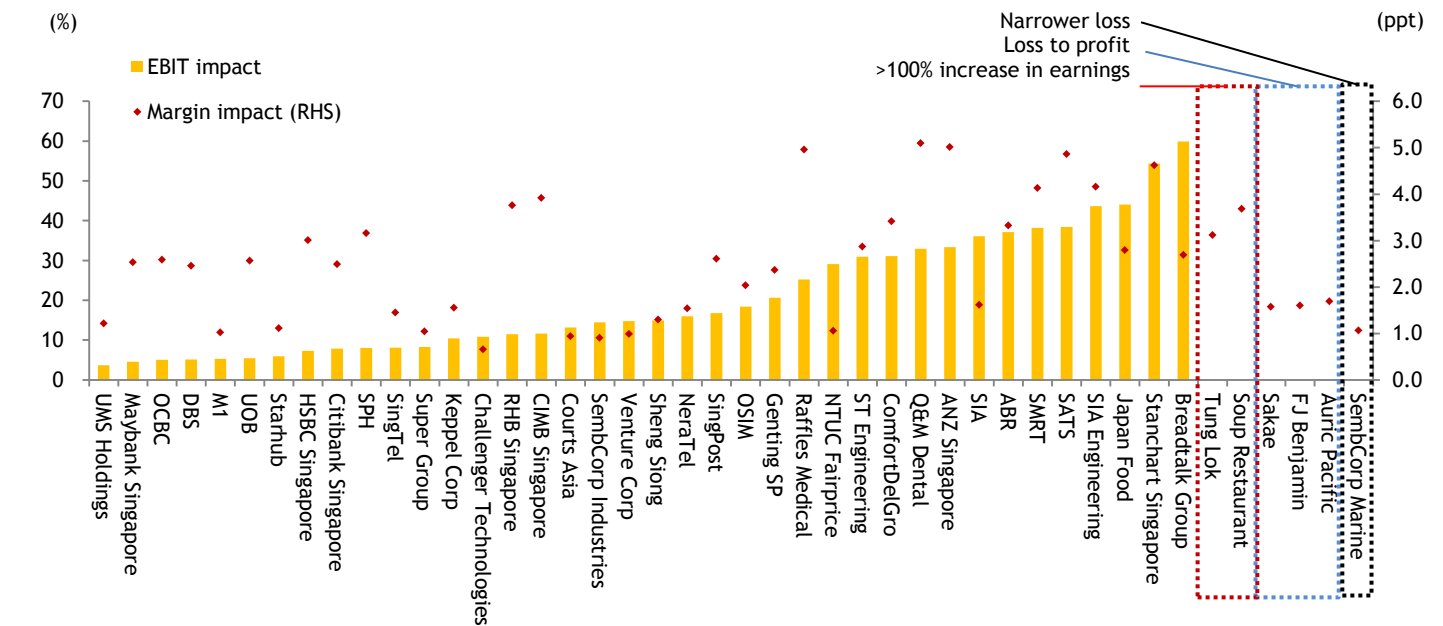
Fig 51: Labour vs margins for our 37 companies

Greatest relief for loss-making or low-margin businesses with high labour charge-outs



Source: Companies, Factset, Maybank Kim Eng

Fig 52: Impact of a 10% cut in labour costs on EBIT



Source: Companies, Factset, Maybank Kim Eng

### 3.7 Lowering property rents

High rentals are a common bugbear. In our review of the 37 companies, we attempted to isolate operating-lease and depreciation costs for buildings and land to gauge their occupancy costs. Where disclosures are lacking, we have included operating leases. However, the impact is usually not significant. With the exception of retailers, occupancy costs appear to account for less than 6% of sales. This implies that big discounts in property rents may not provide major relief for Singapore Inc.

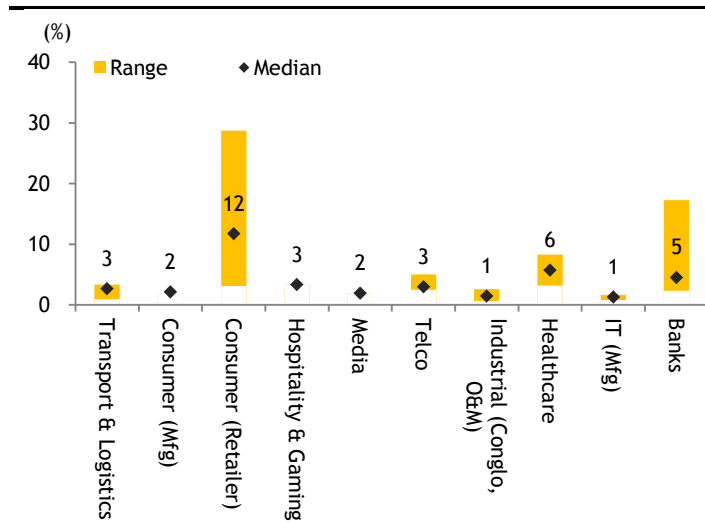


**What about the retailers?** Even for retailers, occupancy costs as a percentage of sales can vary widely, according to their trade mix. For supermarkets and IT retailers, rents tend to form a low share of sales. Occupancy costs affect restaurants and garment retailers much more. Then again, the impact is highly dependent on the ability of the retailers themselves to generate turnover. Depending on their tenancy agreements, some retail landlords take a cut of retailers' sales as variable rents. As the charts below suggest, median occupancy costs account for 12% of sales in our sampling of retailers. This is quite a fair amount against their median EBIT margins of only 4%.

An interesting data point is CapitaLand Mall Trust's (SELL, TP SGD1.97) disclosure that occupancy costs for its tenants rose by 2.7ppts over two years to 18.5% in 2015. The trust is Singapore's largest retail REIT. This information is consistent with our data, where 85% or 11 of our 13 retailers reported a higher share of occupancy costs.

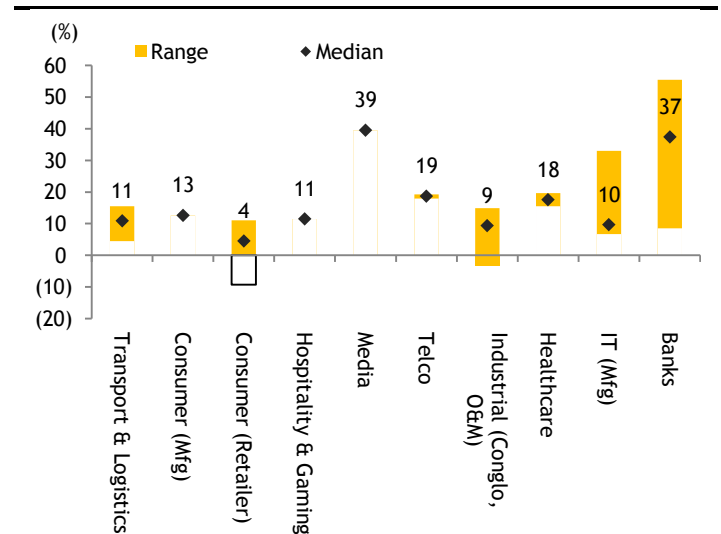
**Rents not that consequential for banks.** We next investigated occupancy costs for banks in Singapore to assess the impact on office landlords. Insurance and financial institutions account for 30-50% of the demand for office REITs. Against a median 37% EBIT margin for banks, the median occupancy cost of 5% of sales is not exorbitant. Furthermore, with the exception of RHB Singapore, occupancy costs in our sampling of banks account for less than 10% of their income.

**Fig 53: Occupancy costs as a % of sales for companies**



Source: Companies, Factset, Maybank Kim Eng

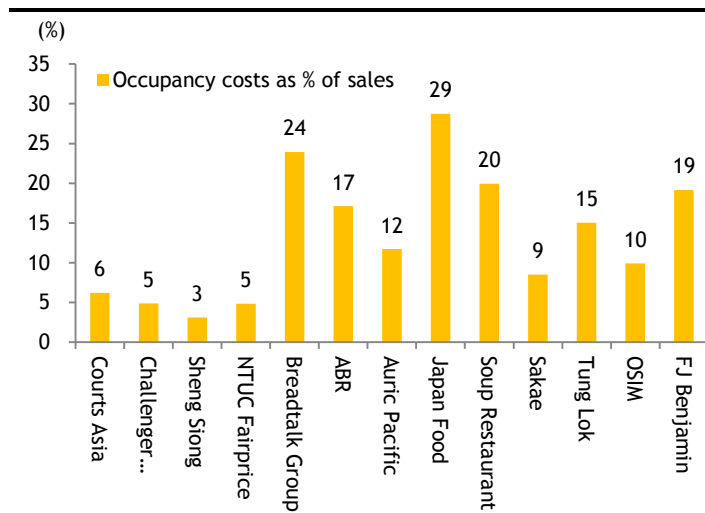
**Fig 54: EBIT margins**



Source: Companies, Factset, Maybank Kim Eng

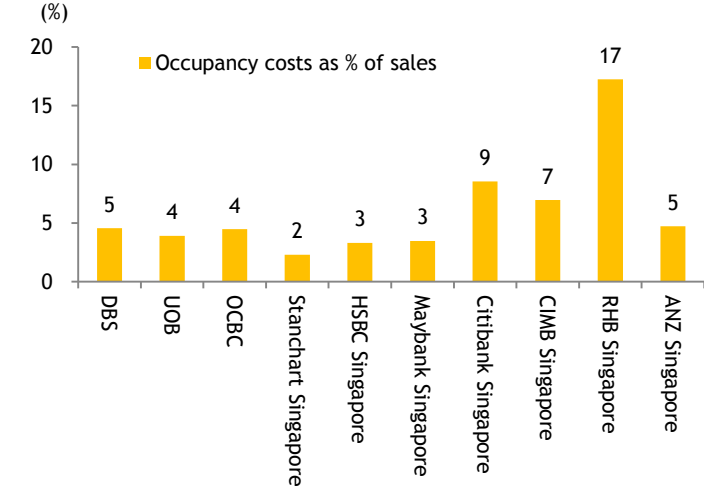


Fig 55: Occupancy cost as a % of sales for our 13 retailers...



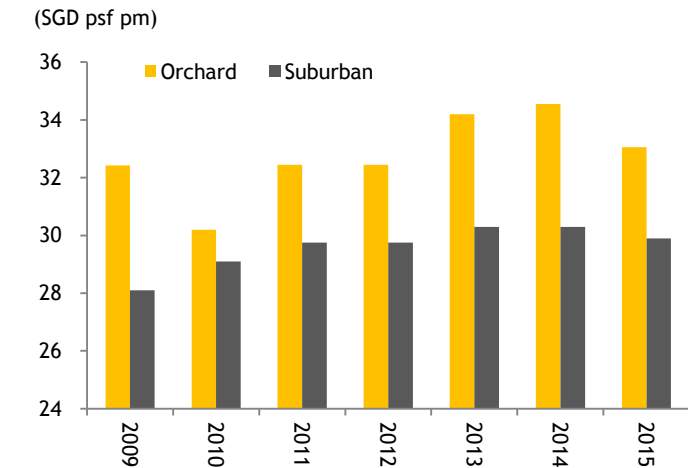
Source: Companies, Factset, Maybank Kim Eng

Fig 56: ... and for our sampling of banks in Singapore



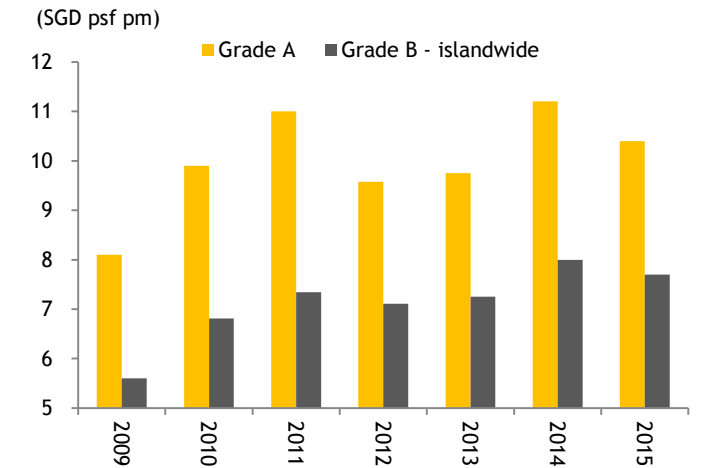
Source: Companies, Factset, Maybank Kim Eng

Fig 57: Prime retail rents



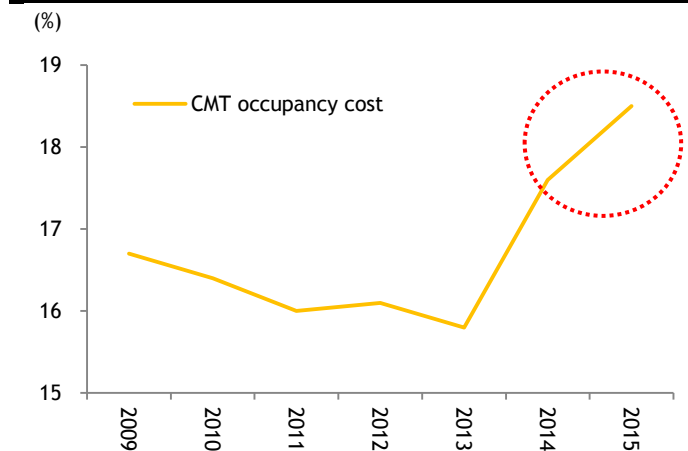
Source: CBRE

Fig 58: Office rents



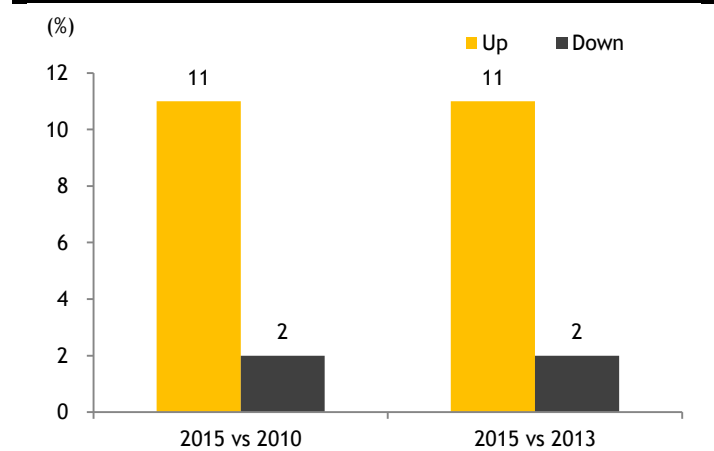
Source: CBRE

Fig 59: Occupancy costs for tenants of CapitaLand Mall Trust Have surged in recent years...



Source: Companies, Factset, Maybank Kim Eng

Fig 60: Changes in occupancy costs as a % of sales for retailers ... ditto for our basket of retailers



Source: Companies, Factset, Maybank Kim Eng



### 3.7.1 Rents could fall even without further measures

Even without further intervention by the government, we already see downside for retail rents. Oversupply in the office and retail-space markets should be the main culprit. If the government wishes to engineer even lower prices, it could introduce more commercial space to its confirmed list of future land sales. But this would take too long to influence prices on the ground.

## 3.8 Limited monetary tools

The SGD nominal effective exchange rate (NEER) is the policy tool wielded by the MAS to balance medium-term price stability with long-term economic growth. Amid heightened external uncertainties and shifts in geopolitics, the MAS could place even greater emphasis on SGD NEER stability. If so, the scope for large downward adjustments to SGD to regain economic competitiveness is extremely limited, in our view.

The MAS's management of SGD NEER has historically been asymmetrical. When there are overheating risks, the MAS typically allows the SGD to strengthen against the basket of currencies it is benchmarked to. During the economic troughs of 1998, the early 2000s and GFC, the MAS opted for policy neutrality as a stable SGD was deemed crucial for inspiring confidence in its highly open economy.

Instead, budgetary tools were deployed to lower business costs and provide short-term relief. Three reasons for this: 1) Singapore's high imports for both consumption and production. Any imported inflation from a weaker SGD would erase benefits of a soft currency; 2) lowering effective wage costs or taxes is thought to have a more decisive impact on enhancing competitiveness; and 3) destabilising the SGD may trigger capital flights and endanger Singapore's financial-hub status. Heightened risks after Brexit could reinforce the MAS' determination to maintain SGD stability.

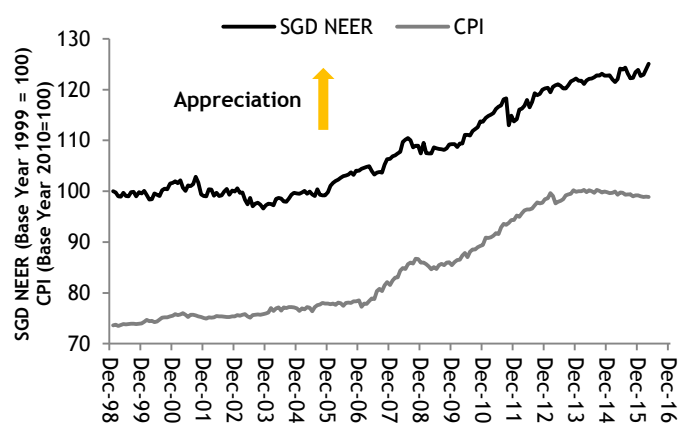
Since Apr 2004, except for a hiatus during the GFC, the MAS has kept SGD NEER on a gradual and modest appreciation path. Over 2005-2016, the SGD has appreciated 2.2% annually against its basket. Inflation is up by a similar magnitude, despite weak commodity prices.

The MAS' 14 Apr announcement of a reset to policy neutrality already represents a major policy response to the current landscape. The latest deflation of 0.5% was made possible by benign commodity prices and the absence of domestic asset inflation. Further weakness to SGD NEER beyond neutrality would have to be precipitated by nasty shocks to the world's financial or economic system.

This brings us back to our argument that business costs - namely wages - and government spending or transfers would have to bear the brunt of adjustments during the country's economic restructuring.

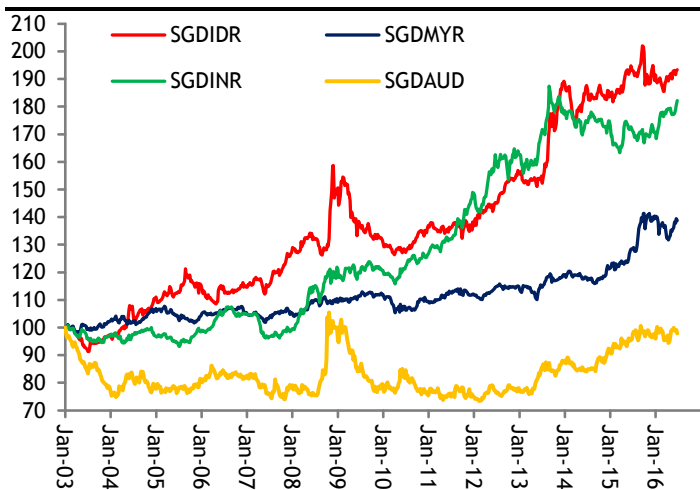


Fig 61: SGD NEER and CPI



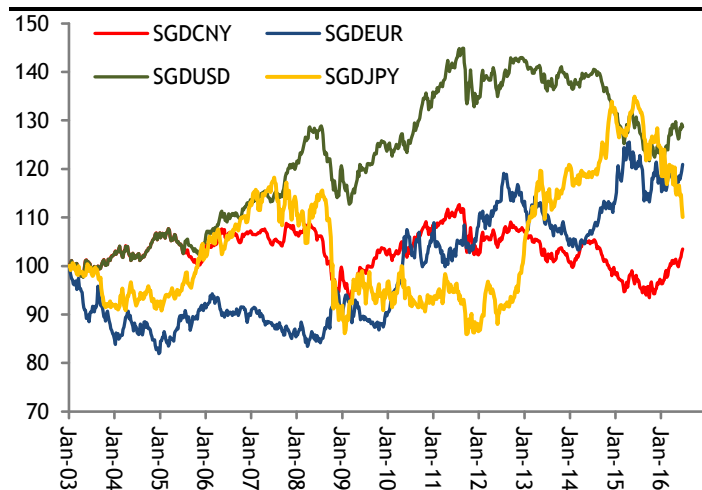
Source: MAS, SingStats

Fig 62: Appreciating over the long term vs risk currencies...



Source: Bloomberg

Fig 63: ... as well as safe havens



Source: Bloomberg



## 4. Consumption is the Best Stabiliser

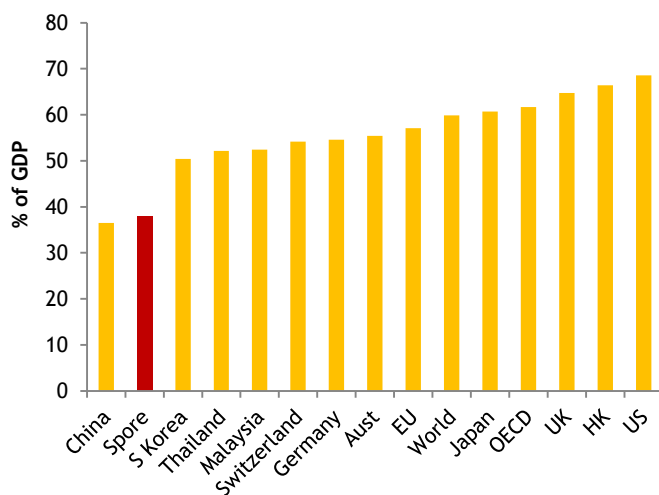
- At USD12,355 a year, Singapore's household consumption per capita is one of the lowest among developed countries.
- Low-income families spend more than their monthly income. If money is diverted away from property and wage relief is successful, we foresee a consumption boost.
- Consumer staples offer the best exposure to this and we recommend Sheng Siong.

### 4.1 Consumption dilemma in Singapore

Private consumption as a percentage of GDP has been dwindling since the 1970s. Stabilising at 37% of GDP, it is among the lowest in the world. That said, this ratio may be slightly misrepresentative of our local context since a large MNC presence implies that part of the country's GDP in the form of MNC earnings is not accessible to Singapore households. We think that per capita consumption is a better measure. Dollar per capita consumption here is lower than in Australia, Hong Kong and Japan.

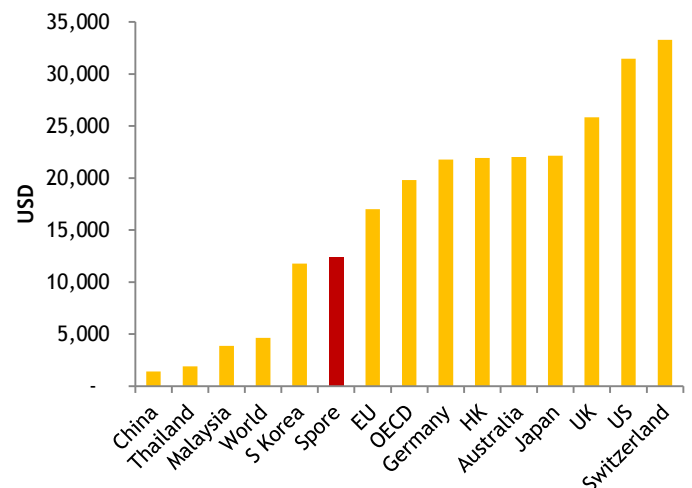
The Department of Statistics' Household Expenditure Survey 2012/13 shows resident household income rising 5.3% over the period 2007/2008 to 2012/2013, faster than household expenditure's 4.3% growth. The implication is that people are hoarding their hard-earned dollars and not spending. Even as their per-capita income has increased to the seventh-highest in the world, Singaporeans have not generously opened up their wallets.

Fig 64: 2014 consumption per GDP (constant 2005 USD)



Source: World Bank data

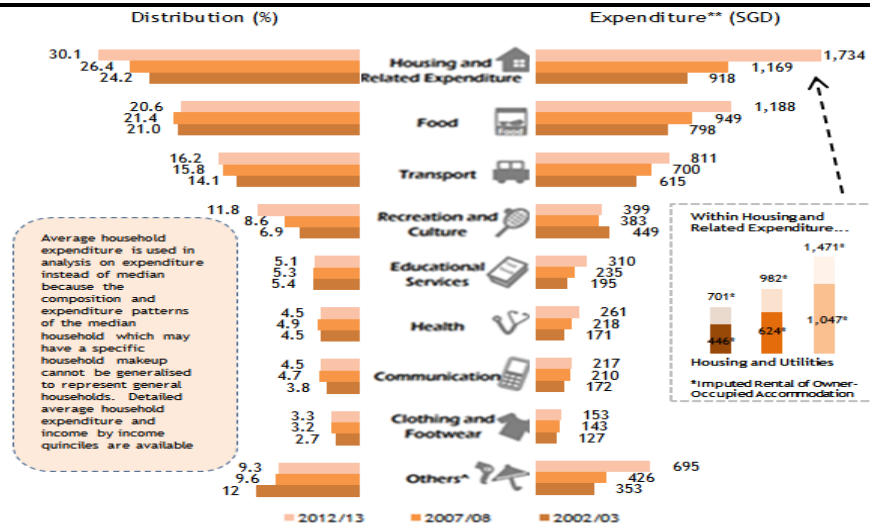
Fig 65: 2014 household final consumption expenditure per capita (constant 2005 USD)



Source: World Bank data

## 4.2 But why have we not been spending?

Figure 66: 2012/13 household expenditure survey



Source: Report on the Household Expenditure Survey 2012/13

Among the many reasons, property is the biggest. Report on the Household Expenditure Survey 2012/2013 indicates the sharpest increase for housing-related expenditure. This comprised 30.1% of expenditure, up from 26.4% in 2007/2008 and 24.2% in 2002/2003. Almost all other expenditure items as a percentage of total spending retreated. Spending on food, transport, health, communication and clothing all ceded to property. The sharpest decline was registered for recreation and culture, whose share slipped from 11.8% in 2002/2003 to 8.6% in 2007/2008 and further to 6.9% in 2012/2013.

Old habits die hard, apparently. Singaporeans have been trained too well by their own government to see property as the only safe source of long-term value creation. But as owning a property is expensive in Singapore, most people would put aside money for the day they can afford to buy one. Or if they have enough, they are stashing it somewhere for the right time to invest in properties.

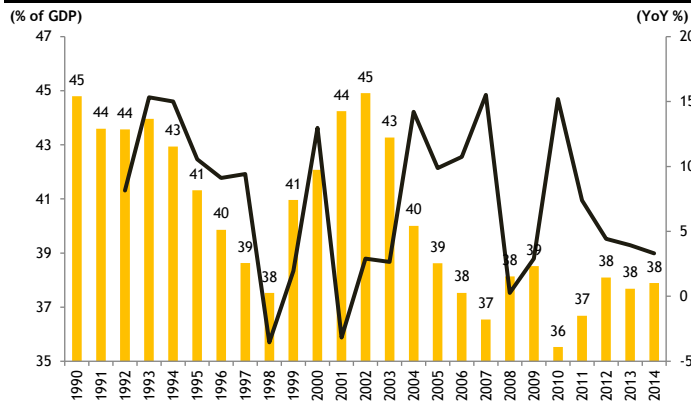
This penchant for property is not the only restraint on consumption. Since 2011, household liabilities have been rising faster than assets. Both consumption and disposable income have been weighed down by several Singapore peculiarities:

- **Forced retirement savings.** All Singaporeans and PRs aged 55 and below must contribute 20% of their wages to the CPF, capped at SGD1,200 a month. Effectively, the take-home net pay of a person earning a gross monthly wage of SGD6,000 is only SGD4,800.
- **Transport.** A large portion of disposable income goes to servicing car loans. The same survey estimated that 42% of Singaporean households owns cars and the cost of owning a basic car is 5-10% of household income, based on income for the 61<sup>st</sup>-80<sup>th</sup> quintile.
- **Equities tarnished as an investment class.** Property as an asset class has outperformed financial assets, though it cannot be monetised easily and does not stimulate expenditure. Wealth from the equity market has higher income elasticity but stagnant stocks since the GFC and CLOB International & S-Chip debacles have seriously deterred stock investments.



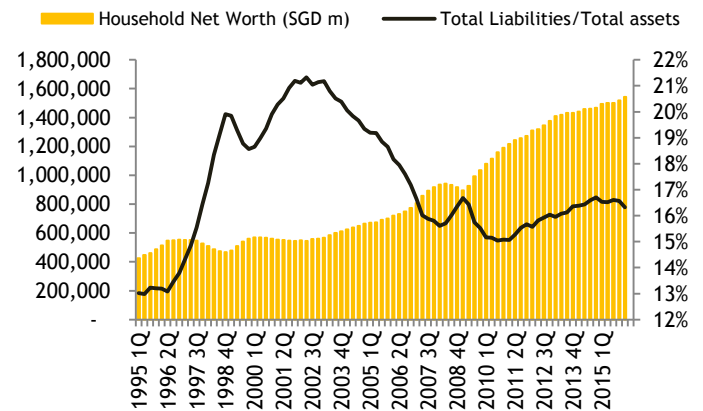
- **Growing “silver” burden.** With one of the fastest-ageing populations in the world, Singaporeans are wary of their ability to maintain financial independence after retirement and manage medical costs and costs of living in their golden years. They naturally choose to preserve wealth by reducing consumption. This further weighs on consumption.

