

## **ASEAN: Healthcare Services: Hospitals**

**Equity Research** 

## Private hospitals key beneficiaries of rising healthcare spend; initiate on 5 cos, Buy KPJ

### High secular growth to benefit private cos

Over 2014E-2020E, we expect ASEAN healthcare (HC) spending to continue growing significantly (1.5X GDP growth) given low penetration relative to developed markets and supportive demographics/ income trends. **Private** hospitals are likely to be **key beneficiaries** as we expect:

- Private HC spending share to keep rising, given public sector funding constraints, and
- Medical tourism sector to boom further as new markets add to demand.

We believe **Indonesia's** private hospitals will see **highest returns** given their structural advantage of lower land/construction/labor costs, **followed by Malaysia/Thailand hospitals**, then Singapore.

### Rapid 2014E-16E DACF growth for SILO/KPJ

We expect SILO (47%) and KPJ (14%) to see highest DACF growth through 2016E, given their aggressive beds-growth plans. While BGH had highest growth over 2004-2013, we expect it to slow as future growth comes mainly from greenfield hospitals, which have low initial profits. We expect RFMD's 2014E-16E DACF growth to be lower than past levels as new capacity will come onstream only in 2017E.

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### Initiate on 5 cos; Buy KPJ, Sell RFMD/BGH

We initiate on 5 hospital companies in the sector:

- KPJ Healthcare with Buy: A key beneficiary of rising private healthcare spending (11% 2014E-2020E industry CAGR) and medical tourism spending growth (19% 2014E-2020E industry CAGR) in Malaysia, along with its strong DACF growth outlook. Our 12-month target price of RM4.30 implies 30% upside potential.
- Raffles Medical Group (RFMD)/Bangkok Dusit
  Medical Services (BGH) with Sell: While both are
  high quality hospital operators, we expect 2015E2016E returns to be average/below average;
  valuations are expensive. Our 12-month target
  prices of S\$3.10/Bt13.70, respectively, imply
  potential downsides of 15%/17%.
- We initiate on Bumrungrad Hospital (BH) and Bangkok Chain Hospital (BCH) with Neutral and maintain Neutral on Siloam and IHH given limited upside potential to our 12-month TPs.

We value the stocks on 2016E Director's Cut (EV/GCI vs CROCI/WACC) methodology, as two-year forward Director's Cut produces the highest alpha based on our back-testing analysis.

### **KEY POINTS ADDRESSED IN THIS REPORT**

- Why is private HC spending rapidly rising?
- Why do KPJ/SILO have the highest 2014E-2016E DACF growth and is that sustainable?
- Why do BH/RMFD have the highest 2014E-2016E CROCI and is this sustainable?
- Why we value hospital stocks on 2016E EV/GCI vs CROCI/WACC methodology?

#### **SUMMARY OF RATINGS AND TARGET PRICES**

Ticker	Rating		e as of in-2014	12-m TP	Potential upside / (downside)
KPJH.KL	Buy	RM	3.30	4.30	30%
BH.BK	Neutral	Baht	112.5	118.0	5%
SILO.JK	Neutral	Rp	14,950	15,500	4%
IHHH.KL	Neutral	RM	4.17	4.20	1%
BCH.BK	Neutral	Baht	7.85	7.80	-1%
RAFG.SI	Sell	S\$	3.66	3.10	-15%
BGH.BK	Sell	Baht	16.50	13.70	-17%

Source: Datastream, Goldman Sachs Global Investment Research.

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Prices in the report are as of the market close of June 2, 2014, unless mentioned otherwise.

The authors would like to thank Elsie Cheng Haiwen for her contribution to this report.

## Deep dive into long-term trends; expand coverage with five initiations

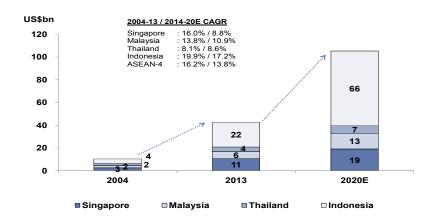
Healthcare (HC) penetration rate in ASEAN-4 (Singapore, Malaysia, Indonesia and Thailand) is very low (average 2013 HC spending as % of GDP of 3.9%) as compared with developed markets' averages (2013 global / OECD HC spending as % of GDP at 10.5% / 13.1%), and is likely to see strong secular growth ahead given favorable income and demographic trends, in our view. We expect ASEAN-4 HC expenditure to grow at 1.5X GDP growth over 2014E-2020E, as we see all countries, especially Indonesia, crossing multiple HC spending sweet spots (Exhibits 11-13). Our deep dive examining the HC systems, trends, and competitive landscape, points to a positive outlook for the private hospital companies. Considering HC spending growth potential, addressable market size and ability of our coverage companies to capture growth, we see the most favorable growth opportunities in Indonesia, then Malaysia/Thailand, and finally Singapore.