**Fig 67: Declining consumption as a % of GDP, with the spike in the early 2000s mainly due to GDP contractions**



Source: SingStats

**Fig 68: Household debt has been rising steadily since 2011**



Source: SingStats

### 4.3 Consumption can be a panacea

If the government does go down the road of discouraging excessive investment in residential property, we are hopeful that entrepreneurship and consumption may be revitalised.

This should be positive for the economy as consumption is the most stable component of final aggregate demand and should provide an economy with a built-in stabiliser. Without a strong consumer to buffer external shocks, the economy has become especially vulnerable to volatile FDIs and the export sector.

Barriers to entry to this sector are typically the lowest while an outsized tourism sector should help reward successful private initiatives. As government-linked companies are absent from this sector, the risk of being crowded out is also minimal. This space may well become more vibrant and creative, in our view.

#### 4.4 Scope for higher consumption

Based on the 2012/2013 household survey, lower-quintile families have been receiving substantial government transfers. Government transfers represent 89.9% of income before transfers for households in the first 20<sup>th</sup> quintile. It is also sizeable at 24.9% for the 21<sup>st</sup>-40<sup>th</sup> quintile. Yet, 1<sup>st</sup>-20<sup>th</sup>-quintile Singaporeans are in deficit. We expect consumption's elasticity to changes in income for these two segments to be high.

Bear in mind also the pervasive presence of foreign maids in households when interpreting the survey results. As maids are considered members of a household, their compensation is not regarded as an expenditure item. If taxes were included as well, we estimate that monthly per household surplus for the 61<sup>st</sup> quintile and higher would be SGD2,000-2,500 lower, reducing the surplus considerably. In addition, part of the surplus may be locked away in CPF which can only be tapped for property purchases.

**Fig 69: Monthly household income and expenditure**

Monthly household income	Total	1st-20th	21st-40 <sup>th</sup>	41st-60th	61st-80th	81st-100th
2002/03	6,179	1,229	3,060	4,759	7,286	14,558
2007/08	8,105	1,466	3,934	6,175	9,439	19,511
2012/13	10,503	2,022	5,299	8,378	12,270	24,544

Monthly household expenditure	Total	1st-20th	21st-40 <sup>th</sup>	41st-60th	61st-80th	81st-100th
2002/03	3,352	1,704	2,460	3,178	4,067	5,351
2007/08	3,809	1,787	2,950	3,602	4,569	6,138
2012/13	4,724	2,231	3,536	4,699	5,590	7,568

Monthly household surplus	Total	1st-20th	21st-40 <sup>th</sup>	41st-60th	61st-80th	81st-100th
2002/03	2,827	(475)	600	1,581	3,219	9,207
2007/08	4,296	(321)	984	2,573	4,870	13,373
2012/13	5,779	(209)	1,763	3,679	6,680	16,976

Gov't transfer as % of income	Total	1st-20th	21st-40 <sup>th</sup>	41st-60th	61st-80th	81st-100th
2012/13 Gov't transfers as % of Household Income Per Household Member before Gov't Transfer		89.9%	25.9%	12.4%	5.8%	1.7%

Source: Report on the Household Expenditure Survey 2012/13, Maybank Kim Eng

#### 4.5 Short-term prescription: feed the poor first

Consumption and income elasticity to income is 1.05. This means that the more income people have, the more they will spend. We believe that deficits in monthly household income to expenditure and large government transfers for the lowest two quintiles imply unsatisfied demand.



Fig 70: Consumption elasticity to income

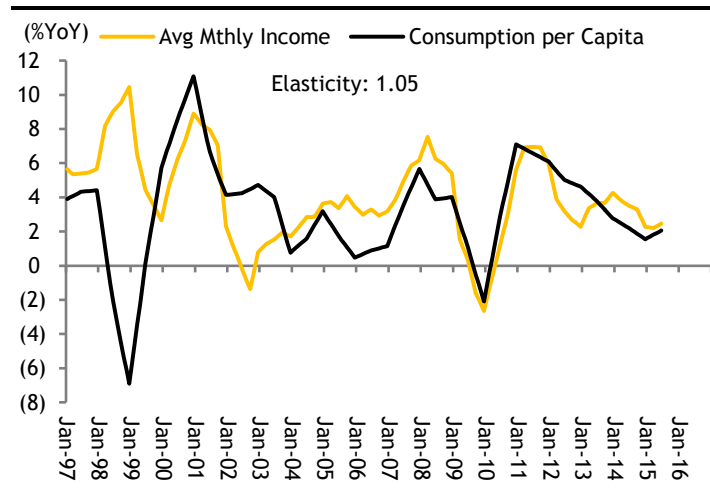
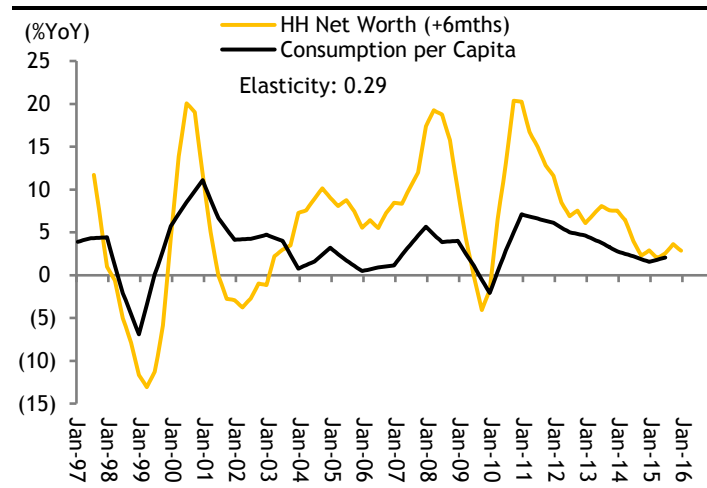


Fig 71: Consumption elasticity to net worth



On the other hand, consumption elasticity to wealth is 0.29. As consumption's elasticity to wealth increases is low, any appreciation in the capital value of properties is unlikely to catalyse consumer spending. This implies that to lift consumption, increasing income should be more effective than raising wealth levels.

Going by this, the prescription becomes clear to us.

**Subsidise the lower income and they will eat more.** The rich spend more in each category in absolute terms but they spend less on food and other basic necessities than the poor. But when the poor has more income, they disproportionately spend more on food over others. This will have an immediate disproportionate impact on GDP.

To generate a virtuous feedback loop, we think the government will need to continue its subsidy programme, especially if it wants to keep property-cooling measures in place. More may need to be done for the sandwiched middle class which is not entitled to benefits but feels the full brunt of higher costs of living.

#### 4.6 Stake out consumer staples: Sheng Siong our top pick

Our bottom-up analysis suggests that consumer staples have been faring much better than consumer discretionary. Supermarket chains reported better profits in 2015 than 2013. With the exception of Challenger Technologies (CHLG SP, Not Rated), our basket of 11 restaurants and 13 retailers booked lower profits or larger losses.

**Why Sheng Siong?** We recently added mass-market supermarket operator, Sheng Siong (BUY, TP SGD1.12), to our consumer universe after resuming its coverage. With economic growth slowing, we see more people eating in than out, and this will boost demand for fresh produce in particular, which makes up 40% of Sheng Siong's revenue on average and commands significantly higher margins than dry goods. In addition, Sheng Siong's SSS and Singapore's food inflation were closely correlated in past cycles. As inflation is a key leading indicator for Sheng Siong and food CPI is expected to rise in 2016, we expect a jump in its SSS in the coming quarters.



#### 4.7 Longer term: positive feedback loop between income and consumption

As people feel more positive about their income and income prospects, any increases in income should be followed by higher spending. Also, long-term increases in income affect consumption more than short-term increases. For an income gain of a year or more, consumers tend to change their spending habits more than to temporary increases in income. Hence, any government measures must be seen to be capable of building income sustainably.

We believe our recommendations for lowering business costs should directly help consumption in the longer term. Indirectly, if properties remain closed as an investment class, people's allocation of resources to consumption could increase as well.

## 5. Too much property, too little R&D

- Government has been emphasising value creation and innovation for some time, with limited success.
- As spending tends to be backend-loaded during the government's term, we expect higher public spending from 2018.
- Two areas of spending: R&D support; and **development of a Smart Nation**.
- Industrial space would be needed. Buy AREIT & MINT.
- Telcos play a crucial role in smart-nation development. Buy SingTel and StarHub.

In preparation for a new normal, the government appears to be going for more pervasive structural changes. Deputy Prime Minister Tharman Shanmugaratnam has been re-emphasising value creation and innovation, meant to deepen the skills of Singaporeans. A Committee on Future Economy chaired by Finance Minister Heng Swee Keat will blaze the trail. (As the minister is currently indisposed by illness, Minister for Trade and Industry, Mr S Iswaran, has taken over).

### 5.1 Reservoir of foreign reserves

Market pricing of public goods and services and decades of budget surpluses has given Singapore a large reservoir of foreign reserves. Recurring investment income from the reserves is large enough for 50% of the net investment returns as defined by the government, to contribute to 20% of public expenditure in the national budget. We argued in earlier reports that such income more than compensates for Singapore's lack of natural resources.

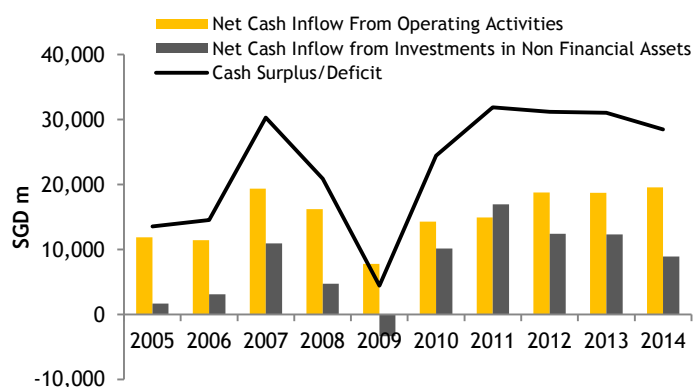
Based on government revenue that includes land-sale and net investment income as defined by the IMF's Government Finance Statistics Manual standards, Singapore's cash surplus averaged SGD30.6b a year in 2011-2014 against operating expenditure of SGD50b.

### 5.2 Backloaded public spending

The FY16 budget is projected to have a primary deficit of SGD4.99b (operating revenue less expenditure) and a surplus of SGD3.45b (including primary deficits, special transfers, top-ups and net investment returns contributions or NIRC). As FY16 is only the first year of this government, initial spending should be more conservative. There should be more scope for higher public spending ahead.

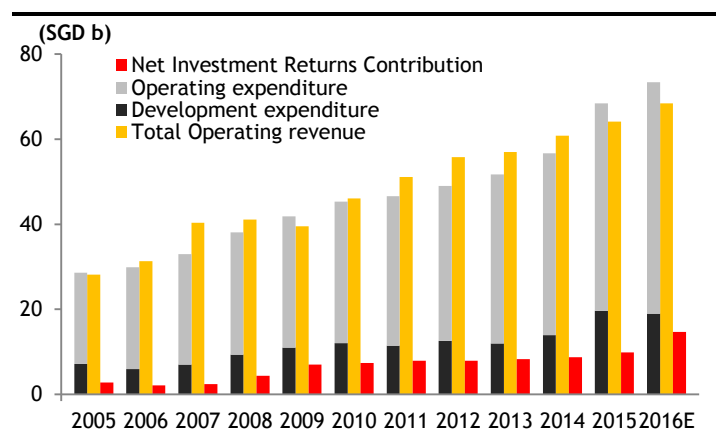
**Fig 72: Government finance in accordance with IMF definitions**

*Includes land-sale and net investment income*



Source: SingStats

**Fig 73: NIRC supplements government revenue**

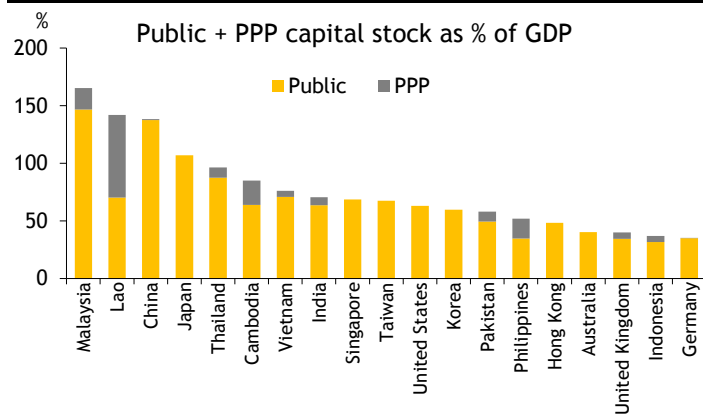


Source: Accountant-General's Department

### 5.3 Quantity & quality of infrastructure

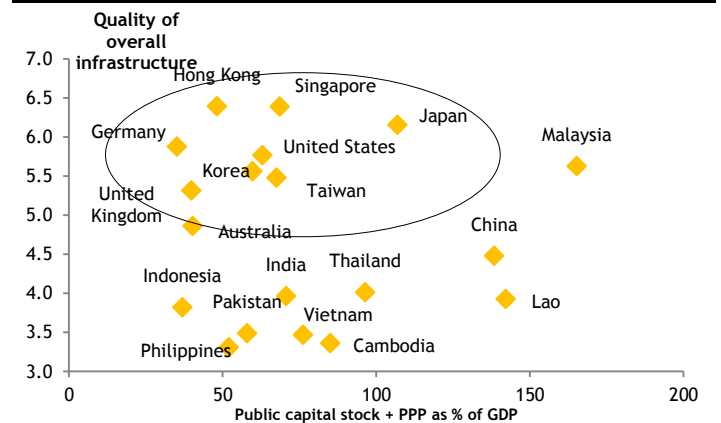
Singapore's past judicious spending on infrastructure has helped put its infrastructure in a class of its own in ASEAN. Its hard infrastructure has largely been built and development expenditure as a percentage of GDP should decline. Still, the government wants to expand its development expenditure from SGD15b to SGD20b by 2020. Building on existing initiatives, it is likely to spend on raising the disposable income of the lower strata, helping the aged, R&D to cultivate new eco-systems and automation to raise productivity.

**Fig 74: Public + public-private partnership (PPP) capital stock per capita**



Source: IMF - Investment and Capital Stock Dataset, Maybank Kim Eng

**Fig 75: Quality of infrastructure & public capital stock + PPP as a % of GDP**



Source: IMF - Investment and Capital Stock Dataset, World Economic Forum, Maybank Kim Eng

### 5.4 Raising productivity: mainly through R&D

Since the 2011 general elections which forced about a U-turn in the government's liberal immigration policies, wages have risen not because of productivity gains but labour shortages. This makes wage growth unsustainable, in our view.

The St. Louis Federal Reserve pointed out that Singapore's GDP per capita was 16% higher than that of the US but its GDP per hour was 38% below the US in 2013. To generate this level of GDP per capita, the Singaporean worker had to work 41% more hours with a labour participation rate that was 33% higher than that of the US.

We believe Singapore's way of achieving high GDP per capita is not long-lasting. Average GDP per hour in the developed world was 75% of the US level vs Singapore's 62%. But Singapore's hours worked per worker were 41% higher than the average for developed nations and the US, while its labour participation rate was 28% higher. Even against countries with similar manufacturing to GDP ratios, GDP per hour in Singapore was lower than in Austria, Finland, Germany, Ireland and Sweden.



**Fig 76: Labour Productivity Index in 2013, relative to the US (US = 1)**  
 Singapore is 5<sup>th</sup> from the bottom for GDP per hour, ahead of Portugal, Czech Republic, Greece, South Korea

Relative to USA	GDP/capita	GDP/hr	Hrs/Worker	Worker to Pop'n Ratio	Mfg % GDP
Europe					
Austria	0.87	0.82	0.95	1.12	19.0
Belgium	0.79	0.91	0.92	0.95	14.0
Czech R.	0.52	0.46	1.03	1.09	25.0
Denmark	0.75	0.83	0.84	1.08	14.0
Finland	0.73	0.73	0.97	1.04	17.0
France	0.68	0.88	0.87	0.89	11.0
Germany	0.77	0.85	0.82	1.11	23.0
Greece	0.46	0.49	1.19	0.80	10.0
Ireland	0.74	0.83	1.05	0.84	20.0
Italy	0.60	0.67	1.02	0.87	15.0
Netherlands	0.82	0.89	0.82	1.12	12.0
Norway	1.16	1.12	0.83	1.25	7.0
Portugal	0.41	0.40	1.12	0.91	13.0
Spain	0.57	0.74	0.98	0.79	13.0
Sweden	0.86	0.82	0.94	1.11	17.0
UK	0.76	0.76	0.97	1.02	11.0
Asia Pacific					
Australia	0.92	0.79	1.01	1.14	7.0
Japan	0.72	0.64	1.03	1.10	19.0
Singapore	1.16	0.62	1.41	1.33	19.0
S. Korea	0.64	0.48	1.20	1.11	31.0
North America					
Canada	0.84	0.74	1.00	1.13	-
USA	1.00	1.00	1.00	1.00	12.0
Average:	0.76	0.75	1.00	1.04	15.7

Source: The Conference Board Total Economy Database, calculations by Anna M. Santacreu of the St. Louis Federal Reserve, 2015 Paper No.5

As textbook theories maintain that differences in productivity can be largely explained by technology, the Singapore government has been ramping up its investments in R&D. This is to boost the amount of technology that the Singapore worker works with, in hopes that this will translate into productivity gains.

- **Research, Innovation and Enterprise 2020 Plan commits SGD19b to R&D for 2016-2020.** RIE2020 is the sixth plan to focus on R&D and technology since it was first rolled out for 1991-1995, to the tune of SGD2b. The budget for the 1996-2000 plan became SGD4b, that for 2001-2005 was SGD6b, for 2006-2010 SGD13.5b and for 2011-2015 SGD16b. Cumulatively, SGD41.5b was funnelled to research and innovation from 1991 to 2015.

RIE2020 differs from its previous incarnations in its greater emphasis on the value of research. **Up to 40% of its budget is now reserved for private-sector tendering, up from 20%.** This marks a major shift to free-market determination of projects with the greatest economic value for extraction. We believe this policy shift could catalyse more private funding which should help lift R&D as a percentage of GDP above average levels.

*"It will contribute significantly to the economy and creates opportunities and jobs, supports national initiatives like Smart Nation, SkillsFuture, studies which we are doing under the Committee for the Future Economy, and it helps our workers to thrive amidst technological changes and globalisation."*

*Prime Minister Lee Hsien Loong  
 8<sup>th</sup> Jan 2016, Press Conference of RIE2020*

- R&D spending could rise from 2% of GDP to 2.4%. RIE2020 alone implies public R&D spending will be 1% of GDP. In partnership with various agencies, RIE2020 seeks to catalyse an extra SGD1.50-1.80 for every dollar of public spending. Assuming that half that target is reached, R&D spending as a percentage of GDP could rise to 2.4%, above the average of 2.22% for developed countries.

**Fig 77: Singapore's R&D needs more private-sector participation**

	2013	2016F
R&D spending: Private / Public	1.34	1.65
Public spending on R&D (SGD b)	3.2	3.8
Private spending on R&D (SGD b)	4.3	6.3
Nominal GDP (SGD b)	376	419
Total R&D spend % GDP	2.0%	2.4%

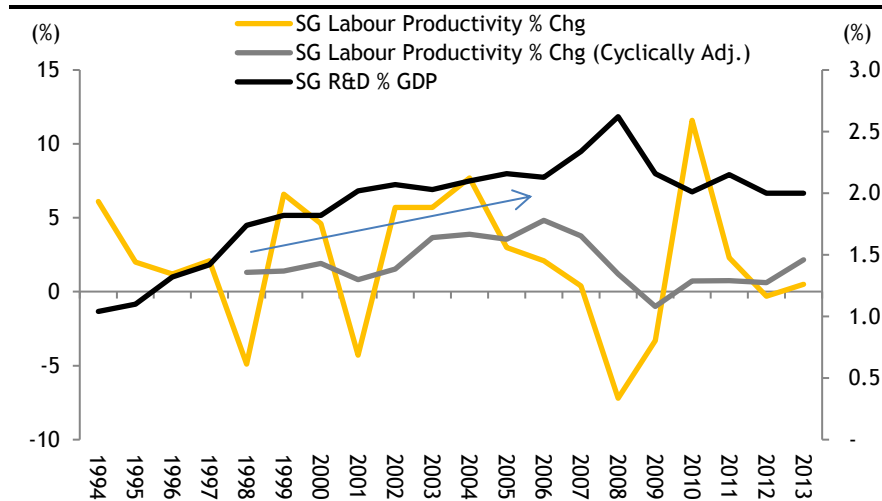
Source: World Bank, National Research Foundation, CEIC, Maybank Kim Eng estimates

On the ratio of public to private funding for R&D:

"For the next five-year plan (RIE2020), I think our target is going from 1.5 to 1.8. We hope to do better than the target but it's not just the amount they spend but whether they spend it intelligently and productively or not. And that depends on the existing companies having the right needs for research, but also depends on new companies coming in who also want to do research."

Deputy Prime Minister Teo Chee Hean  
8<sup>th</sup> Jan 2016, Press Conference of RIE2020

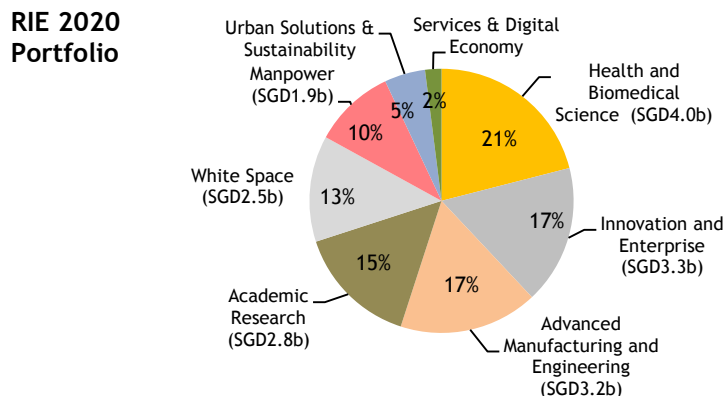
**Fig 78: Productivity growth correlated well with rising R&D to GDP spending from 1998 - 2006**



Source: OECD, CEIC, Maybank Kim Eng

To hasten Singapore's development as a smart nation, RIE2020 will incentivise technology gains under its Urban Solutions and Sustainability sector, Services and Digital Economy sector and White Space component.

**Fig 79: 40% of the RIE2020 budget has been reserved for private-sector competition, up from 20%. This is a quite a jump!**



Source: National Research Foundation

By 2020, this number is likely to reach SGD60.5b cumulatively. Seemingly large, but we think that Singapore may have actually underspent in past years in comparison with other developed countries. World Bank and OECD databases suggest that from 2009 to 2013, Singapore spent 2.06% of its

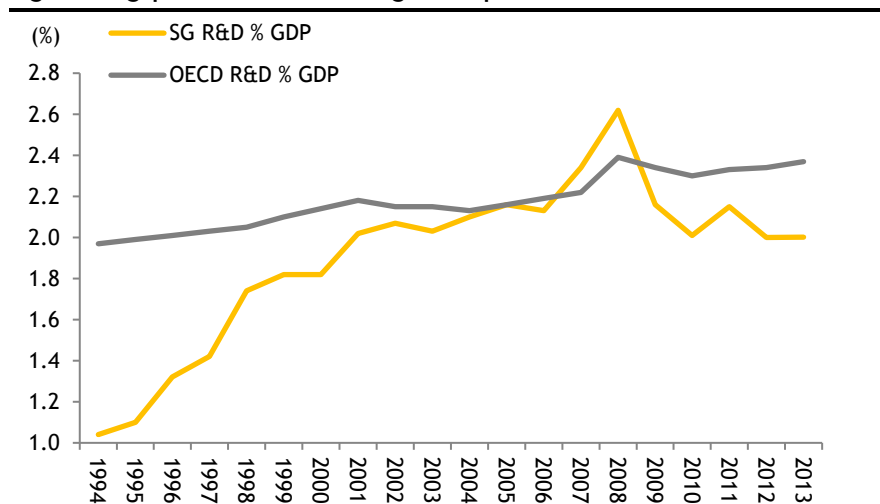
GDP on R&D. Developed countries' spending averaged 2.22%. For every dollar the US spent on R&D, Singapore spent 74 cts. This was below the 79 ct average for developed countries. Although it may not fully explain Singapore's much lower GDP per hour than in the US and average developed country, it does make a case for its R&D spending to climb further.

**Fig 80: Most recent World Bank and OECD figures imply that Singapore spends 7% below the average developed nation on R&D**

R&D % GDP	2009	2010	2011	2012	2013	Avg.	Relative to USA	2009	2010	2011	2012	2013	Avg.
Europe							Europe						
Austria		2.39	2.68	2.81	2.81	2.67			0.87	0.97	1.00	0.98	0.96
Belgium	1.97	2.05	2.15	2.24	2.28	2.14		0.70	0.75	0.78	0.80	0.80	0.76
Czech R.	1.30	1.34	1.56	1.79	1.91	1.58		0.46	0.49	0.56	0.64	0.67	0.56
Denmark	3.07	2.94	2.97	3.02	3.06	3.01		1.09	1.07	1.07	1.07	1.07	1.08
Finland	3.75	3.73	3.64	3.42	3.31	3.57		1.33	1.36	1.31	1.22	1.16	1.28
France	2.21	2.18	2.19	2.23	2.23	2.21		0.78	0.80	0.79	0.79	0.78	0.79
Germany	2.73	2.72	2.80	2.88	2.85	2.80		0.97	0.99	1.01	1.02	1.00	1.00
Greece	0.63	0.60	0.67	0.69	0.80	0.68		0.22	0.22	0.24	0.25	0.28	0.24
Ireland	1.63	1.62	1.53	1.58	1.55	1.58		0.58	0.59	0.55	0.56	0.54	0.57
Italy	1.22	1.22	1.21	1.27	1.26	1.24		0.43	0.45	0.44	0.45	0.44	0.44
Netherlands	1.69	1.72	1.89	1.97	1.98	1.85		0.60	0.63	0.68	0.70	0.69	0.66
Norway	1.72	1.65	1.63	1.62	1.66	1.66		0.61	0.60	0.59	0.58	0.58	0.59
Portugal	1.58	1.53	1.46	1.38	1.37	1.46		0.56	0.56	0.53	0.49	0.48	0.52
Spain	1.35	1.35	1.32	1.27	1.24	1.31		0.48	0.49	0.48	0.45	0.43	0.47
Sweden	3.42	3.22	3.22	3.28	3.30	3.29		1.21	1.18	1.16	1.17	1.16	1.17
UK	1.75	1.69	1.69	1.63	1.63	1.68		0.62	0.62	0.61	0.58	0.57	0.60
Asia Pacific							Asia Pacific						
Australia	2.61	2.74	2.25	2.24	2.24	2.42		0.93	1.00	0.81	0.80	0.78	0.86
Japan	3.36	3.25	3.38	3.34	3.47	3.36		1.19	1.19	1.22	1.19	1.22	1.20
Singapore	2.16	2.01	2.15	2.00	2.00	2.06		0.77	0.73	0.78	0.71	0.70	0.74
S. Korea	3.29	3.47	3.74	4.03	4.15	3.74		1.17	1.27	1.35	1.43	1.45	1.33
North America							North America						
Canada	1.92	1.84	1.78	1.71	1.62	1.77		0.68	0.67	0.64	0.61	0.57	0.63
USA	2.82	2.74	2.77	2.81	2.85	2.80		1.00	1.00	1.00	1.00	1.00	1.00
Average:	2.20	2.18	2.21	2.24	2.25	2.22	Average:	0.78	0.80	0.80	0.80	0.79	0.79

Source: World Bank, OECD, Maybank Kim Eng

**Fig 81: Singapore has over the long term spent less than OECDs on R&D**



Source: OECD



- **Smart Nation vision.** In Singapore's smart nation vision, most household, transport and industrial appliances will become the internet-of-things, controlled by smart phones and other interface devices. Big data is a constant feature that improves and controls the efficient usage of durable goods. The government also shares its geospatial platform with the public, enabling the uploading of data to improve efficiency further. Government services are also largely e-government.

To make this a reality, RIE2020, under the Urban Solution and Sustainability sector, the Services and Digital Economy sector, as well as the White Space component, plays an integral role in incentivising the required technology gains.

*"Therefore our vision is for Singapore to be a Smart Nation - A nation where people live meaningful and fulfilled lives, enabled seamlessly by technology, offering exciting opportunities for all. We should see it in our daily living where networks of sensors and smart devices enable us to live sustainably and comfortably. We should see it in our communities where technology will enable more people to connect to one another more easily and intensely. We should see it in our future where we can create possibilities for ourselves beyond what we imagined possible."*

*Prime Minister Lee Hsien Loong  
24<sup>th</sup> Nov 2014, Launch of Smart Nation Initiative*

## 5.5 Investment implications

There are few listed companies that are direct proxies for R&D and technological change.

But we reckon that one thing all R&D, technology and start-up companies would need is working space. For R&D, the required space should be found in business and science parks. We think this will favour **Ascendas REIT (BUY, TP SGD2.57)**, which derives 34% of its net property income from such parks. High-value manufacturing and tech start-ups would need high-spec industrial and business parks. Again, the beneficiaries should include **AREIT**, with 55% of its net property income emanating from such parks. Recall also that **Mapletree Industrial Trust (BUY, TP SGD1.78)** wants to increase its exposure to high-spec / business parks to 41% of its net property income.

Long-term beneficiaries of the Smart Nation drive should include the telcos: **Singtel (BUY, TP SG3.82)** and **StarHub (BUY, TP SGD4.15)**. This is because data needs would rise exponentially, as would the need for enterprise solutions.



## 6. Go Global? Yes, but Drop Expensive Growth for Cash Flows & Yields

- 36% of Singapore Inc's assets are now outside the country.
- Returns have been dwindling after GFC, as corporates chased growth without sufficient regard for returns.
- We believe they should now focus on enhancing existing assets.
- Equity market has started rewarding companies with quality assets, strong cashflows and yields.
- BUY yield stocks. SELL SingPost.

It has been more than 30 years since Singapore started its internationalisation. Recognition of a limited domestic market and cost pressures were behind the state's strong prodding of local enterprises to develop external wings. Singapore even has a dedicated government agency to push the frontiers of its external economy: IE Singapore. Growth is scarce and prized and overseas expansion is seen as a necessity rather than option. In keeping with this, the equity market has been rewarding growth rather than stability.

### 6.1 From regional to international

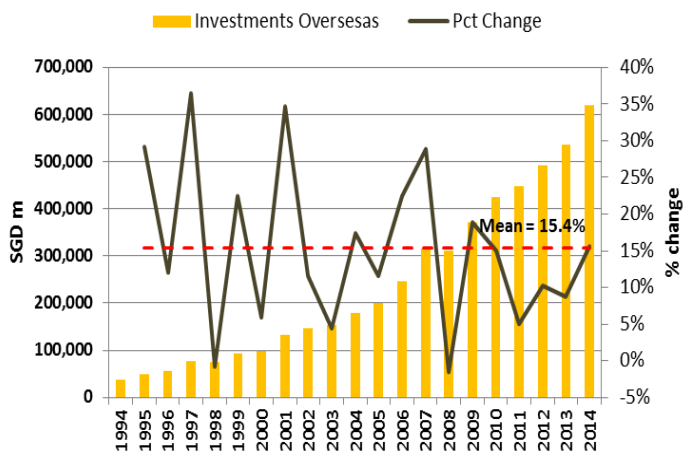
Early efforts were focused on the region. Having developed faster than its neighbours, Singapore spotted growth opportunities in its neighbours' development. Following the Asian financial crisis of the late 1990s, it turned international. But due to nationalistic considerations, Singapore's investments are not always welcome in ASEAN. Numerous examples illustrate this: a rejection of DBS' proposal to buy out Temasek's interest in Bank Danamon in Indonesia; SingTel's forced stake sale of Indosat, again in Indonesia; and outcry over Temasek's acquisition of Shin Corp in Thailand. In the latest development, Brexit, to us, is the apex of anti-globalisation in one of the world's most globalised countries!

### 6.2 Favourite investment destinations

In the last 10-15 years, China has been the investment destination of choice for Singapore firms. Hong Kong / China attracted 26% of capital outflows from Singapore. This was followed by the UK, Indonesia and Australia, at 7% each. Malaysia received 6%. Investments in the offshore centres of BVI, Bermuda, Mauritius, Luxemburg and Caymans totalled 25%. We believe that much of the latter was short-term portfolio flows or investments into China routed through such offshore centres.

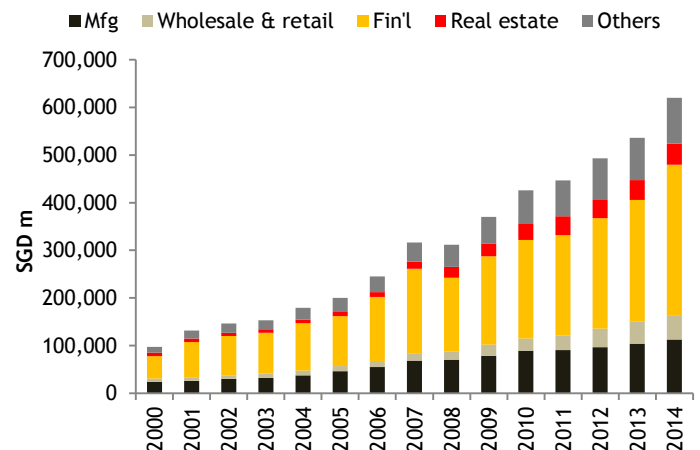
By sector, outbound investments in manufacturing as at end-2014 made up 18% of the total, wholesale and retail 8.2% and real estate 7%. Financial and business services, much likely to be in investment-holding companies based in offshore centres, accounted for 51% of its outbound investments.

Fig 82: Singapore's outbound investments



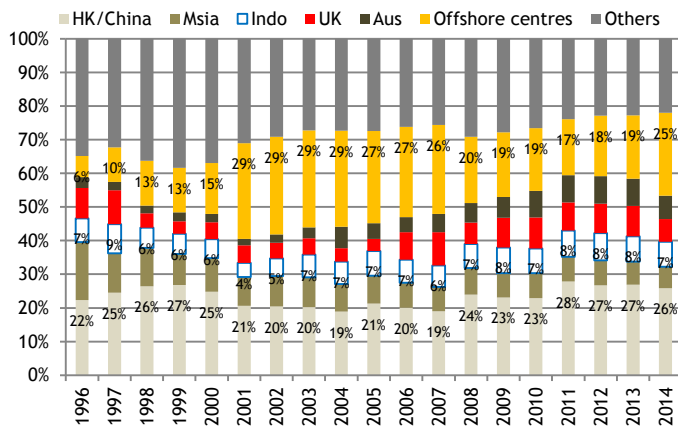
Source: SingStats

Fig 83: Which sectors did Singapore invest in overseas?



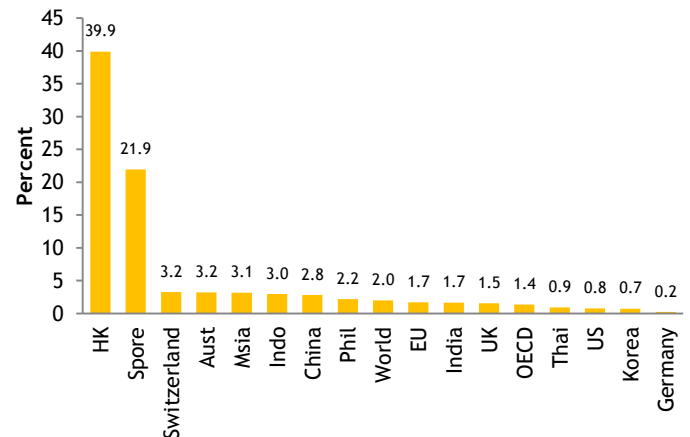
Source: SingStats

Fig 84: Recipients of Singapore's outbound investments



Source: SingStats

Fig 85: Net foreign investments as a % of GDP



Source: World Bank Data

### 6.3 Not all diversification added value

In the earlier years, exuberance led to costly acquisitions: Optus by SingTel and Dao Heng by DBS. Some corporates also amassed a mishmash of companies remotely related to their core operations.

We analysed value accretion or destruction company by company in our universe. Many of our listed companies do not provide sufficient information on returns from their overseas divisions. Where possible, we compared the returns of their overseas assets against group ROAs as well as group ROIC against WACC. Our conclusions are as follows:

#### Domestic investments have yielded higher returns for lower risks

Singapore provides steadier and higher returns than overseas assets. Increased risks from geographical diversification are not usually accompanied by higher returns.

#### ROIC for some is lower than WACC

We estimate that almost all of the 12 companies we reviewed have lower overseas ROAs than group ROAs: an overwhelming number. Some 3 of these companies have narrow gaps between ROIC and WACC, from where we infer that their overseas divisions have lower ROIC than WACC. This implies that not all acquisitions add value, though Singapore companies generally try to achieve this.

Banks' geographical diversification has been enhancing their shareholders' value since GFC. In totality, their overseas ROAs are similar to Singapore's, helped by Indonesia and Malaysia. A synchronised withdrawal of capital by global banks after GFC allowed capital-rich Singaporean banks to plug their gap, generating decent returns in the process. But asset impairment from the oil rout may negate some of their earlier gains.

#### Low returns from China plus concentration risks

Returns on China assets are generally not impressive, across the sectors. CapitaLand alone seems to do just fine in part because of its early entry. Concentration risks for the property sector bear watching. More than 36% of the sector's assets are now in China. In our case study of the returns of **Starhill Global REIT's (HOLD, TP SGD0.79)** assets in Malaysia, China and Australia, China assets yield the lowest returns (see Appendix 3).

#### Returns deviate from expectations

Asset values have been written down for SingPost and SCI. This raises the worry of whether companies have built in sufficient buffers in their projections. It is not uncommon for actual returns to deviate from expected returns due to country-specific risks, which surface often. Hurdle rates appear too low and risks miscalculated, especially as cost of capital has eased after GFC.

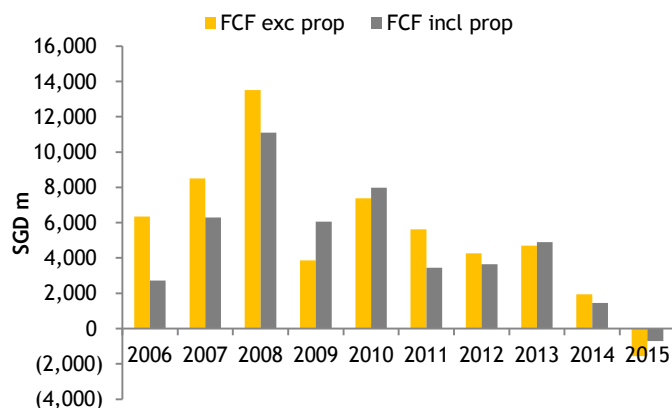
#### Declining ROIC since GFC

ROIC has been receding since GFC, when acquisitions and diversification became more questionable. It could be that the investment cycle is still too short to arrive at definite conclusions. But we note that some of the assets may be vulnerable if global economies do not recover.

## 6.4 Do we really need to pay premium for growth?

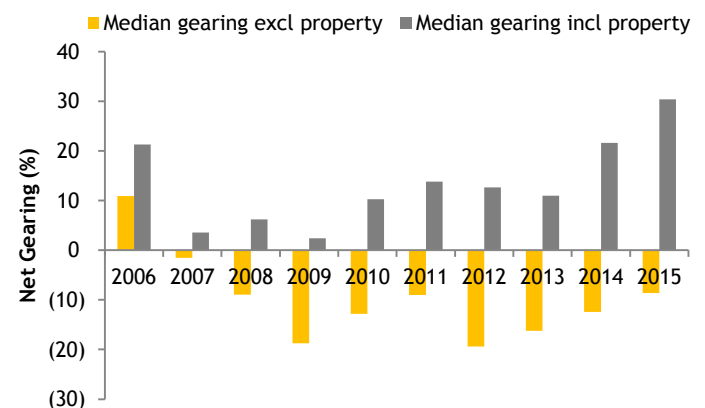
Singapore and Singapore corporates have been putting a premium on growth and not enough focus on risks. They now have mature businesses which generate stable or positive operating and free cash flows. Although balance sheets have been moderately compromised by hefty overseas investments, with leverage scaling higher, they are likely to continue channelling their free cash flows offshore. Numerous now have overseas revenue and assets in excess of 50% of their total.

**Fig 86: Free cash flow in MKE's coverage universe**



Source: Maybank Kim Eng

**Fig 87: Mean / median gearing of MKE's coverage universe**



Source: Maybank Kim Eng



It is possible that the concept of risk management has not taken firm-enough root. We see companies continuing to veer towards high-risk-high-returns investments against lower risks and steadier returns. We think that Singapore companies should build on their existing assets, raise their hurdle rates and turn more selective in their purchases. Increased volatility in global economies means increased vulnerability to external blow-ups. Those which have made investments after GFC may face greater risks, given our observation of declining returns and seemingly higher risks after that.

## 6.6 Smallness of the global market

### Focus on existing assets

Larger companies such as SingTel and CapitaLand now derive more than 50% of their revenue from overseas. In our view, they have attained sufficient diversification that now calls for a more steady and defensive strategy in the face of market volatility. There is no need to chase aggressive growth and take unnecessary risks, in our view. They could, instead, focus on fortifying existing assets. This will require greater scrutiny of project feasibility, higher hurdle rates and certainly, a shift in mindset towards delivering steady and reliable returns.

### Investor focus on lower-risk and yield assets

If the reality sinks in that Singapore's investment properties are no longer a safe asset class, we expect part of the monies to flow into yield assets. Coupled with a greying population, the demand for yields should increase. This has already started in the equity market. Disappointing returns and the volatility of growth stocks have been shifting investors towards yield and more-defensible stocks. This mentality could percolate down to how corporates deliver value to their shareholders.

The Singapore market may soon shape up as a yield-driven capital market, in our view. Already, there are about 37 REITs and 10 business trusts listed. We think that companies with mature assets that can provide stable cashflows could attract capital inflows in a market with few growth opportunities.

On the contrary, we would be wary of companies with substantial overseas exposure and high leverage. This is because their:

- Balance sheets may not be able to withstand external blow-ups.
- High debt may have lowered their WACC to the extent that projects are undertaken with lower hurdle rates. There is a higher chance that some of their projects may destroy value if earnings fail to meet expectations.

Fig 88: ROIC comparison

	Are Singapore corporates earning above their cost of capital?	Did overseas investments help or drag returns?																				
<div>Ascendas REIT</div> <div><ul style="list-style-type: none"><li>Singapore assets dominate until last year's foray into Australia. Marginal and declining exposure to China. Less than 4% of assets at peak.</li><li>NPI is now 11% exposed to Australia, 88% to Singapore.</li><li>Paid a 6.6% premium over valuation for 26 Australian logistics properties (cap rate: 6.5%). Although expensive, management was motivated by need to have scale.</li></ul><p>Australia could lead next wave of growth. Cap rates of 6.8-9.6% for freehold logistics assets are a bargain vs 6.25-7.75% for leasehold assets in Singapore. With Australian interest rates in decline, cap-rate compression is likely. Fair-value gains in Singapore drive significant excess returns over cost of capital. Going by this, Australia could be its next driver of returns if it continues to build scale there.</p></div>	<div>AREIT's ROIC vs WACC</div> <div><p>Source: Company, Maybank KE</p><ul style="list-style-type: none"><li>ROIC exceeds cost of capital on an income basis, but far exceeds it with property-valuation gains.</li></ul></div>	<div>AREIT's foray into Australia</div> <div><div>Ascendas REIT</div><div>Australian Logistics (11% NPI)</div><table><tr><td>Net Property Income</td><td>65.5</td></tr><tr><td>Acquisition Cost</td><td>1077.8</td></tr><tr><td>Debt</td><td>600.0</td></tr><tr><td>Perps</td><td>300.0</td></tr><tr><td>Equity</td><td>177.8</td></tr><tr><td>ROIC</td><td>5.7%</td></tr><tr><td>WACC</td><td>4.7%</td></tr><tr><td>Cost of Debt</td><td>3.5%</td></tr><tr><td>Cost of Perps</td><td>4.8%</td></tr><tr><td>Cost of Equity</td><td>8.5%</td></tr></table><p>Source: Company, Maybank KE</p><ul style="list-style-type: none"><li>Expected to create value for unitholders.</li></ul></div>	Net Property Income	65.5	Acquisition Cost	1077.8	Debt	600.0	Perps	300.0	Equity	177.8	ROIC	5.7%	WACC	4.7%	Cost of Debt	3.5%	Cost of Perps	4.8%	Cost of Equity	8.5%
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Cost of Perps	4.8%																					
Cost of Equity	8.5%																					
<div>CapitaLand</div> <div><ul style="list-style-type: none"><li>Expanded aggressively to China. Now the group's largest market, at 46% of total assets, from just 6% in 2001.</li><li>Granular data not readily available due to changing disclosure standards. Our estimates of its ROAs suggest volatility. Reflects the cyclicality of the property-development business.</li><li>Long gestation for large integrated developments and soft residential market in Singapore has weighed on returns. We expect this to change as various large projects get completed over next few years.</li><li>Strong presales of residential projects in China should bear fruits this year as it hands over completed homes.</li><li>Overall, China has provided a good source of growth and diversification.</li></ul></div>	<div>CapitaLand's ROIC vs cost of capital</div> <div><p>Strong returns for China during its upcycle helped the group beat its cost of capital</p><p>Source: Company, Maybank KE</p><ul style="list-style-type: none"><li>Ability to beat its cost of capital is highly dependent on property cycles. ROIC above WACC for 2005-2011.</li><li>Disclosed WACC has been 5.6-8.5% since 2001.</li></ul></div>	<div>ROA in China vs the Group (EBIT / average assets^)</div> <div><p>Cyclical nature of returns characteristic of the property development business</p><p>^Refers to CapitaLand China Holdings for 2008-2013. Source: Company, Maybank Kim Eng</p><ul style="list-style-type: none"><li>Strong returns for its China operations during good years helped the group beat its cost of capital. Helped by its early entry into the Chinese market.</li><li>Long gestation for large integrated developments in China weighed on returns in recent years. We expect pick-up as projects get completed over next few years.</li></ul></div>																				

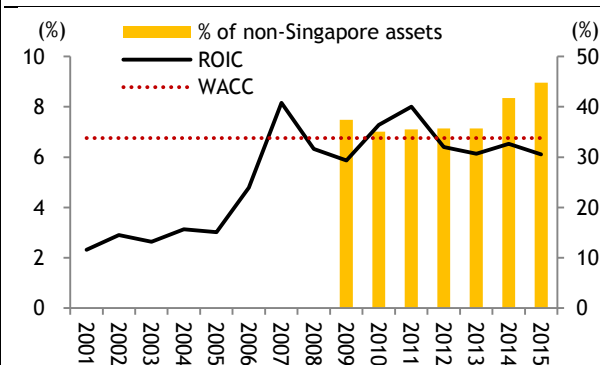
Source: Company, Maybank Kim Eng

## City Developments

- Overseas assets now account for 45% of assets, up from 36% in 2013.
- Previously, London-listed hotel arm, Millennium & Copthorne (M&C,) was its only major overseas operation.
- As overseas developments only started in recent years, data points are scarce. We calculate returns using data points from M&C.
- Our calculations suggest that the group does not meet its cost of capital in most years. While this is partly attributed to its unique way of holding investment properties at depreciated costs, we believe part of the reason was a weak M&C. Except for 2011, M&C's ROA has been below cost of capital.
- Things could change in next few years as it monetises its investment properties conservatively held at cost. The group has a 2018 AUM target of SGD5b from its current SGD2.6b.

## Are Singapore corporates earning above their cost of capital?

### CityDev's ROIC vs cost of capital

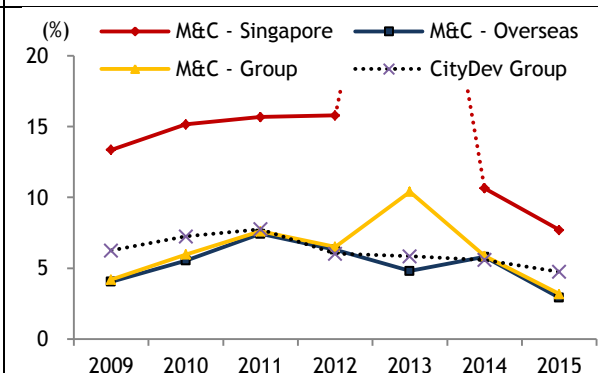


Source: Company, Maybank KE

- Did not meet its cost of capital in most years.
- We estimate a long-term WACC of 6.8% for the group.

## Did overseas investments help or drag returns?

### M&C's ROA (EBIT / average assets^)



Note: Bumper profits for M&C in Singapore for 2013 due to the redevelopment of Glyndebourne. ROA of 41% in 2013.

Source: Company, Maybank KE

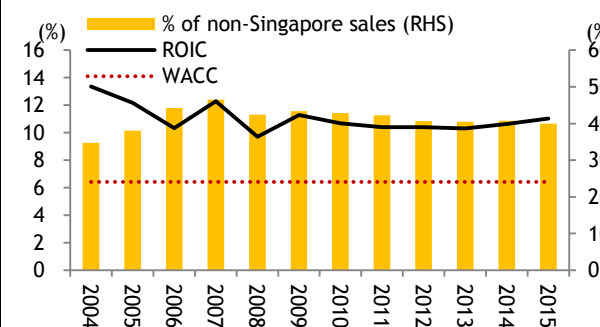
- Except for 2011, M&C's ROA has been below its cost of capital.

## ComfortDelGro

- Roughly 40% of its sales come from outside Singapore. UK/Ireland, Australia and China account for 45% of its profits.
- Split between Singapore and overseas operations maintained by acquiring new operating licenses and smaller companies with similar businesses in these markets.
- UK/Ireland, Australia and China able to generate decent returns over time. UK/Ireland generates the best ROAs, above Singapore's. While returns from China and Australia may be below Singapore's, we believe they are still good sources of growth as returns are generally higher than cost of capital. We attribute this to prudent expansion.

## ComfortDelGro's ROIC vs cost of capital

Consistent spread over its cost of capital

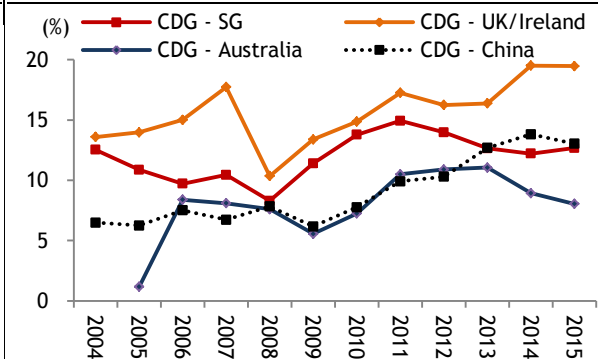


Source: Company, Maybank KE

- Delivers consistent returns with a good spread over its cost of capital. This reflects stable and diversified operations.
- We estimate a long-term WACC of 6.4% for the group.

## ROA in key markets (EBIT / average assets^)

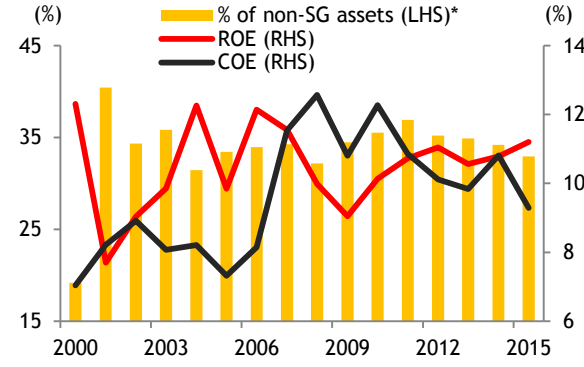
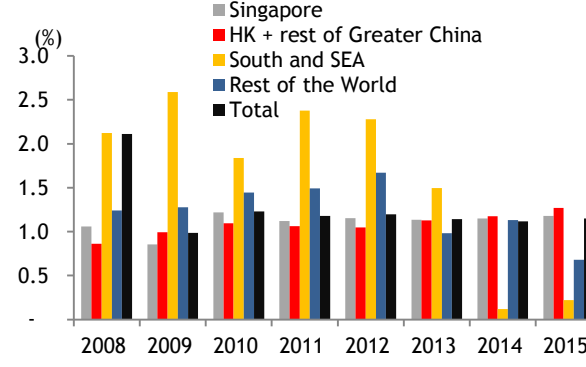
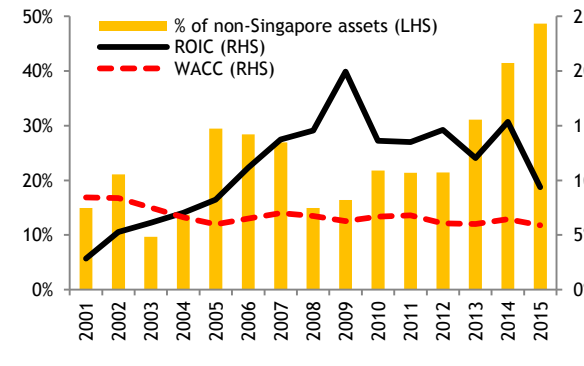
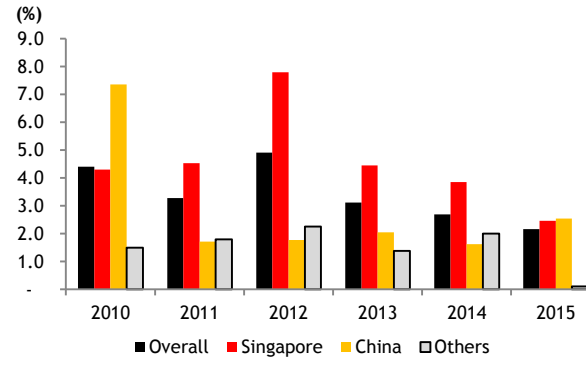
Returns from UK/Ireland consistently above Singapore



Source: Company, Maybank KE

- Good value creation for shareholders. Returns above WACC in major geographies.