The key differentiating parameters in our analysis include:

- Macro analysis: (1) effects of aging, obesity, and income on healthcare spending trends; (2) public-private spending trends and
  possible reforms in public systems; (3) new medical tourism markets that could drive growth in the next decade.
- Company-specific analysis: (1) what drives alpha for healthcare stocks; (2) why we think some companies have higher CROCI; (3) what is implied in share prices for our coverage stocks, thereby providing a better understanding on what stocks to own.

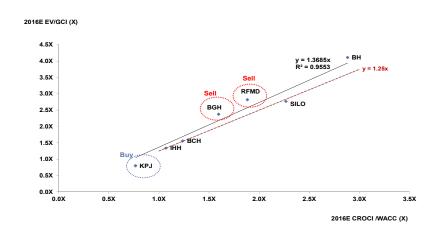
We initiate on KPJ with a Buy for its exposure to the attractive Malaysian healthcare market and attractive valuations on Director's Cut. We initiate with Sell ratings on BGH and RFMD given only average/below-average growth/returns profile and yet high valuations. We maintain Neutral on Siloam and IHH and initiate on BH and BCH with Neutral ratings given limited upside/downside potential to our target prices. We value the stocks on 2016E Director's Cut (EV/GCI vs CROCI/WACC) methodology, as two-year forward Director's Cut produces the highest alpha based on our back-testing analysis.

Exhibit 1: ASEAN private healthcare spending offers significant growth potential



Source: Euromonitor, Goldman Sachs Global Investment Research.

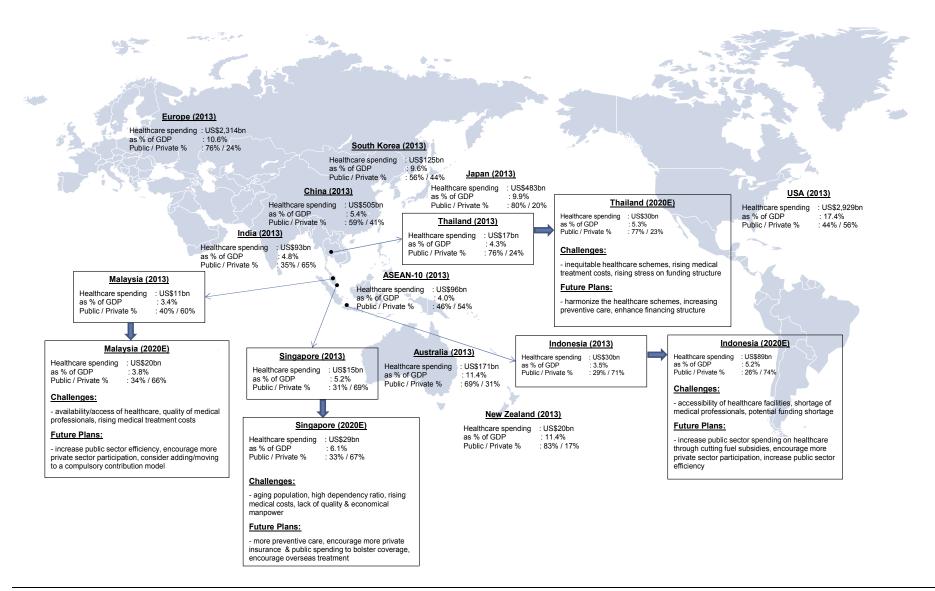
Exhibit 2: KPJ appears the most attractive based on 2016E Director's Cut



Source: Goldman Sachs Global Investment Research.

## Global landscape: ASEAN healthcare penetration low, but growing fast

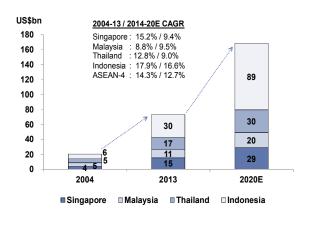
Exhibit 3: ASEAN healthcare penetration is still low, but is growing fast



Source: Euromonitor, Goldman Sachs Global Investment Research.

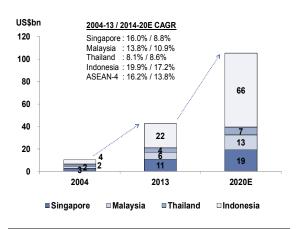
## Positive ASEAN private healthcare and medical tourism outlook, given three themes...

Exhibit 4: Strong healthcare spending growth ahead for ASEAN



Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 5: Private spending to pick up



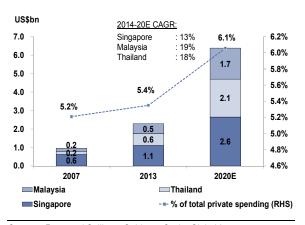
Source: Euromonitor, Goldman Sachs Global Investment Research.

# Exhibit 6: Public spending lags due to lacklustre funding



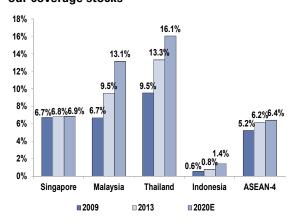
Source: Euromonitor, Goldman Sachs Global Investment Research.