Source: Company, Maybank Kim Eng

	Are Singapore corporates earning above their cost of capital?	Did overseas investments help or drag returns?
<b>DBS</b> <ul style="list-style-type: none"> <li>Overseas expansion only aided in stabilising returns, not augmenting them. Credit costs in downcycle should decide whether overseas diversification has been successful.</li> <li>Overpaid in SGD10b takeover of Dao Heng Bank in 2001. Hong Kong assets surged from 9% in 2000 to 33% in 2001. 31% of PBT and 33% of assets from overseas in 2015.</li> <li>Booked SGD2b impairment for DBS HK in 2005 and 2010, possibly to reset return assumptions to more realistic levels.</li> <li>Until recently, post-GFC lending environment was favourable. Strong volume and low credit costs improved capital deployment.</li> <li>Strong trade flows and CNY / CNH arbitrage lending opportunities enhanced Greater China earnings.</li> </ul>	<b>DBS's ROE vs COE</b> <i>ROEs are now above COEs</i>  <p>* Geographical segmentation is based on the location where transactions and assets are booked.  Source: Bloomberg, Company, Maybank KE</p> <ul style="list-style-type: none"> <li>ROE holding at 11%. After GFC, COE trended down from 12% to 9%, helping to keep ROE above COE.</li> <li>Overseas assets averaged 35% since Dao Heng acquisition. Greater China averages 27%. But overseas likely to be understated as Singapore is also a booking centre for regional assets.</li> <li>ROEs could be compressed by higher volatility and credit costs.</li> </ul>	<b>DBS's ROA by geography</b> <i>South and SEA's ROA declined sharply in the past two years.</i>  <p>Source: Company, Maybank KE</p> <ul style="list-style-type: none"> <li>Singapore ROAs average 1.1%. Overseas returns fluctuate more. South/SEA ROAs were nearly 2.5% before tanking to 0.1-0.2% in 2014-2015 under credit costs.</li> <li>Greater China's ROA has crept up modestly. Now similar to Singapore's, aided by improving NIMs and benign asset quality..</li> </ul>
<b>Keppel Corp</b> <ul style="list-style-type: none"> <li>Has global footprint, especially for offshore &amp; marine, from "near market, near customer" mission. Has emerged as a world-class rigbuilder.</li> <li>Keppel Land also has significant footprint in China.</li> <li>Overseas assets accounted for 49% of assets in 2015, from just 29% in 2005.</li> <li>But also several rounds for provisions for its infrastructure EPC projects in Greater Manchester and Doha North sewage treatment plant in Qatar.</li> <li>In Brazil, major client, Sete Brasil, has filed for bankruptcy.</li> </ul>	<b>Keppel Corp's ROIC</b>  <p>Source: Company, Maybank KE</p> <ul style="list-style-type: none"> <li>ROIC has been declining since 2010 as overseas assets continue to grow.</li> <li>O&amp;M's global footprint has intangible value-enhancing benefits that cannot be measured purely by individual geographical returns.</li> <li>Still creating value above its WACC.</li> </ul>	<b>Keppel Land's ROA (net profit/avg assets)</b> <i>Other than 2010, overall ROAs have been lower than Singapore's</i>  <p>Source: Company, Maybank KE</p> <ul style="list-style-type: none"> <li>No geographical earnings breakdown for Keppel Corp, so using Keppel Land data to get a sense.</li> <li>ROA for Keppel Land's China business came down after 2010.</li> <li>Suspect China assets may be earning below cost of capital in recent years, although our evidence is inconclusive.</li> <li>Overseas ROA below that of Singapore's from 2011 to 2014.</li> </ul>

Source: Company, Maybank Kim Eng

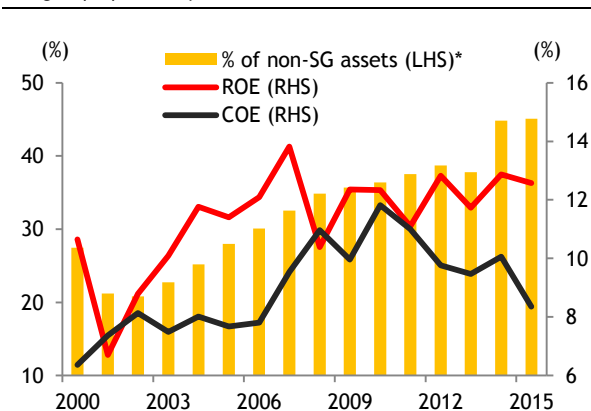
## OCBC

- More aggressive overseas expansion. Against lower cost of capital, group paid premiums for some acquisitions.
- Too early to ascertain if hurdle rates are high enough and returns justify prices.
- Of the three banks, OCBC has highest proportion of overseas assets: from 28% in 2000 to 45% in 2015. 45% of PBT from overseas in 2015.
- Indonesia produced highest ROAs in past three years. This is under threat from a slowing economy and compressed margins.
- Increase in Greater China assets from 10% in 2013 to 18% in 2015 mainly from acquisition of Wing Hang Bank. Assets grew by a 5-year CAGR of 33%. ROAs increased in past two years.
- Acquired ING Asia Private Bank in 2009 and Barclays' wealth business in Asia in 2016 to scale up wealth-management business. Could face higher costs.
- Post-GFC upcycle for banks. So far, overseas assets contributed to steady returns, not increases. Early days yet as credit cycle is moving down.

## Are Singapore corporates earning above their cost of capital?

## OCBC's ROE vs COE

Largest proportion of overseas assets. ROE is above COE.



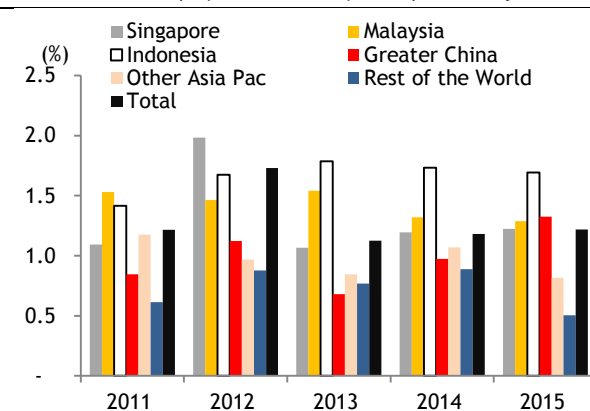
\* Geographical segmentation is based on the location where transactions and assets are booked.  
Source: Bloomberg, Company, Maybank KE

- ROE above COE so far. Widening gap since 2012 reflects better returns from Indonesia and acquisition of ING Asia Private Bank. ROEs for Bank of Singapore rose from 2-3% in 2010-11 to 10% in 2015.
- Building up overseas assets since 2000.

## Did overseas investments help or drag returns?

## OCBC's ROA by geography

Indonesia's ROA outperformed the rest for the past three years.



Indonesia's disclosure started in 2011.

Source: Company, Maybank KE

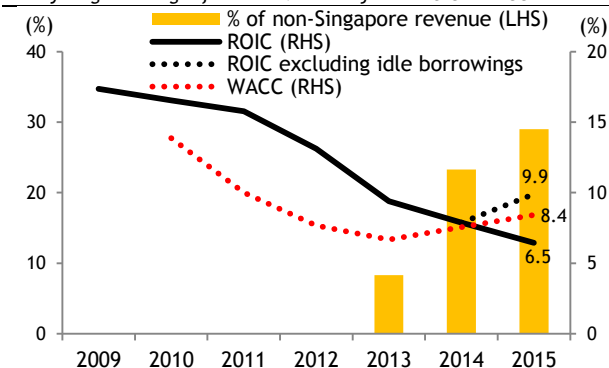
- Malaysian and Indonesian assets clearly adding value.
- Singapore returns near group average, suggesting that overseas returns match Singapore's.
- Greater China returns are below except in 2015 when earnings increased by 85% in 2015. Greater China adds volatility.

## Q&amp;M Dental

- Started M&As in 2013 after building foundation in Singapore. Has been exploring China since 2012.
- Notable success in 2014 when it acquired a hospital group and dental-supply manufacturer in China. Aside from EPS contributions, these have raised Q&M's profile and opened doors to more deals.
- Overseas revenue, mostly from China, leapt from 8% in FY13 to 29% in FY15.
- M&As have fast-tracked EPS growth & market expansion. Also enabled vertical integration from dental-service provider to dental-supply distributor & manufacturer and dental-lab operator.
- Risks: 1) adverse regulatory changes, especially in China; 2) newly acquired entities may not deliver; 3) succession planning.

## Q&amp;M's ROIC vs cost of capital

Declining ROIC due to substantial debt raised for future M&As and early-stage earnings of several M&As. Adjusted ROIC > WACC.



Source: Company, Maybank KE

- Aoxin, Aidite and TP Dental are still in early stages of their growth cycle. They could expand further.
- ROIC excluding idle borrowings rebounded in 2015 to exceed WACC, after three major acquisitions in mid-2014 contributed for the full year.

## Q&amp;M's announced &amp; completed acquisitions

ROIC for all except TP Dental > Q&M's 8.4% WACC

Acquisition target	Country	Completion	Total cost (SGDm)	P/E (x)	LT. ROIC (%)
Aoxin	China	Jul 2014	21.6	15.6	10.7
Aidite	China	Aug 2014	14.9	8.8	22.9
Dr Foo	SG	Jul 2014	5.5	10.5	9.5
TP Dental	SG	Sep 2015	28.6	17.9	7.0
Tiong Bahru	SG	Sep 2015	3.8	7.6	13.2
Aesthetics Dental	SG	Nov 2015	4.0	12.5	8.8
Panjin City Dental	China	Jan 2016	3.1	10.4	9.7
Gaizhou City Dental	China	Jan 2016	0.3	11.2	8.9
Panjin Jinsai Dental	China	Jan 2016	0.8	10.0	10.0
Shenyang Lan Hai	China	Jan 2016	1.0	9.0	11.1
Lee & Lee	SG	Feb 2016	10.0	14.3	8.7
Shenzhen New Perf.	China	Pending	13.8	13.3	11.0
<b>Total</b>			<b>105.9</b>	<b>13.0</b>	<b>11.2</b>

Source: Company, Maybank KE

- All acquisitions expected to add value and deliver a combined 11.2% ROIC vs Q&M's 8.4% WACC.
- Exception is TP Dental. We believe Q&M paid a premium to scale up this single-location group practice with 25 dentists.

Source: Company, Maybank Kim Eng

## Sembcorp Industries

- Has ventured out to UK, China, Vietnam, India and Middle East.
- Overseas assets account for 47% of total assets, from just 25% in 2005.
- Successes included divestment of UK Sembisita for SGD350m gain in 2015. Capital return of c.259% over 15 years with mid-teens annual ROIC in recent years.
- Also restructuring losses in UK Teesside power plant in 2013.
- Recent developments in Brazil shipyard undesirable as major client, Sete Brasil, has filed for bankruptcy.
- Has not chased growth without regard to value but we wonder if hurdle rates should be set higher. This is because when overseas investments go wrong, they tend to do so in a big way.

### Our views on Sembcorp's investments in TPCIL and Salalah Water

The following projects could yield steady-state ROIC of 9-16%, above its WACC of 6% barring unforeseen circumstances.

Investment/Project	Stake	Country	Total Project Cost	Attributable Investment (SGD m)		Total Capital	Expected steady state NOPAT (SGD m)		MBKE est. ROIC		WACC
				Equity	Debt		High case	Low case	High	Low	
Thermal Powertech Corporation India (TPCIL)	87%	India	USD1.5b	450	913	1,363	220	120	16.1%	8.8%	5.90%
Sembcorp Salalah Power & Water Company	40%	Oman	USD1.0b	140	420	560	80	60	14.3%	10.7%	5.90%

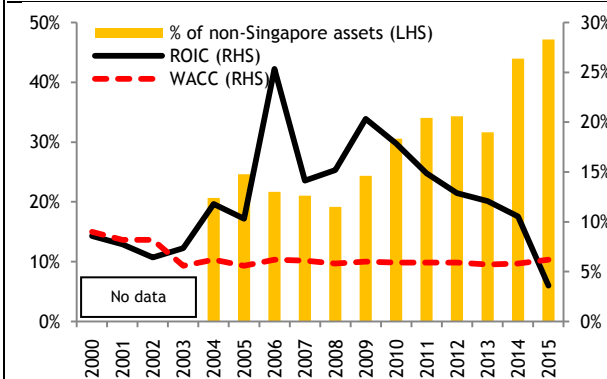
Source: Company, Maybank KE

## SingPost

- Started its transformation in 2011 with a series of M&As.
- Major acquisitions were TradeGlobal (US), Jagged Peak (US), Couriers Please (Australia), FS Mackenzie (UK) and Famous Holdings (6 countries). These focus on e-commerce enabling, parcel delivery & freight forwarding.
- Overseas revenue catapulted to 44% in FY15 from 0% in FY10.
- But M&As have not added much to earnings.
- Risks: 1) long gestation of M&As; 2) cancellation risks for Alibaba's second investment in SingPost; 3) corporate governance.

### Are Singapore corporates earning above their cost of capital?

#### SCI's ROIC



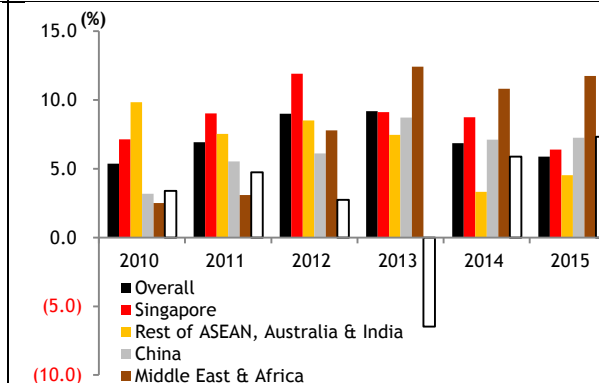
Source: Company, Maybank KE

- ROIC has been declining since 2010 as overseas assets continue to grow.
- ROIC in 2015 fell below WACC, due to Marine losses, but also because of Singapore power-market weaknesses and initial ramp-up of its India power plant.

### Did overseas investments help or drag returns?

#### SCI's ex-Marine ROA (EBIT/avg assets)

Other than 2013, overall ROAs have been lower than Singapore's

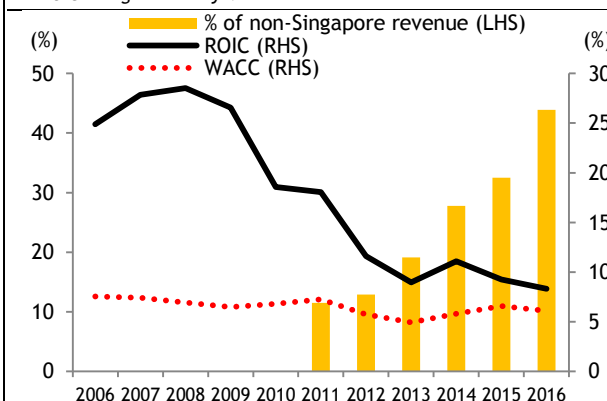


Source: Company, Maybank KE

- We use SCI ex-Marine ROA for our study.
- ROA for Singapore started to come down from FY13, likely due to margin compression in Singapore power business.
- Overseas returns, especially from Middle East, held up.
- But Rest of ASEAN, Australia & India came down.
- Overseas ROA lower than Singapore's generally. But whether overseas assets have been generating above cost of capital is inconclusive.

#### SingPost's ROIC vs cost of capital

Is ROIC being eroded by M&As?

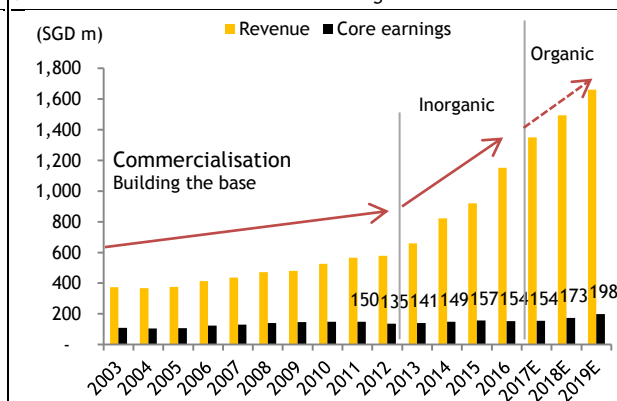


Source: Company, Maybank KE

- Declining ROIC since transformation began in 2011. Yet to yield results.
- Longer-run ROIC still uncertain. Outcome hinges on new CEO's strategy. Possibility of another transition phase.

#### SingPost's profits have not grown since FY11, could stay flat in FY17E

M&As have boosted revenue but not earnings



Source: Company, Maybank KE

- All acquisitions have not added value. Earnings negligible, generating ROIC of less than 2% vs SingPost's 8.1% WACC.

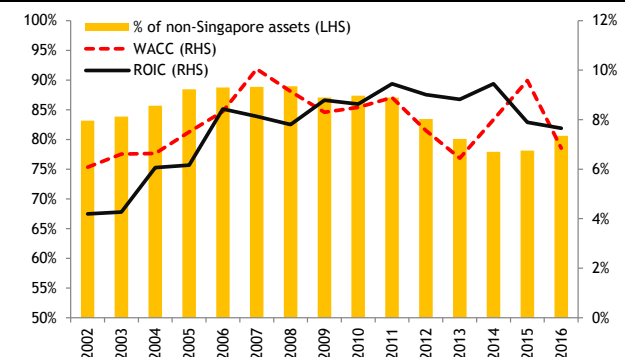
Source: Company, Maybank Kim Eng

## Singtel

- Made major acquisitions in waves. From early regionalisation in the 1990s to venture-capital-like investments in 2012-2015 when newly-formed Group Digital Life division started investing in technologies that the whole group can use. Four big buys: Amobee (2012, USD321m), Adkonian & Konterra (2014, USD385m) and Trustwave (2015, USD810m).
- Early investments were more for new markets and subscribers. Expected to carry their own weight.
- In the digital business, Singtel is acting more like a venture capitalist. Acquisitions not expected to be immediately profitable. In time, it may exit through IPOs, spinoffs or trade sales. None has been sold yet.

## Are Singapore corporates earning above their cost of capital?

## Singtel's ROIC vs cost of capital

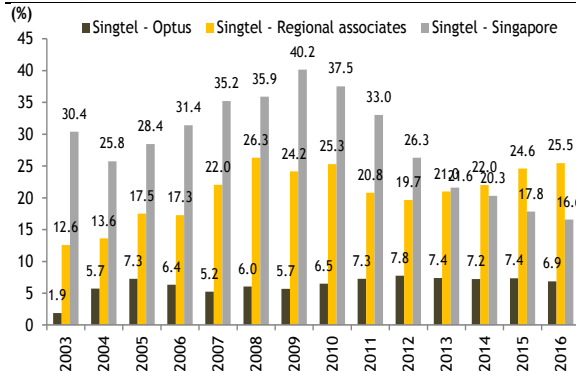


Source: Company, Maybank KE, Bloomberg

- Track record of overseas investments not fantastic. Since its acquisition of Optus in 2001/2002, group ROIC has consistently lagged WACC.
- ROIC only beat WACC after GFC, as M&As died down, allowing it to consolidate investments. Also helped by a sharp drop in WACC as easy capital flooded the world after GFC.
- Returns started to fall again from 2014, after Singtel revved up digital investments in 2012-2015 with four chunky acquisitions costing SGD2b.

## Did overseas investments help or drag returns?

## ROA (EBIT/assets) by major markets



Source: Company, Maybank KE

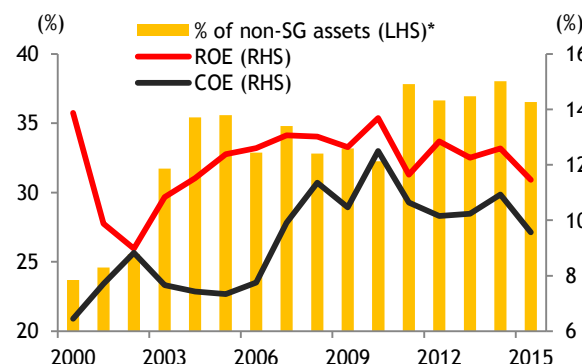
- Singapore ROA very high, albeit declining. Likely because local assets are highly depreciated. Regional associates have done well.
- But Optus' ROA stuck at low single digits. Probably why group returns have lagged cost of capital all this while. With future capex expected to remain high, returns are unlikely to pick up.

## UOB

- Overseas expansion maintains returns, not increases. Yet, credit cycle is turning.
- Beneficiary of legacy assets in SMEs, China and Indonesia. Keeps ROEs consistently higher than COE.
- Judicious expansion. Overseas assets rose from 24% of total in 2000 to 37% in 2015 with increased exposure to Malaysia, Greater China and Indonesia. 39% of PBT from overseas in 2015.
- Malaysia and Greater China each contributed 10-11% to total assets in 2015. Growth in Greater China accelerated after GFC, at a 5-year CAGR of 23%.
- Greater China may be earning below COE. UOB appears to be doing the right thing in not expanding aggressively in Greater China.
- Indonesia's ROAs were 2.3-3.4% before 2014, but currency depreciation and higher loan impairment have started to weigh on returns.

## UOB's ROE vs COE

ROEs have been consistently above COEs.



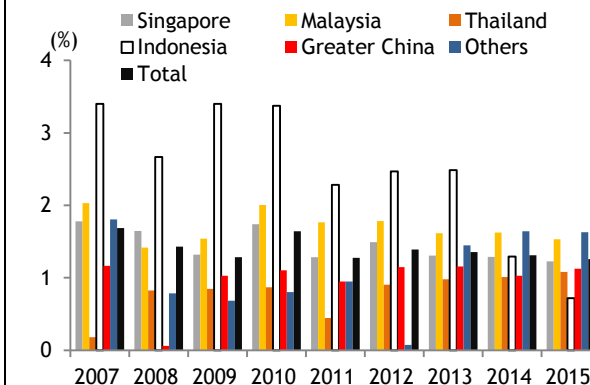
\* Geographical segmentation is based on the location where transactions and assets are booked.

Source: Bloomberg, Company, Maybank KE

- ROE exceeds COE. Gap has been maintained. ROE has been helped by higher NIMs from its SME franchise.
- Like its counterparts, overseas assets have helped to maintain returns, not enhance them.
- ROEs appear less volatile than for the other two banks.
- More aggressive in overseas expansion after GFC.

## UOB's ROA by geography

Total ROA started to exceed Singapore ROA in recent years



Source: Company, Maybank KE

- Credit issues responsible for recent ROA compression.
- Singapore ROAs on par with total returns, but declining. This suggests that overseas assets generate similar earnings as domestic assets.
- Indonesia's returns are most outstanding but have been dwindling since 2014. Malaysia faring well.
- Greater China languishing. Suspect cost of equity could be higher than ROE.



## Singapore Banks

# NEGATIVE [Unchanged]

## Added to Post-Brexit Complexities

### Remain NEGATIVE

Our recent macro-analysis ([The Singapore Fix, dated 29 June 2016](#)) concluded that property curbs may just be made permanent in Singapore. If so, we estimate that this would affect mortgage and building & construction (B&C) loans by less than 1%. Add to that expectations of fewer lending opportunities and rising NPLs from the oil rout, we remain NEGATIVE on banks. For sector exposure, prefer UOB.

### Analyst

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### Sensitivity to fall in property transactions

Assuming property curbs remain, we assess the impact on housing and building & construction (B&C) loan demand. For every 10% decline in private residential sales from 2015 volumes, we estimate that housing and B&C loans may decline by less than 1% from our current assumptions.

Our analysis has not considered the decline in capital values and impact on loan delinquency. Private residential property sales volume has fallen by 61% from peak in 2012. It is probable that cooler sentiment in the property market could result in a bigger than 10% impact. Weaker collateral values can also have a big impact on non-performing loans. The magnitude of the impact hinges on employment rate.

### Overseas investments have not changed dynamics

Our macro-analysis also examined returns from Singapore Inc.'s overseas investments. We found that banks' overseas investments have maintained overall returns. But overseas returns have been fluctuating more than domestic returns, with returns from some countries starting to retreat from lower profits, higher delinquencies and currency depreciation. We found UOB's ROE to be consistently above its COE and far more resilient than peers'. This is thanks to higher NIMs from its SME franchise. That said, we think that credit costs in a downcycle could ultimately decide the success or failure of banks' overseas investments.

Stock	Bloomberg code	Mkt cap (USD'm)	Rating	Price (LC)	TP (LC)	Upside (%)	P/E (x)		P/B (x)		Div yld (%)	
							15A	16E	15A	16E	15A	16E
DBS Group	DBS SP	28,411	Sell	15.30	13.40	(12)	8.9	8.9	1.0	0.9	3.9	3.9
OCBC	OCBC SP	25,810	Sell	8.39	7.20	(14)	9.0	9.6	1.0	1.0	4.3	4.3
United Overseas	UOB SP	21,016	Hold	17.69	16.96	(4)	8.8	9.4	1.0	0.9	5.1	4.2

## 1. If Property-cooling Measures Stay...

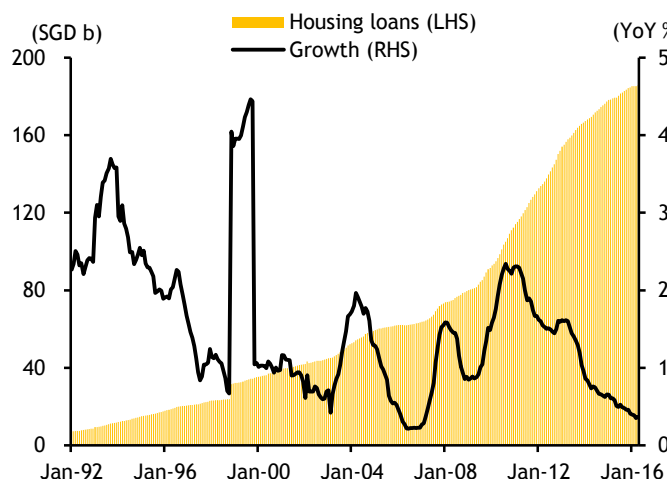
Brexit adds to the complexity of cyclical and structural challenges confronting Singapore. In our recent macro-analysis (*The Singapore Fix*, dated 29 June 2016), our research team suggests that the government may not dismantle property-cooling measures. This is in view of excessive flow of private capital into residential property, leading to asset inflation and a likely misallocation of capital. The result is a loss of competitiveness, risk aversion and dearth of entrepreneurship.

### 1.1 ...what's the impact on mortgage lending?...

We currently assume 1-3% loan growth for Singapore banks for FY16-18E. Banks' loan books in Singapore are anchored by mortgages and building and construction (B&C) loans. In the event that property-cooling measures are made permanent, sales of private residential units and executive condominiums could slow down further.

**Fig 89: Housing loan growth**

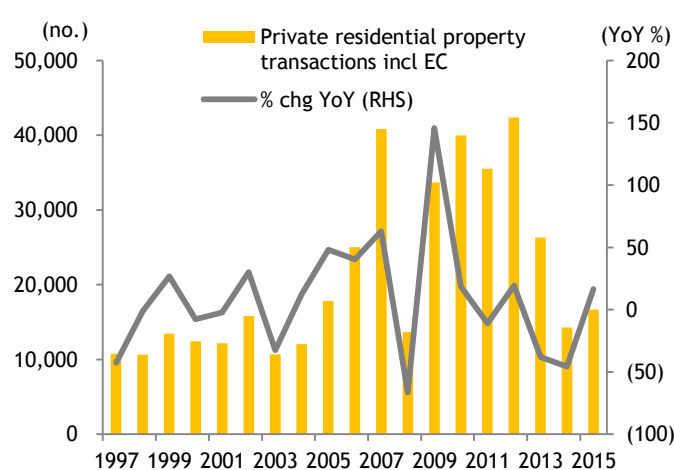
Has already been declining in recent years since the first salvo of property-cooling measures in 2009



^Using DBU housing loans as DBU is a proxy for domestic lending  
Source: MAS

**Fig 90: Private residential property transactions**

Decline in private residential sales by 61% in 2015 from peak of 42,000 units in 2012



Source: URA, Maybank KE

**Fig 91: Sales of private residential properties and housing loans**

Year	Sale of residential units (private residential properties incl EC, no of units)	DBU system housing loans (SGD b)	Absolute YoY change in DBU system housing loans (SGD b)	YoY % growth in DBU system housing loans (%)
2010	39,952	112.4	21.0	22.9
2011	35,523	131.1	18.7	16.7
2012	42,372	152.0	20.9	15.9
2013	26,316	166.5	14.5	9.6
2014	14,301	177.4	10.9	6.5
2015	16,667	184.7	7.2	4.1

Source: URA, MAS, Maybank KE

We estimate that for every 10% decline in housing sales volume from 2015 levels, the system stand to lose SGD600-900m in mortgage opportunities. But as margins for new housing loans are typically tight, at 1% above 3M SIBOR, the pre-tax earnings impact for the system should be less than SGD10m.

A summary of the impact is shown below.

**Fig 92: Summary of impact**

Sales of private residential properties and ECs (no. of units)	16,500
Cost of 1 unit (SGD m)	1
Total transaction value (SGD m)	16,500
Mortgage disbursements based on LTV ratio of 50% (SGD m)	8,000
For every 10% decline in housing sales volume from 2015 levels:	
Decline in transaction value (SGD m)	1,650
Estimated impact on loan quantum for mortgages based on LTV ratio of 50% (SGD m)	600 - 900
Margin for new housing loans (%)	1% differential against 3M SIBOR
Pre-tax earnings impact (SGD m)	Less than 10

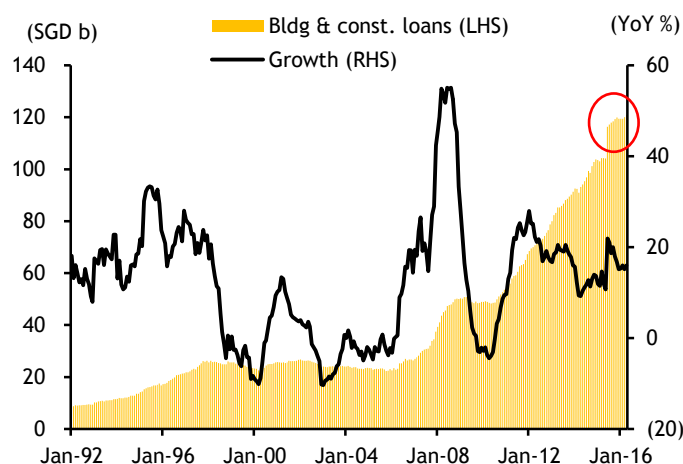
Source: Maybank KE

## 1.2 ...and the impact on B&C lending?

B&C loans form 21% of DBU loans. B&C lending is extended to construction and project companies for property development and construction financing. Projects are not limited to residential housing; they include commercial buildings and infrastructure projects. Government spending in this sector has been taking up the slack of private-sector construction in recent years.