# Exhibit 7: Medical tourism small, but continues to grow



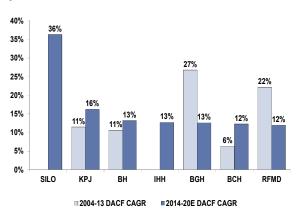
Source: Frost and Sullivan, Goldman Sachs Global Investment Research.

Exhibit 8: Large revenue market share gains by our coverage stocks



Source: Company data, Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 9: Strong DACF CAGR over the same period



Source: Company data, Goldman Sachs Global Investment Research.

## (1) 3 drivers for rising healthcare spend: Lifestyle choices, age, and income levels...

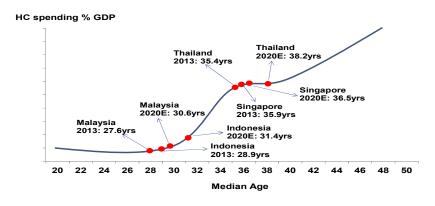
We expect the ASEAN-4 nations, especially Indonesia, to cross multiple HC spending sweet spots (i.e. inflection points where HC as % GDP takes a significant step up) in the next few years, which will support growth. We identify three drivers (all with high r-square) of HC spending as a % of GDP: (1) median age, (2) lifestyle choices (i.e., % of obese and overweight people in the population) and (3) income levels (i.e., GDP per capita), and plotted charts depicting the unique HC spending as a % of GDP relationship with each variable. We identified sweet spots by observing the 1990-2013 historical trends of both ASEAN-4 nations and others that share similar demographic characteristics, e.g., Asian nations like South Korea, Japan, and OECD nations like Norway, Switzerland, UK and USA among others.

Exhibit 10: HC spending growth is a function of lifestyle choices, age and purchasing power; Indonesia hit all three "sweet-spots"

	2004	2013	% ∆	2020E	% Δ	Comments
Obese / Overweight % po	pulation					
Singapore	31%	36%	14%	39%	9%	At the sweet spot
Malaysia	39%	44%	13%	47%	6%	At the sweet spot
Thailand	29%	34%	16%	36%	8%	At the sweet spot
Indonesia	18%	22%	25%	25%	12%	At the sweet spot
Median Age (yrs old)						
Singapore	34.6	35.9	4%	36.5	2%	Not at sweet spot
Malaysia	24.9	27.6	11%	30.6	11%	Crossing sweet spot
Thailand	31.8	35.4	11%	38.2	8%	Not at sweet spot
Indonesia	25.7	28.9	12%	31.4	9%	Cross sweet spot
GDP per capita (US\$)						
Singapore	23,320	54,226	133%	81,072	50%	Not at the sweet spot
Malaysia	4,982	10,788	117%	16,845	56%	Not at the sweet spot
Thailand	2,506	5,679	127%	8,278	46%	At the sweet spot
Indonesia	1,145	3,513	207%	6,468	84%	At the sweet spot

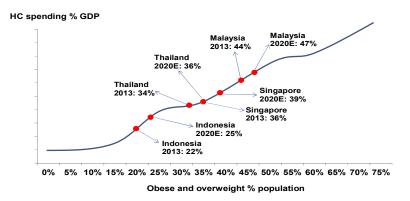
Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 12: Median age vs. healthcare spending as % GDP: "sweet-spots" at 30-35 years and 40 years or > (1990-2013)



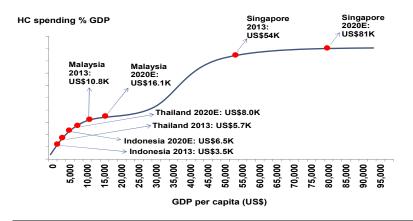
Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 11: Lifestyle choice (i.e., obesity/overweight) trends vs. healthcare spend as % of GDP: "sweet-spots" at 15-25%, 35-50%, 60% or > (1990-2013)



Source: Euromonitor, Goldman Sachs Global Investment Research.

# Exhibit 13: GDP per capita (i.e. purchasing power) vs. HC % GDP: "sweetspots" at US\$0-10K and US\$30-50K (1990-2013)



Source: Euromonitor, Goldman Sachs Global Investment Research.

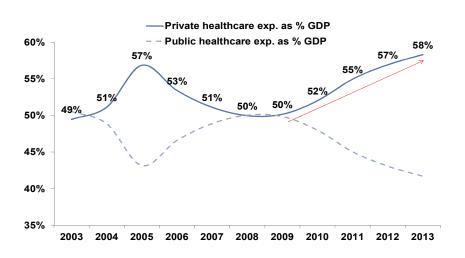
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## (2) Private share rising due to public funding constraints...

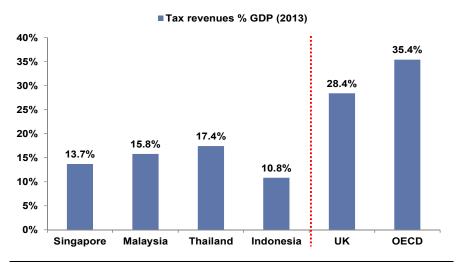
We expect HC consumption and spending to be driven by private spending, as we see constraints for the public sector of the ASEAN-4 nations (except Singapore) to finance the growing demand, given the fiscal budget deficits these countries (except Singapore) face and the low tax revenues collected. We also expect private life / medical insurance penetration rates to rise, given current low levels relative to more developed markets, which will further aid private HC affordability. There is also a possibility—which we have yet to factor in our forecasts—that the public HC systems will have to be revamped in coming years to address the ever-increasing HC needs. This may lead to the public sector outsourcing more HC functions to the private sector, which except for Thailand (where the government has been more pro-active on this front), is still very limited today. Also, we note that historically such arrangements have had unattractive economics (e.g., the number of participating private hospitals in Thailand's Universal Health Coverage scheme has dropped to only 10 from 25 when it first started).

Exhibit 14: ASEAN-4 private spend rising faster than public spend as governments find it increasingly tough to finance HC spending needs



Source: Furomonitor

Exhibit 15: ASEAN tax collection low generally due to lower tax regimes



Source: CEIC.

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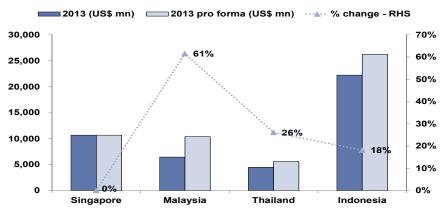
Exhibit 16: We expect private spending share to keep rising; while significant changes are in the works, as supported by recent news flow and MOH checks...

Countries	Challenges in next decade	Ongoing initiatives or new initiatives with private sector impact	Incremental impact on public-private collaboration
Malaysia	Increase access and availability of high quality healthcare service, rising medical costs, less sophisticated cost containment strategy, weak funding structure	1Care1Malaysia - this will require compulsory contribution by employees/employers into a common pool / national insurance scheme and potentially be used for both government and private healthcare access. Details continue to evolve.	Very significant, if it happens
Thailand	Aging population, rising dependency ratio, rising medical costs, inequitable public systems (SSS, UCS, CSMBS), lack of access to high quality healthcare services	SSS could be expanded for the informal working sector (currently only formal), as UCS - given its stretched finances - has only 10 hospitals (25 prior) participating in the program, which limits the effectiveness of the system. Harmonization of CSMB scheme with SSS and UCS will allow private hospitals to also participate in CSMBS.	Significant even as there is already significant collaboration with private sector
Indonesia	Lack of access to basic healthcare services, severe shortage of medical professionals, potential funding shortage	Roll-out of UHC starting 2014 (fully by 2019) will increasingly allow private sector participate in the system.	Very significant, if executed well.
Singapore	Aging population, rising dependency ratio, rising medical costs, lack of lower end medical professionals	Public will continue to lease some beds from private sector (e.g. IHH's Parkway East Hospital); Subsidies can be made more portable into private sector (certain private nursing homes and private GP clinics already eligible)	Negligible

Note: SSS = Social Security Scheme, CSMBS = Civil Servant Medical Benefit Scheme, UCS = Universal Coverage Scheme, UHC = Universal Healthcare Coverage

Source: MOH Malaysia, MOPH Thailand, MOH Indonesia, MOH Singapore, various media sources (including The Straits Times, Jakarta Post, Bangkok Post), Goldman Sachs Global Investment Research.

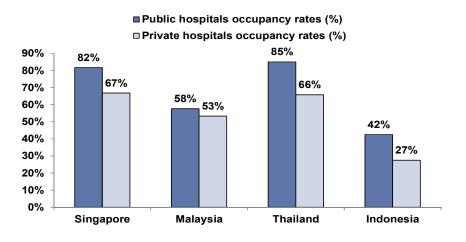
Exhibit 17: ...we think the suggested changes can help increase the addressable market for private hospitals (as shown in the pro-forma below), as it will likely have to happen through compulsory contribution and closer private-public partnerships, i.e., leveraging the capacity from private hospitals



Note: Addressable market is the total of private HC spending and parts of public HC spending which the private sector have access to (e.g. Universal Coverage Scheme in Thailand).

Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 18: Private hospitals preferred by patients due to lower occupancy rates and there is significant upside risk on occupancy levels if private-public partnerships were to occur (2013)



Source: MOH Malaysia, MOPH Thailand, MOH Indonesia, MOH Singapore.

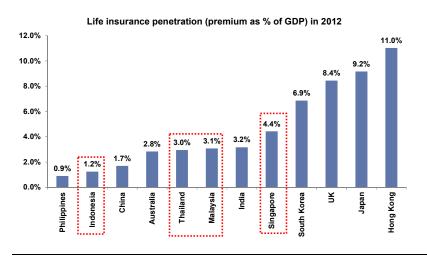


Exhibit 19: Insurance penetration rates also remain low in ASEAN-4 and any likely rise will aid affordability, in our view

Source: Swiss Re

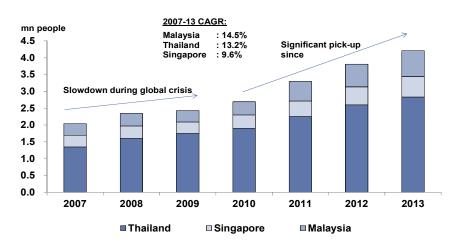
## (3) Number of medical tourists from new markets increasing

We expect the ASEAN-4 medical tourism market to keep growing in the coming years, with the Laos, Cambodia, Myanmar, and Vietnam (LCMV) markets appearing encouraging as a significant new market (especially with AEC-2015), given the similar-to-Indonesia characteristics back in the mid-2000s, i.e., rising FDI / income levels, but lack of proper HC access in domestic markets.