**Fig 93: B&C loan growth**

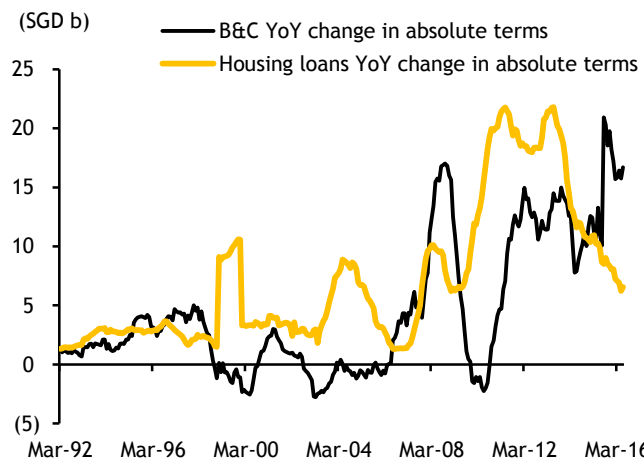
Positive growth, albeit slowing too



Source: MAS

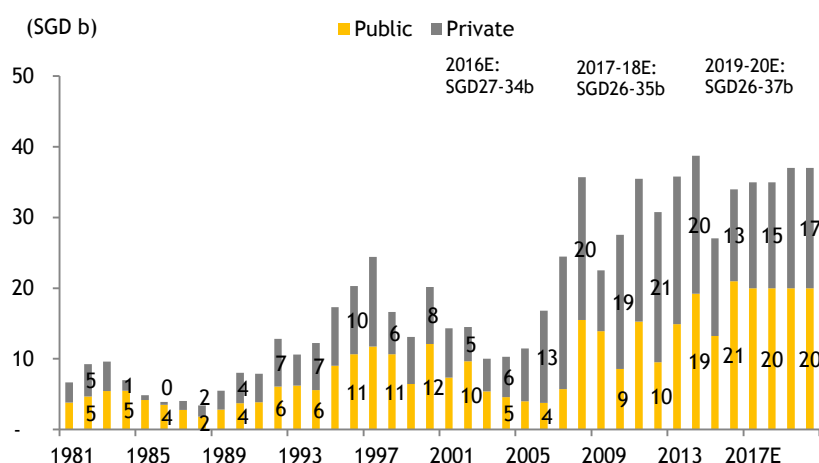
**Fig 94: Correlation between B&C and housing loans**

Correlation coefficient = 0.5, using absolute YoY changes in loans



Source: MAS, Maybank KE

On the assumption that private housing market activity slows, B&C activity should decelerate as well. With the government stepping up spending, the impact would be cushioned. As public projects such as the construction of new MRT lines and North-South Expressway are ongoing, B&C loans are more likely to accelerate than decelerate. The Building and Construction Authority (BCA) expects average construction demand to be sustained at SGD26-37b over 2017-2020E. See our report on ASEAN Infrastructure: The New Old Thing dated 9 Apr 2016 ([link](#)).

**Fig 95: Singapore construction contracts awarded**

Source: BCA, CEIC, Maybank KE

Still, if private housing sales slow, B&C lending cannot escape unscathed. Our channel checks suggest that lending rates for the biggest construction companies average about 2%, although the smaller ones are likely to be paying more. Assuming a 2% lending spread over SIBOR and for every 10% drop in private-housing construction, we estimate that the system's pre-tax earnings would dip by SGD20-25m.

A summary of the impact is shown below.

**Fig 96: Summary of impact**

Sales of private residential properties and ECs (no. of units)	16,500
Cost of 1 unit (SGD m)	1
Total transaction value (SGD m)	16,500
For every 10% decline in housing sales volume from 2015 levels:	
Decline in transaction value (SGD m)	1,650
Estimated impact on loan quantum of B&C loans, after offsetting 10% for developer's margin and 20% for contractor's equity (SGD m)	1,200
Margin for B&C loans (%)	2% differential against 3M SIBOR
Pre-tax earnings impact (SGD m)	20 - 25

Source: Maybank KE

### 1.3 Limitations of linear analysis

It is possible that cooler sentiment in the housing market could reduce transaction volumes by more than the 10% we have assumed. Transaction volumes in 2015 are already down by 61% from the peak in 2012. We also have not factored in declining capital values for property in our analysis.

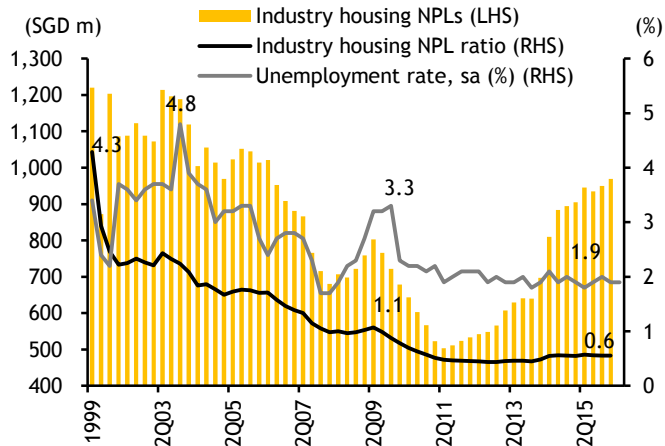
If B&C loans, which have swelled almost 350% since 2007, experience a pullback of far bigger magnitude, this would have spillover effects for the other sectors and economy.

Increases in loan-to-value ratios and decline in collateral values could also bump up loan delinquencies, affecting credit costs and earnings.

## 1.4 Housing and B&C NPLs

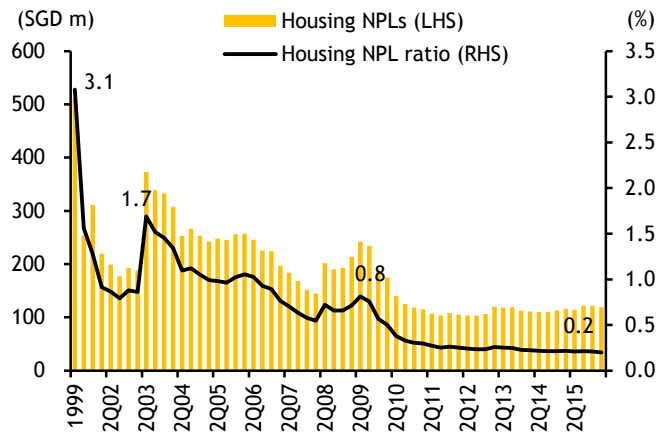
Mortgage loan quality has been resilient after the Asian financial crisis (Figs 18-21). Singapore banks' housing NPL ratios have stayed below 5%, with the exception of OCBC's 9.8% in 1999 and 5.8% in 2000. NPLs for most mortgages tend to be charted by unemployment rates rather than collateral values, from our analysis.

Fig 97: Singapore banks' housing NPLs



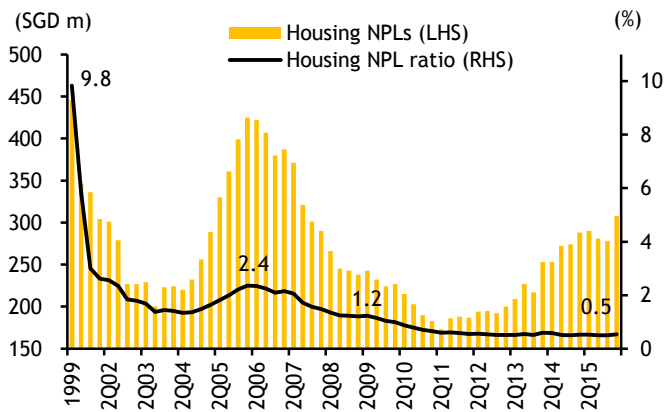
Source: Companies, Ministry of Manpower

Fig 98: DBS' housing NPLs...



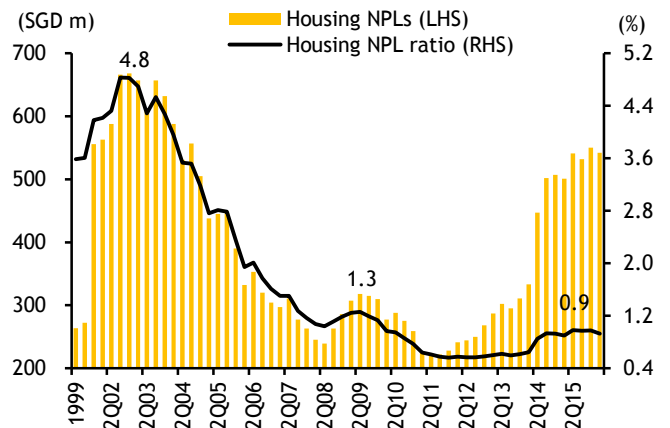
Source: DBS

Fig 99: ...OCBC's...



Source: OCBC

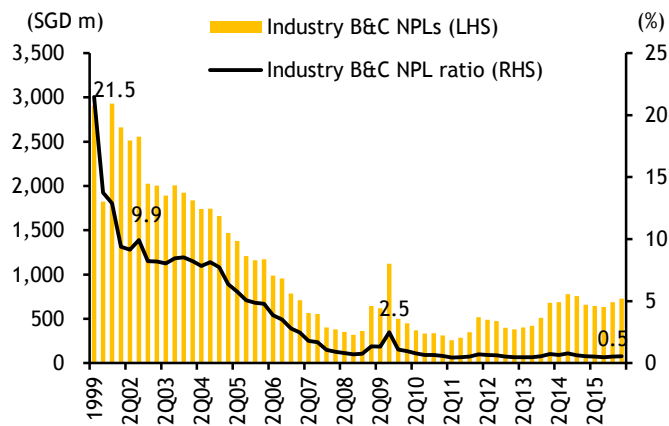
Fig 100: ... and UOB's



Source: UOB

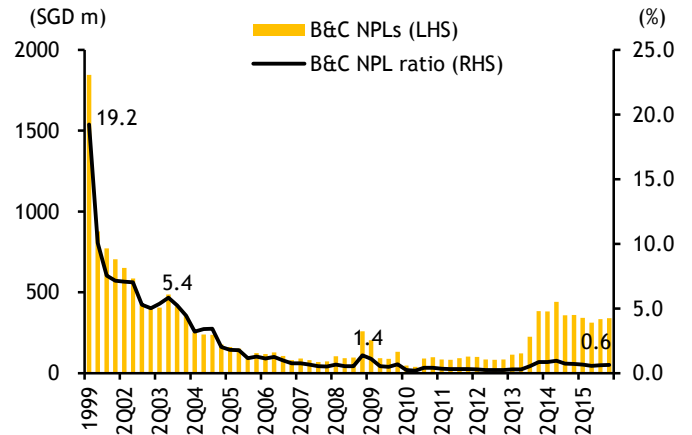
Similarly, Singapore banks' B&C NPL ratios stayed below 1% currently.

Fig 101: Singapore banks' B&C NPLs



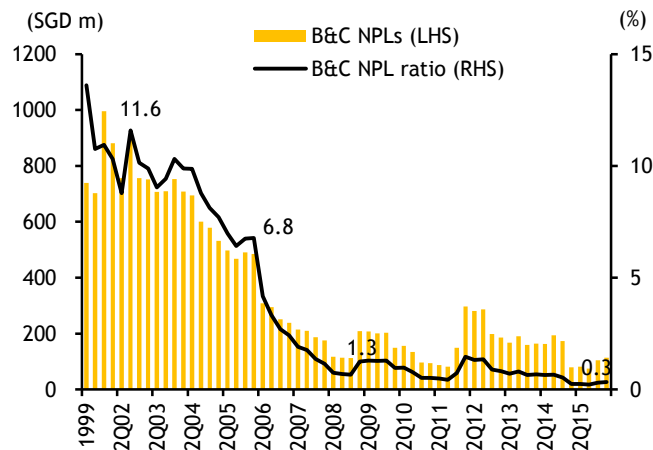
Source: Companies

Fig 102: DBS' B&C NPLs...



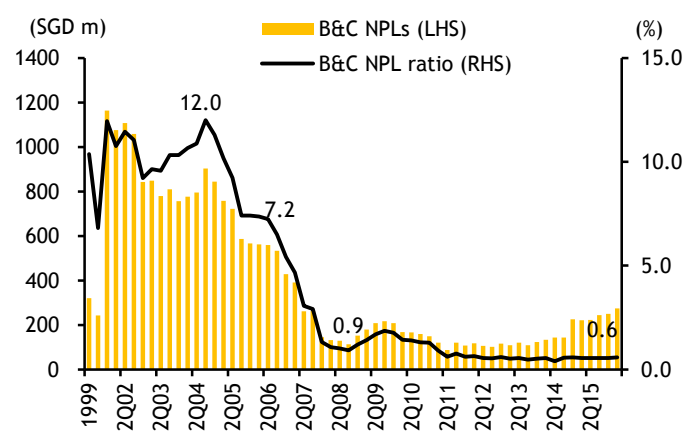
Source: DBS

Fig 103: ...OCBC's...



Source: OCBC

Fig 104: ... and UOB's



Source: UOB

## 2. Overseas Investments

### 2.1 Returns hold up

As common equity is the first capital recourse for banks to absorb losses, we use ROE and COE instead of ROIC and WACC to assess returns from their overseas investments.

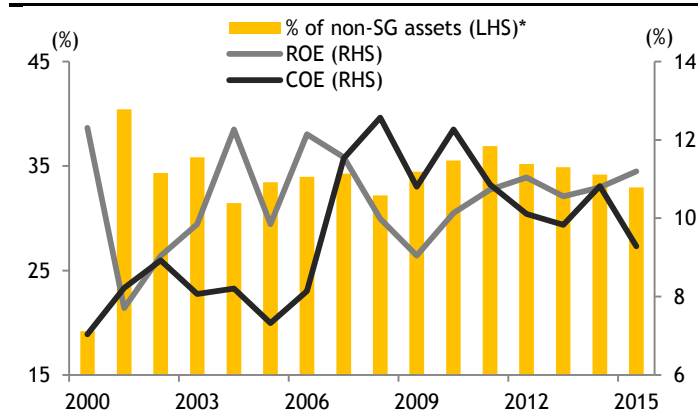
Currently, 33-45% of banks' assets are overseas. PBT from these contributed 30-45% to their total in 2015. Since GFC, global banks have been retreating from Asia as part of their cost rationalisation and operational realignment. Singapore banks have been profiting from this, by filling their shoes.

For 2015, core ROEs exceeded COEs for all three banks. Overseas assets helped to maintain their returns. DBS' COE has also trended down, helping to keep its ROE above COE. The gap between OCBC's ROE and COE has been widening since 2012, reflecting better returns from its Indonesian franchise and Bank of Singapore unit. UOB's ROEs have been consistently above COEs, aided by higher NIMs for its SME franchise.

That said, we think credit costs in a downcycle could decide the success or failure of their overseas diversification.

**Fig 105: DBS' ROE vs COE**

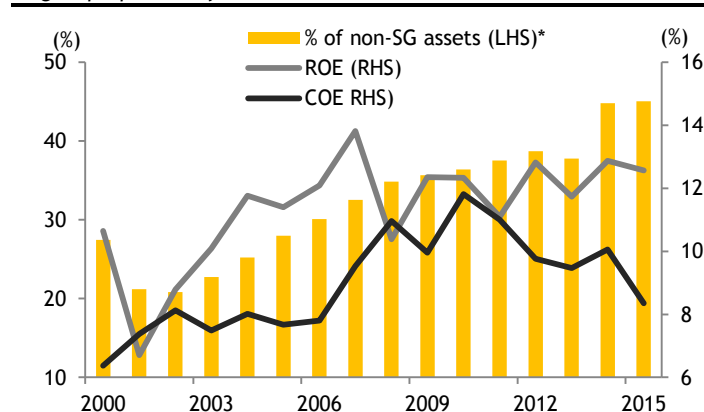
*ROE is now above COE*



Source: Bloomberg, Company, Maybank KE

**Fig 106: OCBC's ROE vs COE**

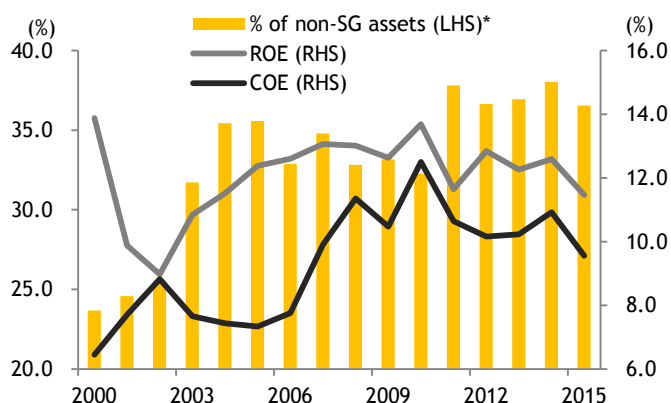
*Largest proportion of overseas assets. ROE is above COE.*



Source: Bloomberg, Company, Maybank KE

**Fig 107: UOB's ROE vs COE**

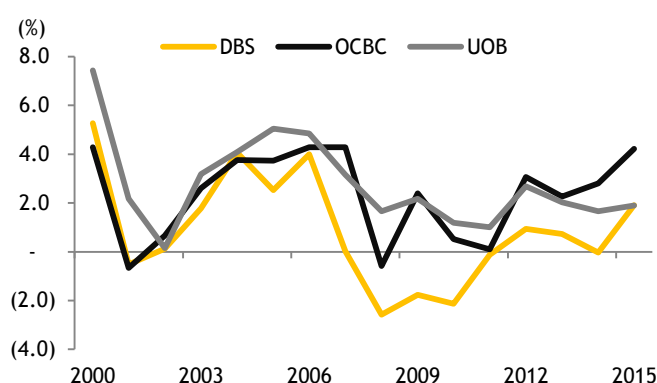
ROE has been consistently above COE.



Source: Bloomberg, Company, Maybank KE

**Fig 108: Banks' ROEs less COEs (%)**

Returns are improving but earnings risks may reverse this



Source: Bloomberg, Companies, Maybank KE

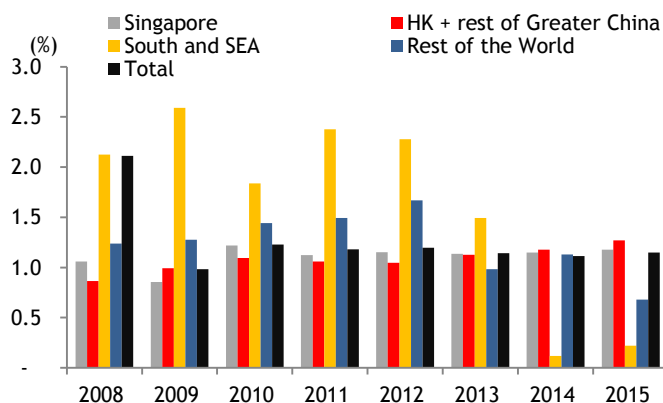
The geographical breakdown provided by the banks is based on where their assets are booked. Our observations are:

- **DBS:** Total ROAs came down after 2008, after which they have been stabilised by domestic returns and improving returns from Greater China. ROAs for South and Southeast Asia have been declining since 2013, as weakness in the Indian economy hit the bank's mid-cap portfolio.
- **OCBC:** Indonesia produced the highest ROAs in the past three years. ROAs from Malaysia and Indonesia exceeded domestic returns, except in 2012. Returns from Greater China also increased after its acquisition of Wing Hang Bank.
- **UOB:** Malaysia has consistently outperformed total returns, while Greater China has been underperforming. Indonesia used to generate ROAs of 2.3-3.5% before 2014, but no longer did so after 2014 due to currency depreciation and higher loan impairment.

In most periods, banks' total ROAs were either on par with or higher than Singapore's. This implies that the returns from their overseas investments have helped to maintain overall returns.

**Fig 109: DBS' ROA by geography**

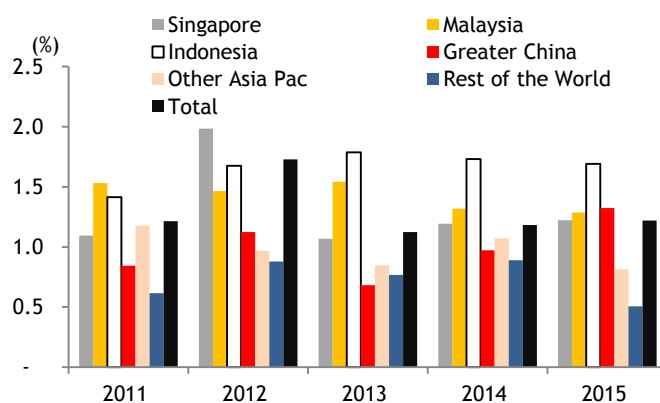
South and SEA's ROAs have declined sharply in the past two years.



Source: Company, Maybank KE

**Fig 110: OCBC's ROA by geography**

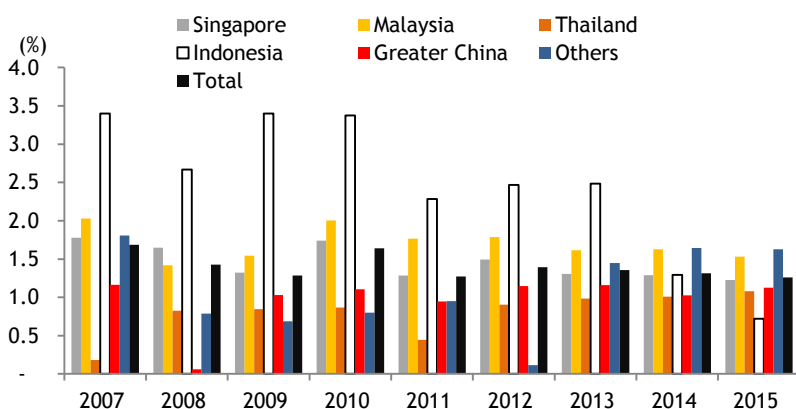
Indonesia's ROA outperformed the rest in the past three years.



Source: Company, Maybank KE

**Fig 111: UOB's ROA by geography**

Total ROA has been on par with Singapore's, except in 2013.



Source: Company, Maybank KE

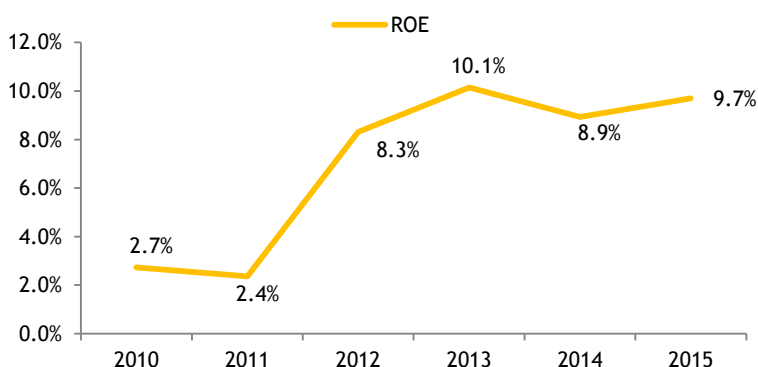
ROAs can be lower in some overseas markets due to country-specific risks and regulatory constraints. Licensing requirements and approval to set up branches or subsidiaries in other countries can take a long time.

## 2.2 Wealth management next?

Wealth management can provide banks with their next source of growth, in our opinion. This is a fee-based, low-capital and high-ROE business. Acquisitions are increasingly seen as the fastest way to scale up, such as: 1) OCBC's acquisition of ING Asia Private Bank (IAPB) in 2009 and Barclays' Asian wealth unit in 2016; and 2) DBS' acquisition of Societe Generale Asia's private-banking business in 2014.

We think OCBC's improving returns since 2012 could be partly traced to its acquisition of IAPB in 2009. ROEs for Bank of Singapore - its private-banking arm formed after the addition of IAPB - leapt from 2.7% in 2010 to 9.7% in 2015, albeit at a heavy price tag of P/AUM of 5.8% or USD1.5b. Increasingly, this business may have to bear higher compliance, regulatory, staff and technology costs as the government tightens regulations against tax evasion and money laundering.

□

**Fig 112: ROEs^ for OCBC's Bank of Singapore**

^Using net income/avg equity.

Source: Company, Maybank KE

# Singapore Consumer & Healthcare

## Taking Stock & Feeling The Pulse

### Go for the best in consumer & healthcare

In our Unmasking Singapore thematic note, we identified consumption as a sector which should benefit from any measures to alleviate high business costs or boost demand through income-related benefits. There is some urgency, as our analysis suggests vulnerabilities even for success stories like Jumbo, whose high staff costs are only ameliorated by low rental costs. Our sensitivity analysis suggests a 15-16% boost for Sheng Siong's EPS and 25-28% boost for Jumbo if labour and rental costs fall by 10%. Elsewhere, healthcare companies are the poster boys of overseas expansion but the jury is still out on their returns. With their premium valuations, there could be risks for underperformers such as IHH. Q&M stands out for its high ROICs which should hit 11%, well ahead of a WACC of 8%.

### Consumer: big winner if something is done about business costs

Consumer companies in Singapore are beset by high business costs. Labour and rentals make up their two biggest costs, after raw materials. If even successfully-run Jumbo and Sheng Siong can be vulnerable, what more the companies whose sales are not faring that well? Jumbo would not be so profitable had its lower rental costs not come to the aid of its wage bill. While Sheng Siong's wages as a percentage of revenue are the lowest in the sector, it is the highest paymaster in absolute terms. However, these two are still the best-quality investible names and potentially the biggest winners if costs can be addressed. Our sensitivity analysis suggests a 15-16% boost for Sheng Siong's EPS and 25-28% boost for Jumbo if labour and rental costs fall 10%. Government-led boosts to disposable income should profit food retailers the most as lower-income subsidies are typically channelled to food purchases.

**Top consumer BUYS: Sheng Siong (TP SGD1.12), Jumbo (TP SGD0.65)**

### Healthcare: poster boys for overseas expansion but jury still out

ROIC for all healthcare companies expanding overseas has been dwindling. Still in their early stages of expansion, this is due to huge upfront capex. While investors are obviously exuberant going by their premium valuations, it is too early to judge their success as their overseas track records are not long enough. Q&M Dental stands out as the most active M&A player in China. So far, its overseas ROICs are comparable to, if not better than, its local ROICs. Raffles Medical is still ramping up in China, but we expect its greenfield Shanghai hospital to deliver better ROIC than WACC when it reaches steady state. IHH is still burning capital overseas with its ROIC at below WACC.

**Top healthcare BUYS: Q&M (TP SGD1.08), Raffles Medical (TP SGD1.73)**

**POSITIVE** - Consumer  
**NEUTRAL** - Healthcare

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Sensitivity analysis		FY17E			FY18E		
Sheng Siong		Current forecast	If costs drop 10%	Chg	Current forecast	If costs drop 10%	Chg
Revenue		873,275	873,275		924,589	924,589	
- Wages		(103,046)	(92,742)	-10%	(109,102)	(98,191)	-10%
- Rental		(23,578)	(21,221)	-10%	(24,964)	(22,468)	-10%
Net profit		68,362	78,872	15%	71,139	82,267	16%
EPS		4.55	5.25	15%	4.73	5.47	16%

		FY17E			FY18E		
Jumbo		Current forecast	If costs drop 10%	Chg	Current forecast	If costs drop 10%	Chg
Revenue		167,267	167,267		177,094	177,094	
- Wages		(46,835)	(42,151)	-10%	(49,586)	(44,628)	-10%
- Rental		(14,887)	(13,398)	-10%	(15,761)	(14,185)	-10%
Net profit		19,615	25,015	28%	22,699	28,384	25%
EPS		3.06	3.90	28%	3.54	4.43	25%

Stock	Bloomberg code	Mkt cap (USD'm)	Rating	Price (LC)	TP (LC)	Upside (%)
<b>Consumer</b>						
Sheng Siong	SSG SP	976	BUY	0.89	1.12	26
Super	SUPER SP	678	HOLD	0.83	0.99	19
Jumbo	JUMBO SP	277	BUY	0.58	0.65	13

<b>Healthcare</b>						
IHH	IHH MK	13,310	HOLD	6.50	6.13	(6)
Raffles Medical	RFMD SP	1,938	BUY	1.51	1.73	15
Q&M	QNM SP	435	BUY	0.71	1.08	53

Stock	P/E (x)		P/B (x)		Div yld (%)	
	16E	17E	16E	17E	16E	17E
<b>Consumer</b>						
Sheng Siong	20.7	19.6	5.3	5.1	4.4	4.6
Super	17.7	15.5	1.7	1.6	2.9	3.3
Jumbo	22.2	18.8	5.8	4.9	2.3	2.7

<b>Healthcare</b>						
IHH	52.8	44.2	2.3	2.2	0.5	0.5
Raffles Medical	35.6	32.2	4.1	3.9	1.4	1.5
Q&M	33.8	27.3	5.0	4.5	1.2	1.3

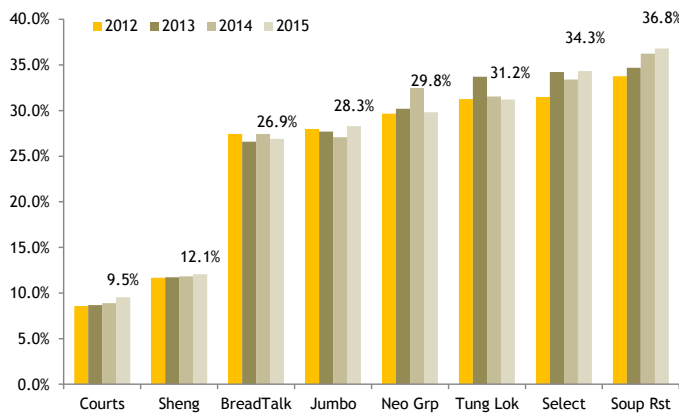
# 1. Consumer Sector

## 1.1 Bedevilled by high business costs

Singapore's listed consumer stocks fall into two camps: the ones successfully managing their labour and rental costs and those that are struggling. The latter far overwhelm the former. All are beset by rising business costs and manpower shortages.