We also see potential for Chinese/Indians to increasingly travel overseas to avail of HC services; although HC quality/capability in both countries are very high, people travel overseas for specialized procedures– e.g. if certain procedures / drugs are unavailable in their local market (e.g., gender selection IVF and certain biological drugs are unavailable in China, but available in Thailand), for better service or a leisure holiday on the side (e.g., cosmetic surgery).

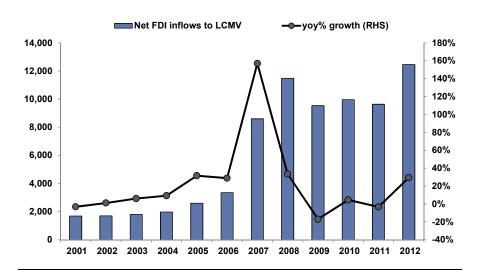
Further, we expect to keep seeing growth in Indonesia (non-Jakarta) and Middle East (Qatar/Oman/UAE already big travelers, but potential from Saudi Arabia) medical tourists. There are also new markets like Russia, Mongolia where medical tourist inflows are rising, but for proximity reasons, we see the impact from these travelers as more limited.

Exhibit 20: ASEAN medical tourism historically driven by Indo and Middle East patients



Source: Frost & Sullivan.

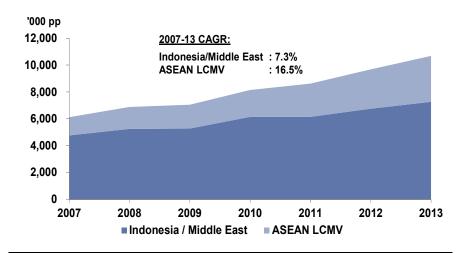
Exhibit 22: FDI investments for these countries are on the rise...



Source: CEIC.

Exhibit 21: General tourist flow from LCMV starting to accelerate, with ASEAN hospitals reporting more medical tourists from such markets

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Source: Euromonitor.

Exhibit 23: ...with more upside risk from AEC 2015 initiative

	ASEAN Economic Community 2015							
Objective	To make ASEAN a more dynamic and competitive economic bloc through regional economic integration governed by the principles of an open, outward-looking, inclusive, and market driven economy							
	(a) a single market and production base: free flow of goods, services, investment, capital, & skilled labor							
Key characteristic	(b) a highly competitive economic region: aims to introduce nationwide competition policies and laws (CPL) to ensure a level playing field and incubate a culture of fair business competition for enhanced regional economic performance in the long run							
envisaged	(c) a region of equitable economic development: initiatives to enhance economic integration of Laos, Cambodia, Myanmar and Vietnam (LCMV) to enable all Member States to move forward in a unified manner and to enhance ASEAN's competitiveness as a region							
	(d) a region fully integrated into the global economy: (i) a coherent approach towards external economic relations and (ii) enhanced participation in global supply networks							
Timeline	ASEAN leaders have agreed to launch AEC on December 31, 2015							

Source: ASEAN Economic Community.

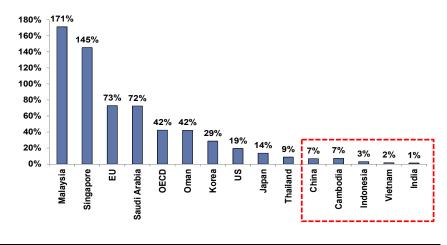


Exhibit 24: LCMV economic and healthcare conditions now appear similar to Indonesia in early-mid 2000s, where purchasing power is growing fast but healthcare access is lacking

	Laos (2013)	Cambodia (2013)	Myanmar (2013)	Vietnam (2013)	Indonesia (2006)
Population (mn)	6.8	15.1	53.3	90.7	229.9
GDP per capita (US\$)	1,477	1,016	869	1,902	1,640
Age expectancy (years)	65.2	71.9	65.2	75.9	69.2
# JCI accredited hospitals	0	0	0	1	0
Doctors per '000 person	0.1	0.2	0.6	0.7	0.2
Nurses per '000 person	N.A.	0.6	0.5	1.0	1.4
Inpatient beds per '000 person	1.2	N.A.	0.6	3.1	0.6

Exhibit 25: We also see potential from China and India, as general tourism rises; while medical quality/care is high in these countries, they may travel for specific medical treatments unavailable in home markets or for better service/leisure reasons, in some ways similar to Middle Easterners