**Fig 113: Staff costs are disproportionately high**

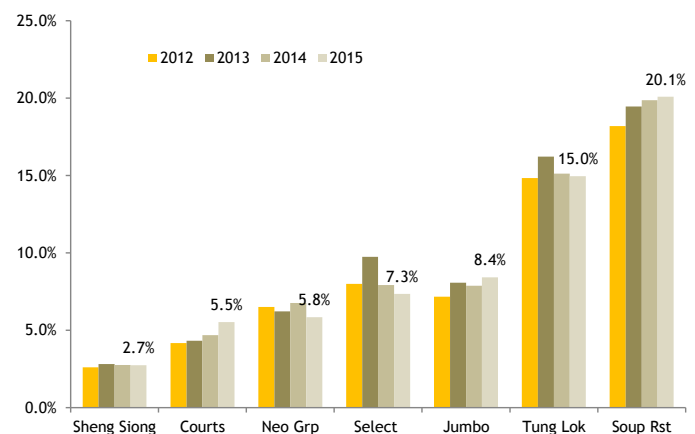
*Sheng Siong's staff costs, although lower in proportion to its sales, are the highest in absolute terms in our consumer universe*



Source: Company data

**Fig 114: Rental costs**

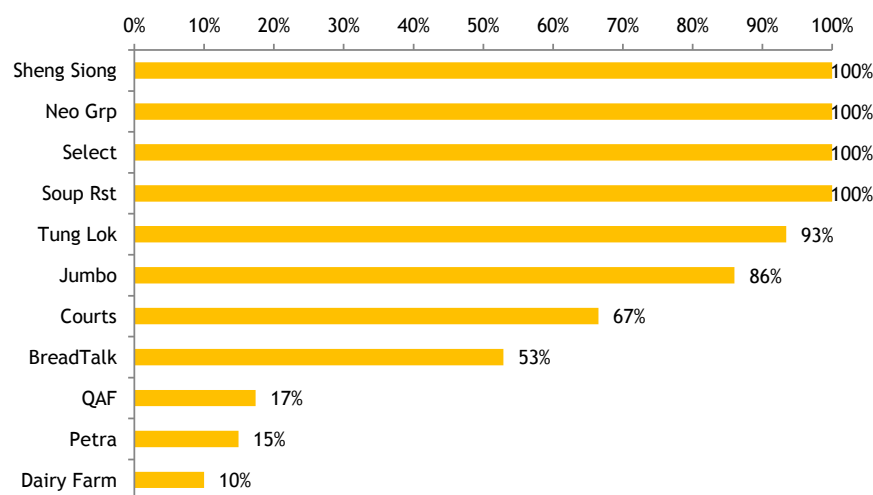
*There are clearly two camps: those with rental costs <10% and >15%*



Source: Company data

We examined 10 consumer-staple companies in Singapore for their mix of most vexing business costs.

**Fig 115: Consumer companies' home-ground exposure**



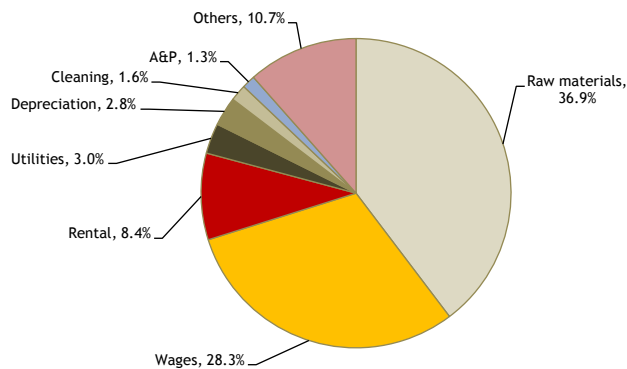
Source: Company data

Super Group is not here as we were unable to get detailed data on operating costs

Even though Sheng Siong and Jumbo have successfully dealt with the two biggest cost bugbears, salaries and rentals remain their biggest variable costs, after raw materials and other consumables. As Jumbo's staff costs run as high as 28% of its revenue, even it cannot escape unscathed if its rentals are not generally lower. Its most successful seafood outlets are located outdoors where rents are lower than inside malls. Sheng Siong is the flag-bearer of cost management in Singapore but its wage cost is low at 13% of sales only because of high food costs. In absolute terms, its staff costs are the highest in the industry.

**Fig 116: Jumbo's FY15 cost mix...**

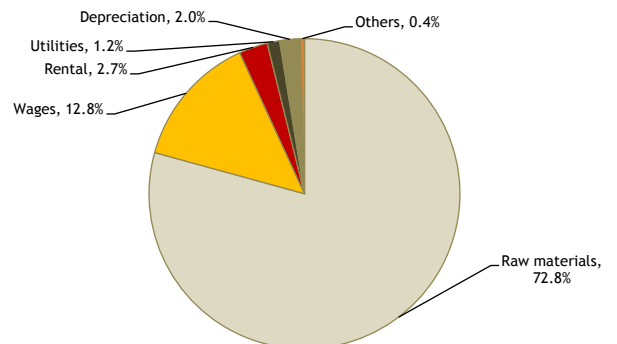
*With staff costs at a high 28% of sales, even Jumbo would be in trouble if not for its lower rental costs*



Source: Company data

**Fig 117: ... Sheng Siong's...**

*Low costs relative to revenue only appear so mainly due to high material costs. Absolute staff costs are the highest in the industry*

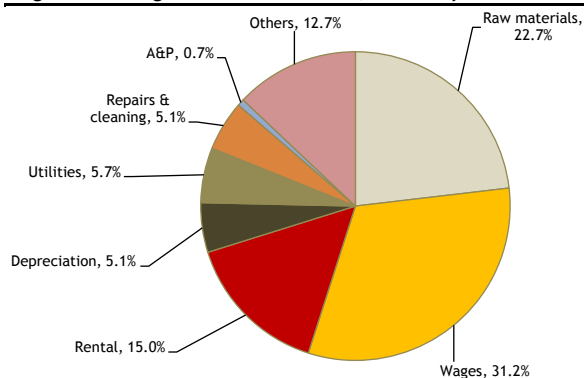


Source: Company data

The pain of high business costs is more acute for companies not faring that well in revenue terms, such as the Tung Lok Group and Soup Restaurant. Unlike Sheng Siong, there is no relief, as both wages and rentals are equally high.

**Fig 118: ...Tung Lok's...**

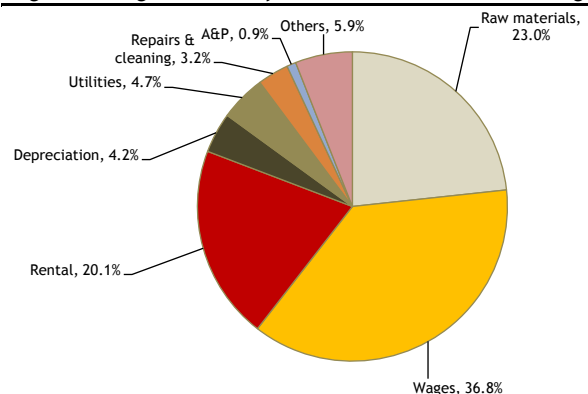
*Wages are as high as 31% and rentals, at 15% of revenue*



Source: Company data

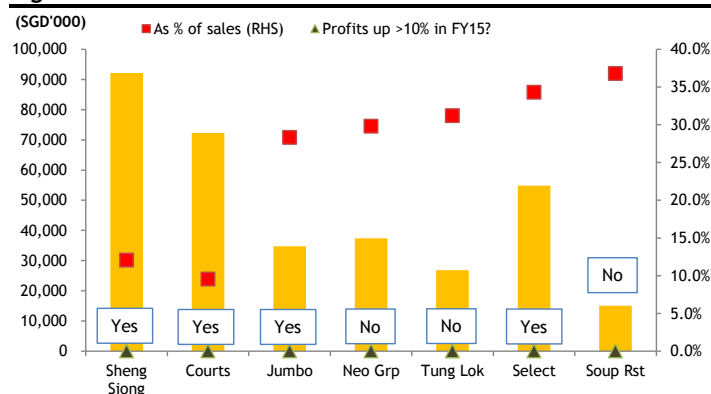
**Fig 119: ... and Soup Restaurant's**

*Wages even higher at 37% of revenue with rentals exceeding 20%*



Source: Company data

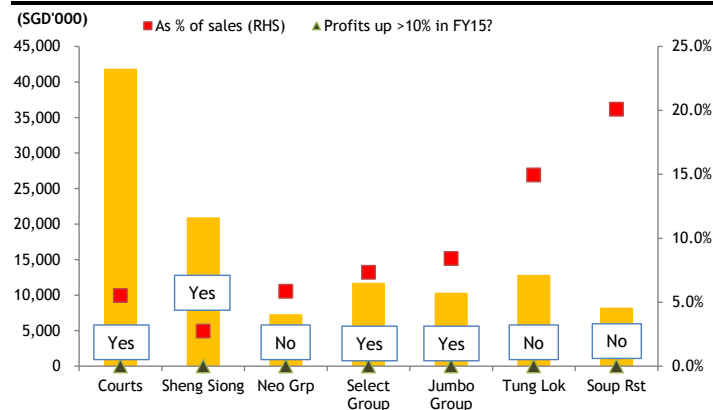
**Fig 120: High labour costs a problem if not accompanied by high sales or lower costs elsewhere**



Source: Company data

**Fig 121: Similarly with rental costs**

*Jumbo is unique as its lower rentals mitigate its high staff costs*

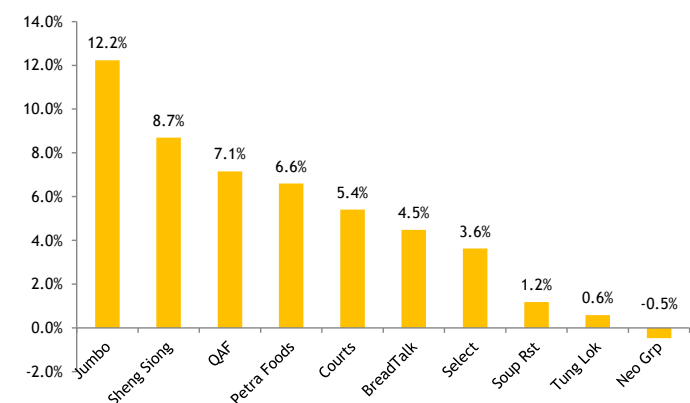


Source: Company data

The difference between the two camps appears to boil down to sales (see Figs 120-121). The higher their revenue, the better they appear positioned to handle high costs. That's just simple mathematics, but it brings up a troubling issue. If consumption ever dips so slightly, costs for even those which are doing well now could catch up. This makes it imperative for them to break into bigger external markets, such as what Jumbo has done and what Sheng Siong will soon be doing.

For those stuck in Singapore at the lower end of the margin curve, they appear to be treading a fine line between solvency and insolvency. That is a dire prospect.

**Fig 122: At the low end, consumer EBIT margins hang in a balance...**



Source: Company data

**Fig 123: ... between solvency and losses**



Source: Company data

The measures we called on wage relief and property measures should provide some breathing room, if they are forthcoming. Lower wage and property-rental bills could immediately provide reprieve for consumer companies, while subsidy-driven improvements in disposable income could boost demand. More pertinently, the margin impact should be disproportionately larger for the consumer sector, given their lower margin base.

## 1.2 Go for quality names

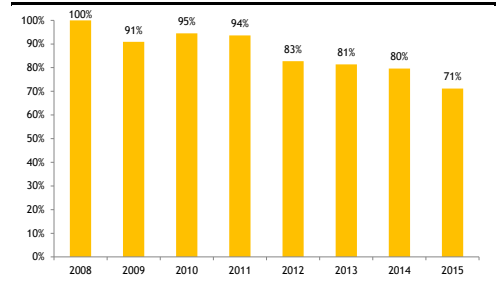
If operating costs can be cut, loss-making or low-margin companies such as Neo Group, Tung Lok or Soup Restaurant should benefit the most. Still, this does not make them investible stocks.

- **Sheng Siong (SSG SP, BUY, TP SGD1.12), the biggest cost winner.** Although its absolute wage bill is high, it is the lowest at 13% of revenue. We are also expecting its topline to grow faster this year as core inflation picks up. Furthermore, at just 42 stores in Singapore vs 48 for Cold Storage and 122 for market leader, NTUC FairPrice, Sheng Siong has expansion potential. It is, moreover, exploring ways to use IT to boost productivity. Reflecting traction, the number of workers it required to run a supermarket by 2015 was just 71% of what it needed in 2008.

Longer term, a successful break into China could provide another catalyst, in our view.

- **Jumbo (JUMBO SP, BUY, TP SGD0.65) another big winner, due to its high wage bill.** Any wage relief should also benefit Jumbo as wages account for 28% of its revenue, on par with the rest of the consumer sector. If not for its low rental costs, Jumbo may not be doing so well today. This is a chink in its armour that needs addressing.
- **Profits could be boosted by 15%/28% if costs are cut by 10%.** Our sensitivity analysis suggests that if labour and rental costs are cut by 10%, Sheng Siong's EPS could be bumped up by 15-16% in FY17-18 and Jumbo's, by up to 28%.

**Fig 124: Workers needed per store now are just 70% of the level in 2008**



Source: Company data

**Fig 125: Considerable savings for Sheng Siong and Jumbo if wages and rental costs are cut by 10%**

FYE Dec (SGD'000)	FY17E			FY18E		
	Current forecast	If costs drop 10%	Chg	Current forecast	If costs drop 10%	Chg
<b>Sheng Siong</b>						
Revenue	873,275	873,275		924,589	924,589	
- Wages	(103,046)	(92,742)	-10%	(109,102)	(98,191)	-10%
- Rental	(23,578)	(21,221)	-10%	(24,964)	(22,468)	-10%
Net profit	68,362	78,872	15%	71,139	82,267	16%
EPS (SGD cts)	4.55	5.25	15%	4.73	5.47	16%
<b>Jumbo</b>						
Revenue	167,267	167,267		177,094	177,094	
- Wages	(46,835)	(42,151)	-10%	(49,586)	(44,628)	-10%
- Rental	(14,887)	(13,398)	-10%	(15,761)	(14,185)	-10%
Net profit	19,615	25,015	28%	22,699	28,384	25%
EPS (SGD cts)	3.06	3.90	28%	3.54	4.43	25%

Source: Company data, Maybank Kim Eng

## 2. Healthcare Sector

### 2.1 Are overseas returns worth the risks?

We next explore the kind of returns that Singapore companies have been generating or expect to generate from their overseas investments. In our view, healthcare companies, especially general hospital operators Raffles Medical and IHH Healthcare and specialised groups such as Q&M Dental are the best case studies for this, given the market's premium valuations for them.

### 2.2 Healthcare companies showing the way

Due to small markets at home, many Singapore and Malaysia healthcare companies have been expanding overseas. In doing so, they aim to generate higher growth and replicate their domestic business success abroad. In chronological order, the leading proponents of this model are:

- **IHH Healthcare (IHH MK, HOLD, TP SGD6.13)** was formed in 2012 from a mega-merger of Singapore-based Parkway Group, Malaysia-based Pantai Group and Turkey-based Acibadem. Still managed mostly by Singaporeans and funded by strong cash flows from Singapore, it has expanded into India, Hong Kong and China. Being a market leader in premium services, IHH incurs huge upfront capex to build state-of-the-art hospital facilities. Also, with a legacy of high intangible assets from its mega-merger, ROIC and ROA have been low and declining.
- **Q&M Dental (QNM SP, BUY, TP SGD1.08)** started its M&A spree in 2013 in China. It has discovered favourable M&A deals in third-tier cities, after initially running into limited success in first-tier cities. It tasted its first success in 2014, when in two blockbuster deals, it acquired majority stakes in a dental hospital group and a dental-supply manufacturer in China.
- **Raffles Medical (RFMD SP, BUY, TP SGD1.73)** started to actively look overseas only in 2015. It has acquired a regional clinic group and will be developing a 400-bed tertiary hospital in Shanghai. ROIC and ROA have been declining due to high upfront development costs.

**Fig 126: All announced and completed acquisitions of Q&M except TP Dental have ROICs that beat Q&M's 8.4% WACC**

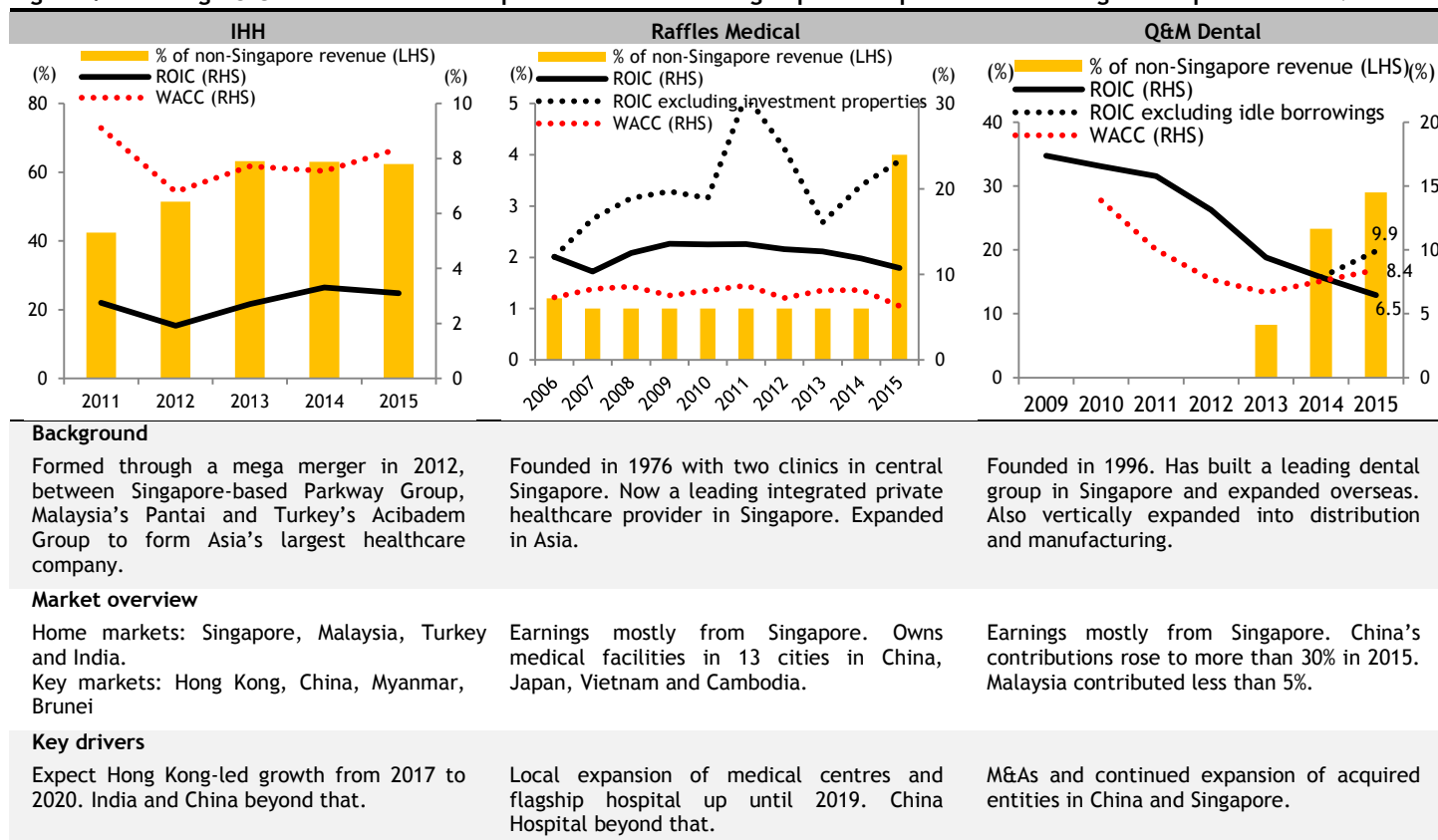
Acquisition target	Country	Announced	Completed	Total cost (SGD)	Acquisition P/E (x)	Long-term ROIC (%)	Profit guarantee (SGD)		LT profits (SGD)
							2016	2017	
Aoxin	PRC	Jul 2013	Jul 2014	21,600,000	15.6	10.7	1,641,063	1,788,759	2,316,495
Aidite	PRC	Nov 2013	Aug 2014	14,900,000	8.8	22.9	2,248,250	2,585,488	3,419,307
Dr Foo	SG	Mar 2014	Jul 2014	5,500,000	10.5	9.5	525,000	525,000	525,000
TP Dental	SG	Apr 2015	Sep 2015	28,600,000	17.9	7.0	1,600,000	1,600,000	2,000,000
Tiong Bahru	SG	May 2015	Sep 2015	3,800,000	7.6	13.2	500,000	500,000	500,000
Aesthetics Dental	SG	May 2015	Nov 2015	4,000,000	12.5	8.8	320,000	320,000	350,000
Panjin City Dental	PRC	Jun 2015	Jan 2016	3,059,870	10.4	9.7	153,011	153,011	153,011
Gaizhou City Dental	PRC	Jun 2015	Jan 2016	317,739	11.2	8.9	28,370	28,370	28,370
Panjin Jinsai Dental	PRC	Jul 2015	Jan 2016	844,435	10.0	10.0	84,663	84,663	84,663
Shenyang Lan Hai	PRC	Oct 2015	Jan 2016	986,087	9.0	11.1	109,315	109,315	109,315
Lee & Lee	SG	Jan 2016	Feb 2016	10,000,000	14.3	8.7	700,000	700,000	872,126
Shenzhen New Perfect	PRC	Jun 2016	Pending	13,750,000	13.3	11.0	1,032,900	1,135,200	1,510,951
<b>Total/Weighted average</b>				<b>105,883,043</b>	<b>13.0</b>	<b>11.2</b>			<b>11,869,237</b>

Source: Company, Maybank KE

## 2.3 Market overlooking falling ROIC for now

To a man, all the healthcare companies we studied are seeing declining ROIC. Still in their early stages of expansion, ROICs have been declining due to huge upfront capex. That said, investors are obviously bullish given their premium valuations. It is still too early to judge their success as their overseas track record is still not long enough. However, we believe the market understands that their development models for new overseas investments involve a hockey-stick curve where business grows at a normal linear pace but once an inflection point is hit, growth starts to take off at an exponential rate.

**Fig 127: Declining ROICs for healthcare companies due to their huge upfront capex and borrowings for expansion and M&As**



Source: Company data, Maybank Kim Eng

- **Q&M stands out as the biggest success story so far.** The standout appears to be Q&M Dental, which is easily the most active M&A player in China. So far, its overseas ROICs are comparable to, if not better than, its local ROICs. If not for debt that was taken on ahead of its actual need to facilitate faster conclusions of its M&A negotiations, its ROIC would have consistently exceeded WACC and not dipped below in FY15. In the long term, profit guarantees for its various deals provide some confidence that ROIC can hit as high as 11.2% relative to its historical WACC of 8.4%.
- **IHH's ROIC has lagged WACC for years now.** Management has told investors that it has different ROIC expectations for different countries due to their varying stages of development. It aims for 20+% ROICs for developing countries and 15+% for developed countries. So far, there are no indications that it is near the part of the hockey-stick curve where growth takes off. We see risks of a correction if this inflection point does not come soon.

- **Still early in the game.** Raffles Medical, which will only start its first China hospital in 2019, expects higher ROICs than its local projects, from higher fees and lower costs in China. Its upcoming 400-bed Shanghai Hospital is expected to deliver a 15.9% ROIC vs the group's 8.1% WACC. We expect the hospital to reach a steady state in 2023, its fifth year of operation. On the other hand, 55%-held International SOS (MC Holdings) is estimated to generate an ROIC of around 5%. Despite this low value accretion, its 10 clinics are necessary for Raffles Medical to gain a stronger foothold in China and penetrate new markets like Vietnam and Cambodia, before setting up more profitable hospitals. It could also complement its new Shanghai Hospital, by acting as a referral centre.

# Singapore Property

## The Property Fix

# NEUTRAL

[Downgrade]

### Cooling measures could stay; D/G to Neutral

We turn less bullish on the sector as our recent macro-analysis suggests that property-cooling measures could - and likely should - be in place for longer than expected. As such, expectations of a strong rebound in home sales may not materialise in the near term. While asset monetisation and overseas diversification may provide some support, we see them as weaker catalysts for the sector. We cut home-sales and EPS forecasts accordingly. We see less appealing valuations for Ho Bee and CityDev against our revised RNAV and TPs. Downgrade both from BUY to HOLD. Wing Tai stays as a HOLD. CapitaLand is our sole BUY in the sector.

### Macro implications of property investments

Our recent review of the relationship between Singapore's property market and economy in [The Singapore Fix, dated 29 June 2016](#) suggests undesirable implications of the increasing use of residential property as investments. The deployment of surplus capital to this asset class may be a poor allocation of capital that could be channelled to more productive uses, our study indicates. Rising occupancy costs from higher property prices will also erode disposable income. We think this has been partly responsible for Singapore's lower consumption rates than its regional peers. Lastly, we believe that home-price inflation could lift wage expectations and impinge on Singapore's labour competitiveness.

### Prices have not dipped enough for the government

With home prices down for more than two years, the market has been pressing for a review of the government's Additional Buyer's Stamp Duty (ABSD) and loan-to-value restrictions. Even before considering macro-economic concerns, good take-up of recent new launches and stubbornly low interest rates imply that the government could tread cautiously on the question of cooling measures in the near term.

### Sales rebound from lifting measures may not happen

Therefore, we believe that investors should temper expectations for a home-sales rebound from a review of cooling measures. It is better to leave this as an upside surprise. While asset monetisation and overseas diversification could provide some sector support, we see them as weaker catalysts. We cut forecasts the most for Wing Tai to factor in its payment of various QC and ABSD penalties, its smaller recurring-income base and headwinds for its retail business. CityDev's EPS has been lowered for slower sales but mitigated by its larger recurring-earnings base and overseas profits. Small revisions have been made for CapitaLand and Ho Bee due to their smaller exposure to Singapore's residential market. Nonetheless, we mark down the latter's earnings further for lower profits from its UK offices due to the weaker GBP.

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### Property Developers

BBG Ticker	Rating	Price (SGD)	TP (SGD)	Upside (%)	RNAV disc. (%)	P/BV (x)
CAPL	BUY	2.94	3.93	33.7	(41)	0.71
CIT	HOLD	8.17	8.92	9.2	(27)	0.86
HOBEE	HOLD	2.15	2.28	6.0	(42)	0.51
WINGT	HOLD	1.62	1.71	5.6	(23)	0.40

### Key changes

BBG Ticker	Rating		TP (SGD)	
	New	Old	New	Old
CAPL	➡ BUY	BUY	↓ 3.93	3.95
CIT	↓ HOLD	BUY	↓ 8.92	9.82
HOBEE	↓ HOLD	BUY	↓ 2.28	2.47
WINGT	➡ HOLD	HOLD	↓ 1.71	1.93

Source: Maybank Kim Eng

## Surplus capital to property will keep home prices up, up & away

We recently reviewed the relationship between Singapore's property market and its broader economy in [The Singapore Fix, dated 29 June 2016](#). Although Singapore has one of the highest home-ownership rates in the world, Singaporeans are still not satisfied. Almost everyone still aspires to be a landlord. This has led to the increasing use of residential properties as investments.

Investors continue to snap up residential properties whenever prices dip ever so slightly, even though income returns from this asset class have not been great in recent history. Even the best net yields during the GFC were only 3.5% for prime homes. We think that investors' willingness to accept such low returns stems from their entrenched belief in the long-term capital-appreciation potential of this asset class. Buying property is also facilitated by the following two government policies:

**Avenue for unlocking CPF savings.** Purchasing a property is one of the few ways a working adult can access his or her Central Provident Fund (CPF) savings in Singapore. Working adults are required to contribute a portion of their monthly salaries to CPF, Singapore's state-managed savings plan, as a form of forced retirement savings. By purchasing a property with CPF funds and leasing it out, one can gain cash income throughout one's life. This encourages the use of CPF for property purchases. There are also fewer restrictions on the use of CPF monies for the purchase of properties, unlike other forms of investments such as gold and stocks.

**Liberal subletting rules for public housing.** Liberalised subletting rules for public housing since 2007 have encouraged the use of residential properties as investments. After the change in regulations in 2007, Singapore HDB owners are now able to lease out their entire flats if they meet the minimum occupation period. More than 51,000 HDB homes today have been approved for leasing. Their owners can thus buy private properties while retaining their public housing for rental. But Singaporeans' preoccupation with owning and investing in properties has at least three undesirable implications, as we found in our recent macro-study.

**1) Poor allocation of capital.** Even after the recent downturn in home prices, Singapore households have tied up SGD840b of their capital in residential properties - a relatively illiquid asset class. At 209% of GDP, we wonder if this is a poor allocation of capital, which can be channelled to more economically productive uses.

**2) Weighs on disposable income.** Rising property prices tend to raise occupancy costs and lower disposable income for the population. Our calculations suggest that occupancy costs account for 20% of household spending in 2012-2013, up from 16% in 2007-2008 and 13% in 2002-2003. This is consistent with our observations on consumption, with Singapore having lower per capita household consumption than other high-income OECD countries.

**3) Wage inflation.** We believe there could be another trade-off from rising property prices that may not have been fully appreciated. Conventional thinking suggests that home prices track income growth over time as the population can afford to pay more for their homes. We believe the reverse is also true: higher home prices can lead to higher wages as well. There are at least three mechanisms for this. Firstly, higher home prices would fuel inflation,

accentuating the pressure on nominal wages to keep up with real wages, at the very least. Secondly, income needs to rise to service higher mortgages or rents. This applies to both the resident and non-resident workforce as occupancy costs usually represent a chunk of their spending. Thirdly, as 91% of households are home owners, a buoyant property market has enabled many young and smart Singaporeans to live on passive income and retire early.

## **To remake economy, government may keep cooling measures for some time**

We believe the government is aware of the country's infatuation with residential properties as investments and has implemented various tactical measures to address this. The introduction of ABSD and various loan-to-value limits since 2010 for the purchase of second and subsequent homes was targeted at the excessive use of residential properties as investments. At the time of implementation, the measures were meant to be temporary. But in the years since, the government has been reluctant to roll them back, oft citing still-high home prices.

Increasingly, we see risks of these measures becoming permanent. Even before considering top-down concerns, strong take-up rates for new launches and stubbornly low interest rates could keep the government guarded about lifting cooling measures too early. Property developers under our coverage have themselves been cautious on Singapore's residential market for a few years. They have limited their exposure by diversifying overseas. Those private / foreign developers that had bought land at elevated prices in their stead could take a bigger hit if home-sales volumes stay soft.

## **Sales rebound from lifting measures may not happen**

In view of the above, we believe that investors should temper their expectations for a home-sales rebound from any review of cooling measures. It is better to leave that as an upside surprise. While asset monetisation and overseas diversification could provide some sector support, we see them as weaker catalysts.

We cut home-sales and profit forecasts accordingly. We cut the most for Wing Tai in view of its need to pay various QC and ABSD penalties. We build in SGD66m of ABSD for The Crest (40% stake) in Sep 2017 and SGD131m of QC penalties for Nouvel 18 (50% stake) based on assumed unsold inventories at their deadlines beginning Nov 2016. Our cuts also reflect its smaller recurring income base and persistent headwinds for its retail business.

CityDev's earnings have been lowered for slower sales, but the impact is buffered by its larger recurring earnings base and overseas profits. We factor in a SGD108m payment of ABSD for Commonwealth Towers (30% stake) in Feb 2018 and QC penalties of SGD131m for Nouvel 18 (50% stake). We push out sales assumptions for South Beach Residences, Gramercy Park and New Futura.

Small revisions have been made to our forecasts for CapitaLand and Ho Bee due to their smaller exposure to Singapore's residential market. Ho Bee's residential projects on Sentosa are not subject to QC deadlines. Nonetheless, we mark down the latter's earnings further for lower profits from its UK offices due to the weaker GBP.

Figure 128: Net income changes

	New			Old			Change		
	2016E (SGD m)	2017E (SGD m)	2018E (SGD m)	2016E (SGD m)	2017E (SGD m)	2018E (SGD m)	2016E (%)	2017E (%)	2018E (%)
CapitaLand	966	1,614	1,485	948	1,665	1,452	2	(3)	2
City Developments	654	525	619	770	690	636	(15)	(24)	(3)
Ho Bee Land	122	64	54	133	93	77	(8)	(31)	(30)
Wing Tai	20	24	42	35	116	183	(42)	(79)	(77)

Source: Maybank Kim Eng

## Valuations less appealing now

We raise discount rates applied to all Singapore residential assets by 5ppt to 20% as we expect an extended period of weakness. We also refresh our valuations to update the latest market value of listed entities and for significant currency moves. In particular, we lower the valuation of M&C by 18% to 365pence to reflect the sharp fall in its share price recently.

We find valuations of CityDev and Ho Bee less appealing now against our revised RNAV and TPs and cut them to HOLD from BUY. We made significant cuts in RNAV and TP for Wing Tai but retain it as a HOLD, as negatives appear to be priced-in. CapitaLand is our sole BUY in the sector.

We turn less bullish on property developers and downgrade our view to NEUTRAL from POSITIVE.

Figure 129: TP and RNAV changes

	New			Old			Change		
	RNAV (SGD)	TP (SGD)	Target prem/(disc) (%)	RNAV (SGD)	TP (SGD)	Target prem/(disc) (%)	RNAV (%)	TP (%)	Target prem/(disc) (ppt)
CapitaLand	5.00	3.93	(21)	5.00	3.95	(21)	0.0	(0.5)	(0.4)
City Developments	11.22	8.92	(20)	11.91	9.82	(18)	(5.8)	(9.2)	(2.9)
Ho Bee Land	3.73	2.28	(39)	3.94	2.47	(37)	(5.3)	(7.7)	(1.6)
Wing Tai	2.10	1.71	(19)	2.29	1.93	(16)	(8.3)	(11.4)	(2.9)

Source: Maybank Kim Eng

Figure 130: Valuations of property developers

Company	Rating	Price	TP	Upside	Market cap	ADTV	RNAV	Current prem/ (disc)	Target prem/ (disc)	Latest BVPS	P/BV	Dividend yield (%)			Latest net gearing
		(SGD)	(SGD)	(%)	(SGD b)	(SGD m)	(SGD)	(%)	(%)	(SGD)	(x)	15	16E	17E	(x)
CapitaLand	BUY	2.94	3.93	33.7	12.5	29.2	5.00	(41)	(21)	4.13	0.71	3.1	3.4	3.4	0.47
City Developments	HOLD	8.17	8.92	9.2	7.4	19.3	11.22	(27)	(20)	9.49	0.86	2.0	2.0	2.0	0.25
Ho Bee Land	HOLD	2.15	2.28	6.0	1.4	0.3	3.73	(42)	(39)	4.19	0.51	3.3	3.3	3.3	0.54
Wing Tai	HOLD	1.62	1.71	5.6	1.3	2.1	2.10	(23)	(19)	4.09	0.40	1.9	1.9	1.9	0.18
<b>Average</b>				<b>13.6</b>				<b>(33)</b>	<b>(25)</b>		<b>0.62</b>	<b>2.5</b>	<b>2.6</b>	<b>2.6</b>	<b>0.36</b>

Share prices as of 28 Jun 2016

Source: Bloomberg, Maybank Kim Eng

# Singapore Industrial REITs

## Sweet Spot for Industrial Landlords

### Long-term support for R&D, high-value industries

Too much capital in residential properties has been stifling consumption, entrepreneurship and innovation, as suggested by our recent macro-analysis (Singapore Strategy, 30 June). As such, the government may maintain its property-cooling measures *longer* than widely expected. A lack of further capital gains coupled with depressed yields should then re-direct capital to better-yielding assets, commercial and industrial REITs included. Public spending is expected to keep up the focus on boosting productivity, innovation & enterprise: industrial space will be required for R&D, high-value industries, start-ups and SMEs. Our top picks for positioning for this are **AREIT (BUY, TP SGD2.57)** and **MINT (BUY, TP SGD1.78)**.

### AREIT & MINT should be top beneficiaries

R&D outfits, high-value industries and start-ups are all going to need business-park, science-park and high-spec industrial space in particular. Our top SREIT picks, **AREIT** and **MINT**, have **60% and 41% of their portfolios committed to these types of spaces, with spare capacity to fill**. Moreover, supply is likely to be very tight for business/science parks, while high-spec space will be similarly tight as most of the upcoming supply has been designated for data-centre use, not high-value industrial use. Not forgetting, the latest budget is very SME-centric and SMEs form the bulk of AREIT's and MINT's tenants. All in all, we continue to favour industrial SREITs over retail and office ones.

### Australia provides the next lap of growth

AREIT and **CACHE (BUY, TP SGD0.87)** took the plunge into Australia last year, boosting their exposure there to more than 11%. **AAREIT (BUY, TP SGD1.55)** was the early mover with 16% exposure as early as 2014. And why not? With freehold properties commanding cap rates much higher than Singapore's, declining interest rates and a low AUD/SGD, Australia makes for an attractive proposition. We expect AREIT to build up its presence there, to realise value from a large platform bought at a premium.

### Retail & office REITs: risks prevail

There is no change to our negative view on retail and neutral position on office REITs ([SREITs: To flow or not to flow, 12 Apr](#)). For retail SREITs, tapering DPU growth & occupancy, smaller rent reversions and upcoming supply make us wary of the tight valuations in the sub-sector. For office SREITs, we highlighted the weak pre-leasing at the upcoming Marina One (29%), Guoco Tower (18%) and Duo (33%) on 22 Jun ([Office REITs: Marine One 29% pre-leased](#)). Rents may have been sacrificed at Marina One, with large tenants reportedly signing for only SGD7 psfpm. An upcoming supply deluge has been depressing rents and office revenue for **CCT (HOLD, TP SGD1.40)**, **KREIT (HOLD, TP SGD0.97)** and **MCT (SELL, TP SGD1.35)**. Occupancy has been more challenged at non-prime location Grade-A assets, thus MCT's and Suntec's portfolios ([SREITs: Canaries in the coal mine, 17 May](#)).

# POSITIVE

[Unchanged]

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### SREITs (NEUTRAL)

	YTD (%)	Rating	Price (SGD)	TP (SGD)	(+/-) (%)	DY % F(1)	DY % F(2)	DY % F(3)
<b>Retail (NEGATIVE)</b>								
CT SP	11	SELL	2.11	1.97	-7	5.3	5.3	5.4
MCT SP	19	SELL	1.50	1.35	-10	5.4	5.5	5.5
FCT SP	15	SELL	2.04	1.78	-13	5.7	5.7	5.8
SGREIT	7	HOLD	0.78	0.79	2	7.1	7.3	7.5

### Office (NEUTRAL)

CCT SP	13	HOLD	1.46	1.40	-4	6.0	6.2	6.2
KREIT SP	14	HOLD	1.03	0.97	-5	6.4	6.4	6.5
SUN SP	14	HOLD	1.72	1.56	-9	5.9	5.9	6.1

### Industrial (POSITIVE)

AREIT SP	9	BUY	2.43	2.57	6	6.4	6.6	7.0
MINT SP	16	BUY	1.70	1.78	5	6.6	7.1	7.5
CACHE SP	(5)	BUY	0.84	0.94	12	10.0	10.0	10.3
AAREIT SP	4	BUY	1.38	1.55	13	8.0	8.5	8.9

# 1. Government Support for R&D & High-Value Industries: Positive for Industrial REITs

## 1.1 R&D spending could rise from 2% of GDP to 2.4%

The government's Research Innovation & Enterprise Plan 2020 alone has committed SGD19b of funding to R&D for 2016-2020, amounting to c.1% of GDP. The main difference between this plan and the previous 2011-2015 one is that up to 40% of the budget is now reserved for private-sector participation, up from 20%. If this does catalyse private funding, R&D spending could potentially climb from 2% of GDP to 2.4%, assuming every dollar of spending catalyzes 1.65 dollars of private spend (half the target range of 1.50-1.85). This would beat developed countries' average of 2.22% as well as mark a major shift to free-market determination of projects with the greatest value to society.

**Fig 131: Singapore's R&D needs more private-sector participation**

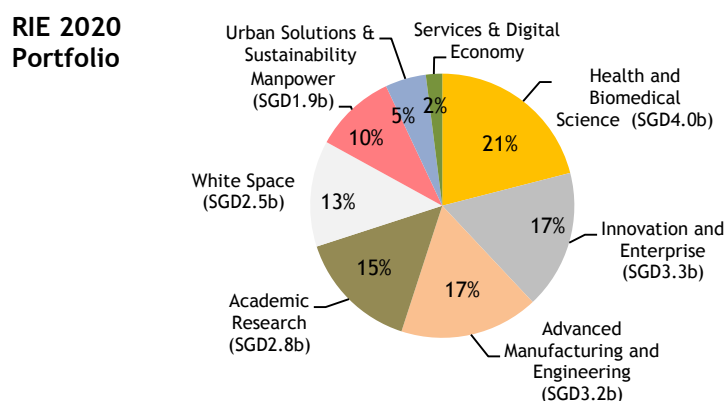
	2013	2016F
R&D spending: Private / Public	1.34	1.65
Public spend on R&D (SGD bn)	3.2	3.8
Private spend on R&D (SGD bn)	4.3	6.3
Nominal GDP (SGD bn)	376	419
Total R&D spend % GDP	2.0%	2.4%

Source: World Bank, National Research Foundation, CEIC, Maybank Kim Eng estimates

## 1.2 Priority for higher-value industries where Singapore has competitive advantages

- Advanced manufacturing has been allocated 17% of the budget
- Health and biomed sciences 21%
- Urban solutions and sustainability 5%
- Services and the digital economy 2%
- White space's 13% is 50% larger than the previous 5-year plan.

**Fig 132: 40% of the RIE2020 budget has been reserved for private-sector competition, up from 20%. This is a quite a jump!**



Source: National Research Foundation

## 1.3 2016 SME focused Budget is positive for industrial REITs

Budget FY16's SGD4.5b Industry Transformation Programme (ITP) aims to raise the productivity of Singapore's SMEs and help them scale-up. This new ITP will continue the work of the 2013 Quality Growth Programme. Most of AREIT's and MINT's tenants are SMEs. Of AREIT's 1,410 tenants

and MINT's 2,000, the top 10 only account for 18.8% and 17.2% of their respective rents.

Specifically, ITP provides for:

- Support for scaling up.
  - ✓ A SGD400m Automation Support Package over three years provides, 1) up to 50% of automation project costs, capped at SGD1m, 2) 100% investment allowance for automation equipment, qualifying projects, 3) government to risk-share 50-70% of loans for automation projects with financial institutions.
  - ✓ M&A tax allowances will be awarded for deals of up to SGD40m in size, up from SGD25m.
  - ✓ Double Tax Deduction for Internationalisation Scheme allows for 200% tax deduction on qualifying market expansion and investment development activities.
- Agency support.
  - ✓ Improved access to business grants through a one-stop portal, bypassing the need to deal with multiple agencies
  - ✓ A National Trade Platform, which is a one-stop information management system to enable electronic data-sharing between business and government. This is expected to save SGD600m man hours a year.
  - ✓ SPRING Singapore will partner the Trade Associations and Chambers to initiate 30 projects to reach out to 3,000 SMES. SG Innovate will match budding entrepreneurs with mentors, venture capitalists and research talent.

## 2. AREIT and MINT to be key beneficiaries

### 2.1 AREIT is 60.4% exposed to business / science parks & high-spec space

It has:

- 34.4% exposure to business / science parks by NPI. Such space is needed by firms doing R&D and high-value industrial, media, clean-tech, infocomm, biomed work.
- 26% exposure to high-spec space (incl. Aperia), needed by firms doing advanced manufacturing as well as for the co-location of HQ and manufacturing functions.

As both segments were only 88% occupied on average last year, there is spare capacity for upside. This is especially as both types of space should be undersupplied from 2017 onwards.

### 2.2 Mapletree Industrial Trust is 34-41% exposed to business parks & high-spec space

It has 14% and 20% exposure to business parks and high-spec space right now. Its total exposure is set to climb to 41% with the completion of two new developments. Both segments were only 88.9% and 89.6% occupied on average last year, leaving room for upside.

**Fig 133: AREIT has 60% exposure to business / science parks and high-spec industrial space, including its 5.4% exposure through The Aperia under integrated development**

	FY 3/15	FY 3/16	FY 3/17E	FY 3/18E	FY 3/19E
<b>SG Business &amp; Science Parks:</b>					
Opg NLA (msf)	6.7	6.8	7.4	7.4	7.4
Occupancy (% , yr avg)	87.3%	88.0%	88.0%	95.0%	98.0%
Avg. Rent (SGD psfpm)	3.17	3.43	3.49	3.47	3.59
Revenue (SGD m)	247.7	273.2	303.5	326.1	347.7
Net Prop. Inc. (SGD m)	163.9	184.6	205.1	220.4	234.9
<b>SG High-Spec Factories:</b>					
Opg NLA (msf)	5.3	5.3	5.3	5.3	5.3
Occupancy (% , yr avg)	89.2%	88.0%	88.0%	92.0%	96.0%
Avg. Rent (SGD psfpm)	2.75	2.85	2.89	2.94	3.00
Revenue (SGD m)	173.0	176.8	179.4	191.1	203.6
Net Prop. Inc. (SGD m)	119.3	122.9	124.8	132.8	141.6
<b>SG Factories:</b>					
Opg NLA (msf)	5.2	5.1	5.1	5.1	5.1
Occupancy (% , yr avg)	92.6%	93.6%	92.0%	92.0%	94.0%
Avg. Rent (SGD psfpm)	1.49	1.47	1.47	1.52	1.55
Revenue (SGD m)	96.1	93.5	92.2	95.1	99.2
Net Prop. Inc. (SGD m)	70.3	67.1	66.2	68.3	71.3
<b>SG Warehouses:</b>					
Opg NLA (msf)	7.9	7.9	7.9	7.9	7.9
Occupancy (% , yr avg)	87.2%	86.7%	84.0%	84.0%	88.0%
Avg. Rent (SGD psfpm)	1.39	1.43	1.43	1.45	1.50
Revenue (SGD m)	127.1	130.3	126.2	128.2	138.7
Net Prop. Inc. (SGD m)	88.9	89.3	86.5	87.8	95.1
<b>SG Integrated Devts:</b>					
Opg NLA (msf)	1.2	1.5	1.5	1.5	1.5
Occupancy (% , yr avg)	93.5%	95.1%	97.0%	99.0%	99.0%
Avg. Rent (SGD psfpm)	2.13	3.39	3.45	3.51	3.54
Revenue (SGD m)	29.6	58.0	60.2	62.5	63.1
Net Prop. Inc. (SGD m)	20.4	44.1	45.8	47.5	48.0
<b>AU Warehouses:</b>					
Opg NLA (msf)		2.8	7.2	7.2	7.2
Occupancy (% , yr avg)		94.4%	95.0%	96.0%	97.0%
Avg. Rent (SGD psfpm)		0.82	0.84	0.86	0.88
Revenue (SGD m)		29.2	77.1	79.8	82.6
Net Prop. Inc. (SGD m)		25.6	67.6	69.9	72.4
<b>Total:</b>					
Opg NLA (msf)	26.3	29.3	34.3	34.3	34.3
Occupancy (% , yr avg)	89.0%	90.2%	89.5%	92.0%	94.6%
Revenue (SGD m)	673.5	761.0	838.7	882.9	935.0
Net Prop. Inc. (SGD m)	462.8	533.7	595.9	626.8	663.2
DPU	14.6	15.4	15.5	16.1	17.0
%YoY	2.5%	5.2%	0.7%	4.0%	5.6%
Units Out. (mil)	2,407	2,667	2,810	2,814	2,818
Lease Expiry % Revenue			21.3%	21.0%	16.5%
Aggregate Leverage (%)	33.6%	37.2%	34.1%	34.1%	34.1%
All-in Financing Cost (%)	2.7%	2.8%	3.1%	3.2%	3.2%
Financing Cost % Hedged	68.2%	71.9%	71.9%	71.9%	71.9%
Debt Maturing % Total Debt			35.1%	8.9%	28.0%
SG Business Parks % NPI	35.4%	34.6%	34.4%	35.2%	35.4%
SG High-Spec % NPI	25.8%	23.0%	20.9%	21.2%	21.3%
SG Factories % NPI	15.2%	12.6%	11.1%	10.9%	10.7%
SG Warehouses % NPI	19.2%	16.7%	14.5%	14.0%	14.3%
SG Integrated Devt % NPI	4.4%	8.3%	7.7%	7.6%	7.2%
AU Warehouses % NPI		4.8%	11.3%	11.2%	10.9%

Source: Company, Maybank Kim Eng

**Fig 134: MINT's exposure to business parks and high-spec industrial space will jump from 34% to 41% by FY3/19**

	FY 3/14	FY 3/15	FY 3/16	FY 3/17E	FY 3/18E	FY 3/19E
<b>Factories (flatted, stack-up, light ind.):</b>						
Opg NLA (msf)	11.5	11.2	10.9	10.9	10.9	10.9
Occupancy (% , yr avg.)	95.6	93.9	95.3	95.4	97.1	97.1
Avg Rent (SGD psfpm)	1.56	1.68	1.71	1.72	1.74	1.76
Revenue (SGD m)	204.7	212.3	214.0	215.1	221.5	225.0
%YoY		3.7%	0.8%	0.5%	3.0%	1.6%
NPI (SGD m)	152.3	162.1	163.5	164.3	169.2	171.9
%YoY		6.4%	0.9%	0.5%	3.0%	1.6%
<b>High-Spec (Multi-Tenanted, non-BTS):</b>						
Opg NLA (msf)	2.0	2.0	2.0	2.0	2.0	2.2
Occupancy (% , yr avg.)	80.8	79.5	89.6	94.1	96.6	96.6
Avg Rent (SGD psfpm)	2.28	2.73	2.64	2.65	2.72	2.73
Revenue (SGD m)	44.4	52.5	57.1	60.3	63.3	68.6
%YoY		18.2%	8.7%	5.5%	5.1%	8.4%
NPI (SGD m)	29.5	34.9	39.4	41.6	43.7	47.3
%YoY		18.3%	13.0%	5.5%	5.1%	8.4%
<b>High-Spec - Build to Suit:</b>						
Opg NLA (msf)		0.0	0.4	0.4	0.9	1.1
Occupancy (% , yr avg.)		100.0	100.0	100.0	100.0	100.0
Avg Rent (SGD psfpm)		1.86	1.90	1.93	3.07	3.26
Revenue (SGD m)		0.7	8.8	8.9	34.0	43.1
%YoY				2.0%	280.3%	26.9%
NPI (SGD m)		0.7	8.5	8.7	27.5	34.4
%YoY				2.0%	216.1%	25.0%
<b>Business Parks:</b>						
Opg NLA (msf)	1.2	1.2	1.2	1.2	1.2	1.2
Occupancy (% , yr avg.)	84.4	81.5	88.9	91.8	93.8	88.0
Avg Rent (SGD psfpm)	4.10	4.11	4.04	4.14	4.32	4.34
Revenue (SGD m)	50.1	48.3	51.7	54.8	58.4	55.1
%YoY		-3.6%	7.1%	5.9%	6.6%	-5.6%
NPI (SGD m)	33.0	31.0	33.7	35.7	38.0	35.9
%YoY		-6.0%	8.7%	5.9%	6.6%	-5.6%
<b>Total:</b>						
NLA (msf)	14.7	14.5	14.5	14.5	15.1	15.4
Occupancy (% , yr avg.)	93.3	90.8	94.1	95.3	97.0	96.5
Revenue (SGD m)	299.3	313.9	331.6	339.0	377.2	391.8
%YoY		4.9%	5.6%	2.2%	11.2%	3.9%
NPI (SGD m)	214.7	228.6	245.1	250.3	278.5	289.6
%YoY		6.5%	7.2%	2.1%	11.3%	4.0%
Lease Expiry by Revenue (%)				21.1%	31.4%	24.1%
Factories % NPI	71%	71%	67%	66%	61%	59%
High-Spec (ex-BTS) % NPI	14%	15%	16%	17%	16%	16%
High-Spec BTS % NPI	0%	0%	3%	3%	10%	12%
Business Parks % NPI	15%	14%	14%	14%	14%	12%
DPU (\$ cts)	10.0	10.4	11.2	11.2	12.1	12.8
Units Out. (mil, wtd avg.)	1,666	1,719	1,774	1,802	1,803	1,805
Forward Yield (%)			6.8%	6.8%	7.4%	7.8%
Aggregate Leverage (%)		28.2	31.9	32.1	32.1	32.1
All-in Financing Cost (%)		2.50	2.58	2.69	2.57	2.57
Financing Cost % Fixed Hedge		87.0	88.0	88.0	88.0	88.0
Debt Maturing % Total Debt				4.1	12.7	15.4

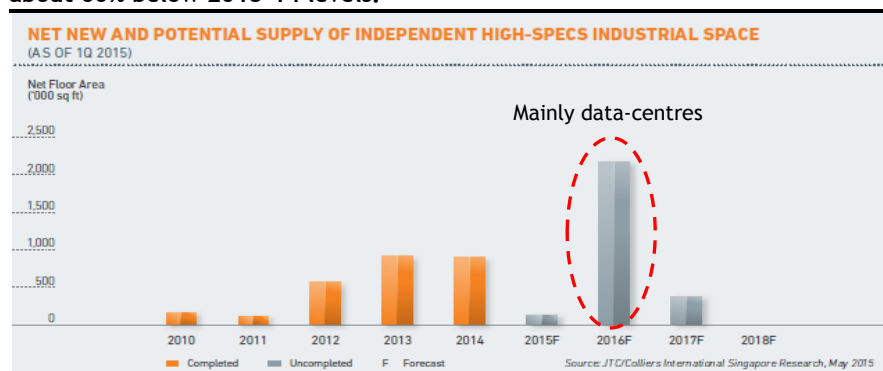
Source: Company, Maybank Kim Eng

Fig 135: Business-park supply set to tank to zero in 2017-2018

Industrial: Supply, Demand, Vacancies & Rents	2011	2012	2013	2014	2015	2016E	2017E	2018E	2016-18
<b>Net Supply / Net Absorption (x)</b>									
All Industrial Types	0.7	1.3	1.7	1.4	1.2	1.6	1.2	0.4	1.1 (3yr avg)
Factories	1.0	1.1	1.7	1.8	1.3	1.6	1.2	0.6	1.2 (3yr avg)
Warehouses	0.5	1.8	2.1	1.0	1.2	1.5	1.5	0.0	1.0 (3yr avg)
Business Parks	0.2	1.6	0.1	2.3	0.8	2.0	0.0	0.0	0.7 (3yr avg)
<b>All Industrial Types:</b>									
Total Stock (msf)	413.1	424.4	440.1	461.2	478.6	504.0	519.5	524.1	
- %YoY	2.0%	2.8%	3.7%	4.8%	3.8%	5.3%	3.1%	0.9%	3.1% (3yr cagr)
Net Supply (Total, msf)	8.2	11.4	15.6	21.1	17.4	25.4	15.5	4.6	45.6 (sum)
Net Absorption (Total, msf)	11.1	9.1	9.3	14.8	14.4	16.1	12.9	12.9	41.8 (sum)
Vacancies (% , year avg.)	6.9%	6.7%	7.5%	9.0%	9.2%	10.6%	10.8%	9.2%	
<b>Factories:</b>									
Total Stock (msf)	321.2	328.4	340.1	351.9	362.3	378.2	387.0	391.4	
- %YoY	2.0%	2.2%	3.6%	3.5%	3.0%	4.4%	2.3%	1.2%	2.6% (3yr cagr)
Net Supply (Total, msf)	6.3	7.2	11.7	11.8	10.4	15.9	8.8	4.5	29.2 (sum)
- % Net Supply Single User	55%	44%	69%	52%	53%	76%	57%	22%	
Net Absorption (Total, msf)	6.1	6.6	6.9	6.4	7.8	10.2	7.0	7.0	24.3 (sum)
Vacancies (% , year avg.)	6.3%	6.3%	7.0%	8.5%	9.0%	10.2%	10.4%	9.6%	
Rents (index, year avg.)	88.9	96.2	102.4	103.8	101.2	93.2	91.1	93.0	
- %YoY (yr avg.)	19.6%	8.2%	6.4%	1.4%	-2.6%	-7.9%	-2.2%	2.1%	-2.7% (3yr avg)
- % implied market rent reversions	9.5%	34.0%	37.7%	16.7%	5.2%	-9.0%	-12.2%	-8.1%	-9.8% (3yr avg)
<b>Warehouses:</b>									
Total Stock (msf)	76.6	79.4	83.3	90.5	95.6	102.6	109.2	109.4	
- %YoY	2.3%	3.6%	4.9%	8.7%	5.6%	7.2%	6.5%	0.1%	4.6% (3yr cagr)
Net Supply (Total, msf)	1.7	2.8	3.9	7.3	5.1	6.9	6.7	0.2	13.7 (sum)
Net Absorption (Total, msf)	3.7	1.6	1.9	7.5	4.3	4.5	4.5	4.5	13.6 (sum)
Vacancies (% , year avg.)	6.8%	5.9%	7.6%	9.5%	8.6%	10.4%	11.7%	7.7%	
Rents (index, year avg.)	87.8	94.1	101.2	100.2	98.7	95.3	93.3	94.4	
- %YoY (yr avg.)	19.3%	7.2%	7.5%	-1.0%	-1.5%	-3.4%	-2.1%	1.2%	-1.4% (3yr avg)
- % implied market rent reversions	4.1%	32.5%	37.4%	14.1%	4.8%	-5.8%	-6.8%	-4.3%	-5.6% (3yr avg)
<b>Business Parks:</b>									
Total Stock (msf)	15.2	16.7	16.7	18.7	20.6	23.2	23.3	23.3	
- %YoY	1.3%	9.3%	0.3%	12.2%	10.1%	12.6%	0.2%	0.0%	4.1% (3yr cagr)
Net Supply (Total, msf)	0.2	1.4	0.0	2.0	1.9	2.6	0.0	0.0	2.7 (sum)
Net Absorption (Total, msf)	1.2	0.9	0.6	0.9	2.4	1.3	1.3	1.3	3.9 (sum)
Vacancies (% , year avg.)	19.2%	17.7%	17.8%	16.4%	15.8%	19.7%	14.3%	8.8%	
Rents (index, year avg.)	96.3	100.2	103.3	106.2	105.7	102.9	102.9	105.4	
- %YoY (yr avg.)	3.6%	4.1%	3.1%	2.8%	-0.5%	-2.6%	0.0%	2.4%	-0.1% (3yr avg)
- % implied market rent reversions	-	-	11.1%	10.3%	5.4%	-0.4%	-3.1%	-0.3%	-1.2% (3yr avg)

Source: JTC, Maybank Kim Eng

Fig 136: High-spec supply is also tight. According to Colliers, 2016 supply will be overwhelmingly for data centres, not industrial tenants. 2017's supply is about 60% below 2013-14 levels.