### **Outbound tourists / Total Population (2013)**

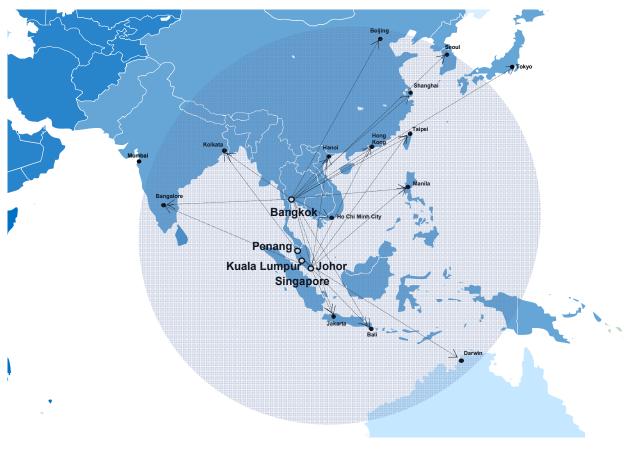


Source: Euromonitor.

Source: Euromonitor.



Exhibit 26: "Rule of thumb" 5-flight radius catchment for medical tourism from Singapore, Kuala Lumpur, Penang, Johor and Bangkok suggests countries like China and India could indeed be new target markets



Source: Goldman Sachs Global Investment Research.

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## Beyond 2020: HC spending growth to continue, but may not reach OECD levels

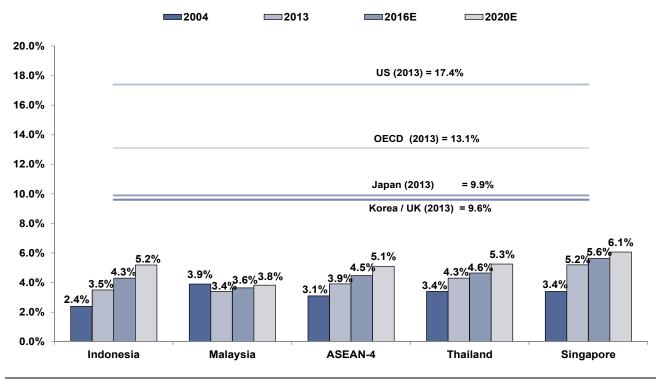
By 2020, we expect ASEAN-4's HC spending as % of GDP to reach 5.1% which is still less than half of the OECD (i.e., proxy for developed markets) average. This indicates that growth will likely stay strong at > 1X of GDP growth even in the decade beyond 2020. That said, we believe that expectations for ASEAN-4 HC penetration levels to reach the OECD average may be overly optimistic due to:

- Singapore will stay an outlier the Singapore HC system focuses heavily on individual accountability, i.e., moderate public funding support and mandating compulsory contribution (Medisave) on an individual basis, and not a pooled basis, which drives individuals to be highly cost conscious /selective in consuming HC services. This is in contrast to most OECD HC systems where healthcare is funded by tax revenues and is largely "free". Hence, even as Singapore has an aged population, high percentage of obese/overweight people and high income levels (Exhibit 141), its HC spending as % of GDP is much lower than many OECD nations. The country's land mass is also very small, which leads to public resources to be concentrated in only certain parts of the country and yet be accessible to everyone, hence allowing economies of scale to be achieved.
- ASEAN-4 will be more cost effective and learn from the experience of developed nations some OECD nations have HC systems that have developed over many decades and have had certain inefficiencies once developed, e.g., (i) extreme multipayer and private insurance dominant model can lead to excessive administrative costs; (ii) 'over-diagnosis" and lack of effective benchmarking of costs for medical care can cause costs to balloon can be difficult to reverse. Thailand, for example, has been successful in cost containment through learning from some of these inefficiencies and Indonesia, for example, is only at the infancy stage of development and will likely be able to bypass some of the pitfalls in rolling out its Universal Healthcare Coverage plans.
- Overall, we expect ASEAN-4 HC spending as a % of GDP to potentially see a ceiling similar to Japan/South Korea levels of 9%-10%, and for Singapore to potentially hit a lower ceiling due to its unique individual accountability model. Over 2014E-2020E, we expect Indonesia to grow the fastest, followed by Malaysia, Singapore and Thailand growing at similar levels. Longer-term, Malaysia and Thailand will likely grow faster than Singapore, as: (i) Thailand's 2014E-2015E GDP growth and HC spending is likely to be slower than under normal circumstances due to the current political situation; our longer term view of Thailand does not take into account these unpredictable events; (ii) Malaysia's HC spending has been constrained by lack of public funding, which we think would need to be supplemented by a compulsory contribution model at some point. If this were to happen, we expect HC spending to accelerate.

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Exhibit 27: ASEAN-4 HC spending as % GDP well below OECD levels; we see a potential ceiling at to be around Korea/Japan levels



Source: Euromonitor, Goldman Sachs Global Investment Research.

## SILO and KPJ to deliver highest DACF growth given aggressive expansion plans

We expect companies with most aggressive beds expansion roadmap to show highest DACF growth. BGH's high historical DACF growth was due to its ability to deliver 17% CAGR in new beds over 2011-2013. Looking ahead, we expect SILO, BCH and KPJ to see fastest growth in new operational beds.