Source: Colliers, JTC

### 3. Australia: Next Lap of Growth

#### 3.1 ROIC exceeds WACC for industrial REITs in Australia

For AREIT, AAREIT, and CACHE, their Australian investment's ROICs exceed WACCs handsomely.

Fig 137: Going into Australia has created unitholder value

Ascendas REIT	2015*	AIMS AMP REIT	2014	2015	CACHE Logistics	2015*
Australian Logistics (11% NPI)		Australian Business Park (16% NPI)			Australian Logistics (16% NPI)	
Net Property Income	65.5	Net Property Income	16.0	14.9	Net Property Income	14.2
Acquistion Cost	1077.8	Reval, FX	9.6	22.7	Reval, FX	1.9
Debt	600.0	Assets	204.7	225.2	Assets	173.1
Perps	300.0	Debt	185.0	181.0	Debt	144.9
Equity	177.8	Equity	19.7	44.2	Equity	28.2
ROIC	5.7%	ROIC	7.4%	6.3%	ROIC	7.8%
WACC	4.7%	ROIC incl. Reval, FX	11.8%	15.8%	ROIC incl. Reval, FX	8.8%
Cost of Debt	3.5%	WACC	5.9%	5.5%	WACC	4.7%
Cost of Perps	4.8%	Cost of Debt	5.6%	4.7%	Cost of Debt	4.0%
Cost of Equity	8.5%	Cost of Equity	8.5%	8.5%	Cost of Equity	8.5%

Source: Companies, Maybank Kim Eng

2015\* refers to annualised NPI for acquisitions done during the year.

We expect AREIT to expand further in Australia, as:

- **Cap rates are attractive.:** Acquisition cap rates of 7-9.6% for typically freehold logistics assets - as paid by CACHE - and 7.5% for a business park - as paid by AAREIT for its Optus building - are bargains against the 6-7.5% for leasehold logistics assets in Singapore and 6-6.5% for leasehold business parks. AREIT paid a 6.5% cap rate for its portfolio, lower than its valuation of 6.8% as it was ready to pay a premium for scale. It has written down this premium but to justify its costs, we believe it has to scale up its platform quickly.
- **Interest rates in Australia are dropping, cap-rate compression is on the cards.** As interest rates are dropping in Australia, debt financing should get cheaper, lowering WACC. Returns could be boosted by cap-rate compression. From the experience of AAREIT, cap-rate compression more than compensates for AUD depreciation.

Fig 138: SREITs peers comparison

Top 100 SREITs peers comparison																			
SREIT Peer Comparison	FY End	Rating	Mkt Cap (SGD m)	Upside	LP (SGD)	TP (SGD)	DPU				Div. Yld	Div. Yld	Div. Yld	Div. Yld	BVPS	P/BV	Agg.	Cost of	
(MKE coverage in BLUE)				(%)			(hist.)	DPU (1)	DPU (2)	DPU (3)	(Hist.)	(1)	(2)	(3)	(hist.)	(Hist.)	Leverage	Debt	
							(SGD cents)				(%)	(%)	(%)	(%)	(SGD)	(x)	(%)	(%)	
RETAIL REITs																			
CapitaLand Mall Trust	Dec	SELL	7,474	(7)	2.11	1.97	11.3	11.3	11.2	11.5	5.3	5.3	5.3	5.4	1.88	1.12	35.5	3.2	
Mapletree Comm. Trust	Mar	SELL	3,201	(10)	1.50	1.35	8.1	8.2	8.2	8.3	5.4	5.4	5.5	5.5	1.30	1.16	35.1	2.5	
SPH REIT	Aug	NR	2,339	10	0.92	1.01	5.5	5.5	5.6	5.7	5.9	6.0	6.1	6.2	0.94	0.98	25.7	2.8	
Fraser's Cpt. Trust	Sep	SELL	1,872	(13)	2.04	1.78	11.6	11.6	11.6	11.8	5.7	5.7	5.7	5.8	1.91	1.07	28.3	2.3	
Starhill Global REIT	Dec	HOLD	1,690	2	0.78	0.79	5.1	5.5	5.7	5.8	6.6	7.1	7.3	7.5	0.94	0.82	35.4	3.2	
Total:			16,577	Capitalisation-weighted average:							5.6	5.7	5.7	5.8	1.07			33.2	2.9
OFFICE REITs																			
CapitaLand Comm. Trust	Dec	HOLD	4,301	(4)	1.46	1.40	8.6	8.7	9.0	9.1	5.9	6.0	6.2	6.2	1.74	0.84	30.1	2.5	
Keppel REIT	Dec	HOLD	3,343	(5)	1.03	0.97	6.8	6.6	6.5	6.7	6.6	6.4	6.4	6.5	1.43	0.71	39.0	2.6	
Suntec REIT	Dec	HOLD	4,352	(9)	1.72	1.56	10.0	10.1	10.2	10.5	5.8	5.9	5.9	6.1	2.14	0.80	36.0	2.9	
Fraser's Comm. Trust	Sep	NR	997	17	1.26	1.47	9.7	9.9	9.8	9.7	7.7	7.9	7.8	7.7	1.55	0.81	36.2	3.1	
OUE Comm. REIT	Dec	NR	859	(0)	0.67	0.66	4.4	5.0	4.9	4.9	6.6	7.5	7.4	7.4	0.96	0.70	40.5	3.6	
Total:			13,853	Capitalisation-weighted average:							6.2	6.3	6.3	6.4	0.79			35.2	2.8
INDUSTRIAL REITs																			
Ascendas REIT	Mar	BUY	6,499	6	2.43	2.57	15.4	15.5	16.1	17.0	6.3	6.4	6.6	7.0	2.17	1.12	37.2	2.8	
Mapletree Ind. Trust	Mar	BUY	3,062	5	1.70	1.78	11.2	11.2	12.1	12.8	6.6	6.6	7.1	7.5	1.37	1.24	28.2	2.5	
Mapletree Log. Trust	Mar	NR	2,493	6	1.00	1.06	7.4	7.4	7.5	7.7	7.4	7.4	7.5	7.7	1.02	0.98	39.6	2.3	
Cache Log. Trust	Dec	BUY	752	12	0.84	0.94	8.5	8.4	8.4	8.6	10.1	10.0	10.0	10.3	0.88	0.96	39.6	3.7	
AIMS AMP	Mar	BUY	875	13	1.38	1.55	11.4	11.0	11.6	12.3	8.3	8.0	8.5	8.9	1.48	0.93	32.4	4.2	
Cambridge Ind. Trust	Dec	NR	704	8	0.54	0.58	4.8	4.5	4.6	4.8	8.9	8.3	8.5	8.9	0.67	0.80	37.1	3.6	
Soilbuild Business REIT	Dec	NR	635	20	0.68	0.81	6.5	6.2	6.4	6.1	9.6	9.2	9.5	9.0	0.79	0.85	36.0	3.4	
Sabana	Dec	NR	383	62	0.52	0.84	6.9	6.1	6.1	6.5	13.2	11.7	11.7	12.5	0.89	0.59	39.6	4.2	
Viva Ind. Trust	Dec	NR	610	na	0.71	na	7.0	na	na	na	9.9	na	na	na	0.81	0.87	37.6	4.1	
KeppelDC REIT	Dec	NR	971	6	1.10	1.16	6.8	6.9	7.0	7.1	6.2	6.3	6.4	6.5	0.92	1.19	29.6	2.4	
Total:			16,984	Capitalisation-weighted average:							7.3	7.1	7.4	7.7	1.07			35.4	2.9
Capitalisation-weighted average (Retail, Office, Ind.):											6.4	6.4	6.5	6.7	0.99			34.6	2.9

Source: Bloomberg, Maybank Kim Eng  
(Prices as at 28 June 2016 closing)



## Appendix 1: Companies in Our Business-Cost Study

We compiled data for 37 companies up until 2015 and another seven up until 2014.

### Companies with data up until 2015

- **Transport & logistics:** SIA, ComfortDelGro, SMRT and SingPost.
- **Consumer manufacturing:** Super Group.
- **Consumer retailers:** Courts Asia, Challenger Technologies, Sheng Siong, NTUC FairPrice, Breadtalk Group, ABR, Auric Pacific, Japan Food, Soup Restaurants, Sakae, Tung Lok, Osim, FJ Benjamin.
- **Hospitality & gaming operators:** Genting SP.
- **Media:** SPH.
- **Telco:** StarHub, M1, SingTel.
- **Industrials:** SembCorp Marine, Keppel Corp, SembCorp Industries, ST Engineering, SIA Engineering, SATS.
- **Healthcare:** Raffles Medical, Q&M Dental.
- **IT (manufacturing):** Venture Corp, UMS Holdings, NeraTel.
- **Banks:** DBS, UOB, OCBC.

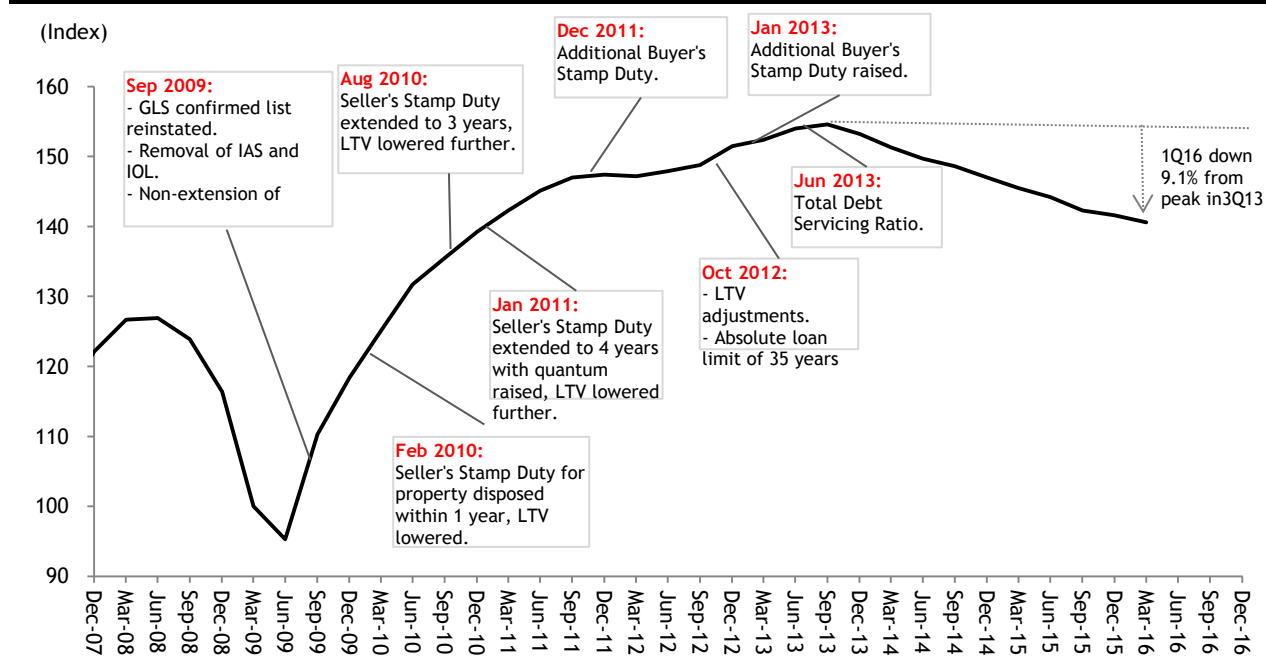
### Companies with data up until 2014

- **Banks:** Standard Chartered Singapore, HSBC Singapore, Maybank Singapore, Citibank Singapore, CIMB Singapore, RHB Singapore, ANZ Singapore.



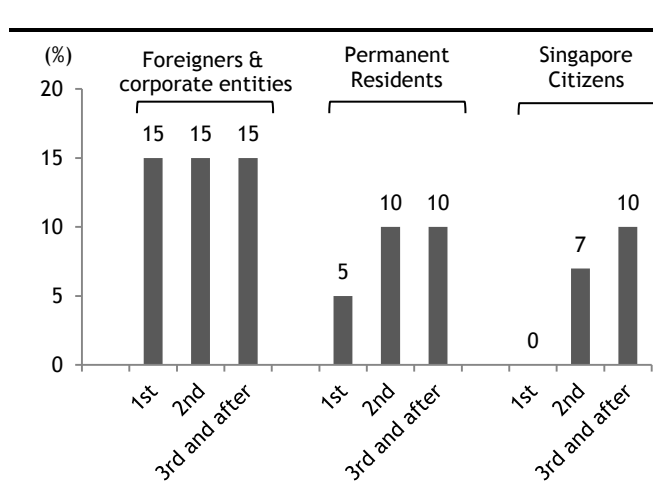
## Appendix 2: Property-cooling measures since 2009

Figure 139: Cooling measures have been effective in bringing down private property prices



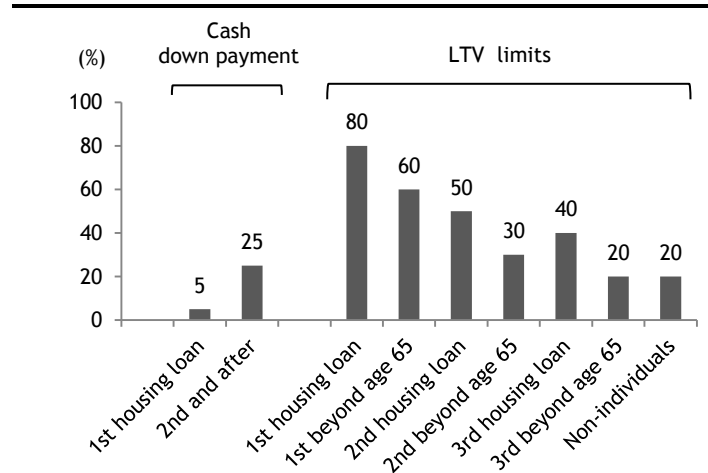
Source: URA, MND, IRAS, MAS, Maybank Kim Eng

Fig 140: Current ABSD rates



Source: IRAS, MAS

Fig 141: Current cash down payment requirements and LTV limits



Source: IRAS, MAS

**Figure 142: Property-cooling measures***Singapore government implemented eight rounds of property-cooling measures from Sep 2009*

	Effective date	Measures
Round 1	14 Sep 09	1) Reinstatement of confirmed list of 1H10 GLS. 2) Removal of interest absorption scheme and interest-only housing loans. 3) Non-extension of Jan 2009 budget assistance measures, mainly pertaining to Residential Property Act.
Round 2	20 Feb 10	1) Introduction of seller's stamp duty (SSD) for properties sold within 1 year of purchase (ad valorem up to 3%). 2) LTV lowered to 80% for all housing loans provided by FIs.
Round 3	30 Aug 10	1) SSD increased to 3 years (3% 1st year; 2% 2nd year; 1% 3rd year). 2) For buyers with one or more outstanding housing loans (incl. HDB loans): i) Minimum cash payment increased from 5% to 10%, ii) LTV lowered from 80% to 70%.
Round 4	14 Jan 11	1) SSD increased to 4 years (16%; 12%; 8%; 4%). 2) LTV lowered to 50% for non-individuals. 3) LTV lowered from 70% to 60% for individuals with one or more outstanding housing loans.
Round 5	8 Dec 11	Additional buyer's stamp duty (ABSD) over and above normal ad valorem stamp duty of around 3%: a) Foreigners and non-individuals buying any property pay 10% ABSD, b) Permanent residents owning one (excl. overseas properties) and buying second or subsequent residential property pay 3% ABSD, c) Singaporeans owning two and buying third and subsequent properties pay 3% ABSD.
Round 6	6 Oct 12	Capping all residential loans at 35 years. Loans >30 years attract higher LTV - both private and HDB properties. a) For individuals without outstanding home loans: i) LTV is 80% if loan tenure does not exceed 30 years or loan tenure ends before retirement age of 65 ii) LTV is 60% if tenure is 30-35 years or if extends beyond retirement age. b) For individuals with outstanding home loans (incl. HDB loans), LTV is 40% for new home loans. c) For non-individuals, LTV for residential home loans lowered from 50% to 40%.
Round 7	12 Jan 13	1) Measures affecting ALL residential properties: a) ABSD raised across the board: i) Citizens: 7% for 2nd purchase, 10% for 3rd and subsequent purchase. ii) PRs: 5% for 1st purchase, 10% for 2nd and subsequent purchase. iii) Foreigners and non-individuals: 15% for all purchase. b) Tighter LTVs for new housing loans to individuals with outstanding loans and non-individuals: i) For individuals with existing housing loans, LTV for 2nd housing loan is now 50% (or 30% if loan tenure exceeds 30 years or extends beyond borrower's retirement age of 65) ii) For individuals obtaining third or more housing loans, LTV will be 40% (or 20% if tenure exceeds 30 years or extends beyond retirement age) iii) For non-individuals, LTV will be 20%. c) Higher minimum cash down payment of 25% for new purchases for individuals with outstanding housing loans.  2) Measures affecting public (HDB) housing: a) Capping of mortgage servicing ratio (MSR): i) For HDB housing-loan applicants, MSR capped at 35% of gross monthly income ii) For MAS-regulated bank-loan applicants to purchase HDB flats, MSR capped at 30%. b) Flat owners who are PRs disallowed to sublet whole flats even after the minimum occupation period. c) Flat owners who are PRs purchasing a private residential property in Singapore must dispose of their HDB flats within 6 months of purchasing the private property (6 months after TOP/CSC for uncompleted projects).  3) Measures for ECs: a) Maximum strata floor area of new ECs capped at 160 sq m. b) Sales of new dual-key ECs restricted to multi-generational families. c) Developers of future ECs can only launch units 15 months from date of award of site or after completion of foundation work, whichever is earlier. d) Private enclosed space and private roof terraces to be treated as GFA and counted under bonus GFA and subject to payment of charges.  4) Measures for industrial property: SSD for industrial properties and land sold within 3 years of purchase (15% if sold within 1st year; 10% if sold in 2nd and 5% if sold in 3rd).
Round 8	28 Jun 13	1) FIs must adhere to TDSR framework when a borrower applies for a new property loan or re-finances existing one. TDSR = (monthly debt obligations / gross monthly income) x 100%. 2) TDSR capped at 60%. 3) Monthly total debt obligations to include: i) Monthly installments for the property loan applied (computed at 3.5% for residential, 4.5% for non-residential property or prevailing rates if higher) ii) Other monthly debt repayments (incl. outstanding property loans, credit-card debt, car loans etc) 4) Gross monthly income to include: i) Fixed monthly salary (excl. employers' CPF) and 70% of monthly variable income earned in preceding 12 months ii) Monthly rental income (for tenancies with at least 6 months to go) iii) Eligible financial assets, discounted at 70% if not pledged for at least 4 years, amortised over 48 months.

Source: URA, MND, IRAS, MAS, Maybank Kim Eng



## Appendix 3: Case Study of Starhill Global REIT's Overseas Investments

SGREIT entered overseas markets in a big way in 2010-2011: Malaysia and Australia. Its assets in China were inherited. Overseas ROIC has, however, not exceeded WACC for the last four years. Group ROIC would have therefore exceeded WACC even more if not for the overseas exposure.

**Fig 143: Unlike group level, overseas assets ROIC was less than WACC**

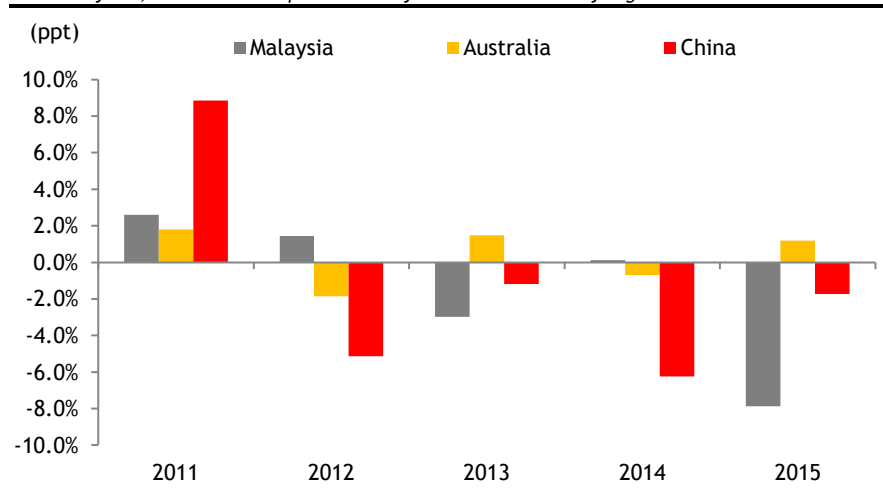
Starhill Global REIT	2011	2012	2013	2014	2015*
ROIC	5.7%	6.6%	10.1%	6.3%	4.8%
WACC	5.9%	5.9%	6.0%	6.2%	5.9%
MY, AU, CN shopping malls only					
ROIC	9.6%	6.1%	4.7%	5.7%	3.1%
WACC	6.3%	6.3%	6.2%	6.5%	5.9%

Source: Maybank Kim Eng, Company

Breaking down its returns, we found that Malaysia and China were its main drags. Australia has been a more consistent performer.

**Fig 144: ROIC minus WACC for overseas assets**

*In certain years, its ROIC-WACC spread in Malaysia and China was way negative*



Source: Maybank Kim Eng

### Macro & political risks to blame

Returns, apparently, were affected by macro and political risks, which corporates find hard to predict. MYR and AUD depreciation heavily affected its total returns in Malaysia and Australia. Over in China, returns were buffeted by government austerity measures, old-fashioned business risks such as extreme oversupply in Chengdu.



Fig 145: SGREIT's ROIC vs WACC by country

	2011	2012	2013	2014	2015*		2011	2012	2013	2014	2015*
MY shopping malls						CN shopping mall					
Net Property Income	30.0	30.0	29.4	28.6	26.0	Net Property Income	10.8	9.9	8.3	5.8	3.5
Reval, FX	7.3	2.8	-16.8	-0.3	-31.4	Reval, FX	9.0	-7.1	-0.7	-4.6	2.3
Assets	443.6	447.5	430.9	427.6	396.3	Assets	102.3	99.9	98.1	77.1	79.5
Liabilities	4.6	4.2	5.0	5.0	5.0	Liabilities	16.4	11.4	11.9	7.5	7.8
Debt	144.2	132.0	127.0	123.0	107.0	Debt	1.0	2.2	1.2	0.0	0.0
Convertible	177.0	177.0	177.0	23.9	23.9	Equity	84.9	86.3	85.0	69.6	71.7
Equity	117.9	134.3	121.9	275.8	260.3	ROIC	16.3%	2.2%	6.2%	1.2%	5.7%
ROIC	8.5%	7.4%	3.0%	6.7%	-1.4%	WACC	7.4%	7.4%	7.4%	7.4%	7.4%
WACC	5.9%	6.0%	5.9%	6.6%	6.5%	Cost of Debt	5.0%	5.0%	5.3%	5.7%	4.9%
Cost of Debt	5.4%	5.4%	5.4%	4.9%	4.5%	Cost of Equity	7.4%	7.4%	7.4%	7.4%	7.4%
Cost of Convertible	5.3%	5.3%	5.3%	5.3%	5.3%						
Cost of Equity	7.4%	7.4%	7.4%	7.4%	7.4%						
AU shopping malls						SG Assets					
Net Property Income	12.3	12.1	14.7	15.5	33.1	Net Property Income	85.0	90.7	102.6	104.0	107.7
Reval, FX	1.6	-4.5	2.1	-4.6	0.0	Reval, FX	47.4	43.0	132.5	36.0	0.0
Assets	155.5	149.5	210.1	203.6	501.7	Assets	1863.3	1909.0	2041.7	2071.5	2076.4
Liabilities	2.6	3.2	3.6	3.6	4.5	Liabilities	34.0	38.4	37.6	36.9	36.1
Debt	79.0	79.0	115.6	115.6	358.0	Debt	488.0	432.5	551.5	574.0	575.0
Equity	73.9	67.3	90.9	84.4	139.2	Equity	1341.3	1438.2	1452.6	1460.6	1465.3
ROIC	8.6%	4.9%	7.7%	5.2%	6.3%	ROIC	7.2%	7.1%	11.7%	6.9%	5.3%
WACC	6.8%	6.8%	6.2%	5.9%	5.1%	WACC	6.0%	6.2%	5.9%	5.8%	5.9%
Cost of Debt	6.2%	6.2%	5.3%	4.7%	4.2%	Cost of Debt	1.9%	2.1%	1.8%	1.8%	2.1%
Cost of Equity	7.4%	7.4%	7.4%	7.4%	7.4%	Cost of Equity	7.4%	7.4%	7.4%	7.4%	7.4%

Source: Maybank Kim Eng

- **Malaysia: ROIC hit by FX.** SGREIT's assets in Kuala Lumpur - Starhill Gallery and Lot 10 - have been master leased to its sponsor and enjoy very stable rents. After a recent rent review, 2016 rents will be lifted by 6.67%. Unfortunately, this consistency could not be captured due to MYR depreciation affecting total returns (NPI + revaluation + FX gains/loss), especially in 2013-2015.
- **Australia: FX hit ROIC, but WACC fell too.** SGREIT is long-term bullish on Australia. It has accumulated three prime assets in 2<sup>nd</sup>-tier cities, Perth and Adelaide. NPI is consistent and ROIC dips below WACC only because of FX. Australia generates the most consistent ROIC-WACC spread of all its overseas portfolios. Its spread over WACC has also been helped by a relentless decline in cost of debt.
- **China: ROIC slammed by government policy and oversupply.** China is the main bane for SGREIT. To be fair, Starhill inherited its China assets when it took over the REIT. NPI has steadily collapsed to 32% of its 2011 peak of SGD10.8m from extreme oversupply in Chengdu, made worse by the austerity drive. Occupancy remains 100% but as rents are mainly pegged to a percentage of revenue, gross revenue has been badly hit by declining tenant sales. ROIC is now significantly below WACC.



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