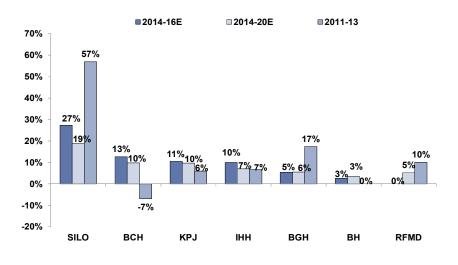
SILO and KPJ are hence likely to show the highest DACF growth. BCH's DACF growth will however lag its beds expansion growth as we expect its 2<sup>nd</sup> high- end World Medical Hospital (to be opened in 2016E) to significantly drag its cash flows, similar to its 1<sup>st</sup> World Medical Centre Hospital post opening in 2013. On the other hand, we expect BH to still show high DACF growth over 2014E-2016E, despite very low bed growth, due to price hikes (c.8% a year going forward; c.9% a year historically), which we think it can effect given its premium hospital status. Sector-wide balance sheets appear supportive of growth. Net D/E for KPJ and BCH will seem high

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in coming years, but we are less concerned about KPJ, as it has a REIT (similar to IHH/SILO) that it can sell assets into, if it needs to raise cash.

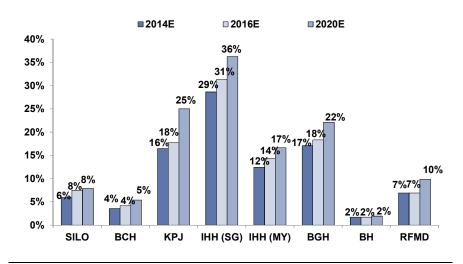
Within the four geographies, Indonesia appears to be the most conducive for growth, as it is not only the least penetrated but its competitive landscape is also the most fragmented (top 3 private hospital groups had in total less than 15% market share in 2013). This is followed by Thailand, and then Malaysia and finally Singapore. Singapore is also no longer issuing any new hospital licenses and hence it is difficult to expand through greenfield projects, whereas the market is quite consolidated and brownfield is also very unlikely. Historically, we observe that DACF growth is a vital determinant with respect to share price performance (Exhibit 32).

Exhibit 28: SILO to deliver an industry leading 27% CAGR in operational beds through 2016E, followed by BCH and KPJ



Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 29: SILO, KPJ, IHH to show largest private hospital market share gains in their respective countries through 2016E

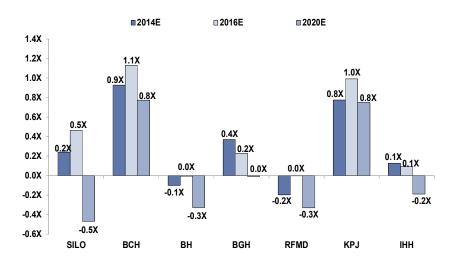


Source: Company data, Goldman Sachs Global Investment Research.



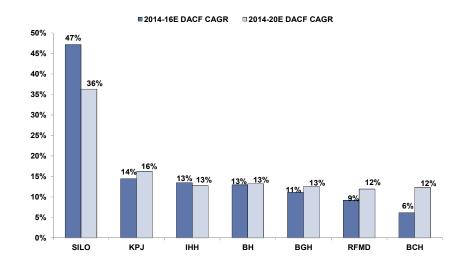
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Exhibit 30: Net D/E generally low for most companies except BCH and KPJ, but KPJ (also SILO and IHH) has a REIT which they can offload assets into



Source: Goldman Sachs Global Investment Research.

Exhibit 31: SILO, KPJ have highest DACF growth; BCH sees drag from low returns WMC hospitals



Source: Goldman Sachs Global Investment Research.

Exhibit 32: DACF growth matters just as much as CROCI as it drove share price outperformance in past 10 years

	Share	price perfori	mance	DACI	F growth qua	artile	CROCI quartile				
	2004-13	2011-13	2013	2004-13	2011-13	2013	2004-13	2011-13	2013		
In US\$ (cumulative)	10Y	3Y	1Y	10Y	3Y	1Y	10Y	3Y	1Y		
Bangkok Dusit	2320%	413%	-3%	Q1	Q1	Q2	Q4	Q4	Q3		
KPJ	2063%	167%	-1%	Q4	Q4	Q4	Q4	Q4	Q4		
Raffles Medical	1429%	154%	17%	Q2	Q2	Q1	Q2	Q1	Q1		
Bumrungrad	885%	232%	13%	Q3	Q2	Q2	Q1	Q2	Q1		
Bangkok Chain	636%	81%	-21%	Q4	Q3	Q3	Q3	Q3	Q2		
IHH	NA	NA	7%	NA	NA	Q4	NA	NA	Q4		
Malaysia Stock Index	301%	76'%	6%	NA	NA	NA	NA	NA	NA		
Thai Stock Index	203%	109%	-11%	NA	NA	NA	NA	NA	NA		
Singapore Stock Index	83%	37%	0%	NA	NA	NA	NA	NA	NA		

Source: Company data, Datastream.

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## BH, RFMD and SILO to deliver the best returns, mainly due to higher GCI turns

• Historically, CROCI differences between companies appear due more to GCI turns and EBITDA margins, than tax and cash conversion reasons. When we dissect GCI turns, we find that gross PPE is 60%-80% of total GCI, followed by long-term investments and intangibles. Net current assets are usually negative, as majority of patients are self-pay or cash patients, which allow for a favorable cash conversion cycle. Within gross PPE, land/building is 60%-70%, followed by hospital equipment at 20%-30%.

- We attempt to better analyze GCI turns by excluding doctor fees from sales (which is typically a pass-through for most hospitals, and as IHH for example does not include it inside its Singapore/Malaysia sales). Under all measures, RFMD stands out well above peers, largely due to its lower gross PPE and medical equipment mix, which we think reflects its high focus on only owning equipment that will see high utilization and willingness to outsource certain tests/procedures. BH's GCI turns is also high, which given its lowest mix of non-PPE assets within GCI we think reflects its discipline in only owning assets related to its core hospital business (BH has taken a stake in BCH before, although it has since sold it off). Both companies are single hospital companies only, which also helps then achieve higher economies of scale.
- SILO meanwhile has high GCI turns due to the low Indonesia land/building costs, which we think can be a sustainable advantage in the medium-term due to the abundance of land in the country, and as most of its sites are in townships / mixed developments owned by one of Indonesia's leading property developer its parent company Lippo Karawaci which yields benefits as well. KPJ and BGH are both middle-of-the-pack in terms of GCI turns.
- IHH and BCH rank the lowest for GCI turns. For IHH, it is mainly due to the high level of goodwill from its from past acquisitions of Parkway and Acibadem, and if we infer from its higher percentage of hospital equipment within its PPE, it may also be partly due to IHH's need to own the most top-end medical equipment and have a complete suite of services for patients, which can have less-optimum utilization at times. BCH's low GCI turns is mainly because it services Social Security Scheme patients, which have very low revenue per inpatient, and possibly as its average hospital size is smaller than others, which limits the ability to maximize sales.
- For EBITDA margins, we also exclude doctor fees and add back rental expenses to factor in that some hospitals leased their assets and others instead owned the assets. Comparing ex-doctor fees/costs EBITDAR margins, RFMD and BH stands out among peers. We think this is due to superior inventory / procurement management from RFMD (low medical supplies expenses) and strong operational cost containment capabilities from BH (low personnel and "others' expenses). For BH, its premium brand status also allows it to improve case mix continuously and pass on inflation pressures, and hence achieve revenue growth and margins expansion even with little visible volume growth. Indeed, revenue per inpatient grew at 9% CAGR over 2008-2013, which is the highest within our coverage.
- BCH and IHH (also a premium brand with strong pricing power, though given competitiveness of Singapore market, revenue per inpatient CAGR is lower than BH) rank middle of the pack. KPJ and SILO rank last. For KPJ, its medical supplies expenses are very high, which implies lower efficiency in managing procurement and inventory. For SILO, we think it is mainly due to low utilization of its hospitals currently, and expect significant improvement ahead. We see also one key advantage for SILO low labor costs due to Indonesia's abundance of labor and lack of cross-country labor mobility due to English language constraints. Singapore hospitals appear to have the highest labor cost component. We also see scope for SILO to potentially reduce its ALOS (average length of stay) from 4.3 days currently (sector average at c.3 days; BH outlier at 4.4 days due to its higher end patient mix–Exhibit 145), which generally leads to higher margins. This is however not yet in our base case.
- Looking ahead, we expect BH to continue to maintain high CROCI through 2018E, before taking a step up from higher GCI turns as its new Petchburi building extension (opens up from 2017E) starts to ramp up from 2019E onwards. For RFMD, we expect CROCI to decline 2015E onwards as GCI turns fall when its new Holland Village medical center (from where it will largely collect rental

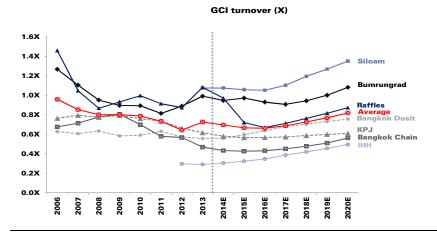
income —from shops and F&B outlets initially, and only gradually open GP, dental and specialist clinics) opens from 2016E and new hospital extension in 2017E. GCI turns and CROCI will eventually improve as these operations ramp up, but we see that from 2018E onwards. SILO will see rapid CROCI improvement in coming years as its new hospitals gradually mature with higher GCI turns and margins improvement. Given the lower land/building costs and personnel expenses – which we think will continue in the medium term – we expect SILO to achieve the highest CROCI among all hospital groups by 2020E. Other hospital groups will also see higher CROCI over time as their current expansion program of new hospitals start to ramp up and mature.

Exhibit 33: We expect BH to show the highest CROCI through 2016E, and for SILO to catch up by 2018E

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)																
Siloam	N.A	14%	14%	15%	17%	19%	22%	24%	26%							
Bumrungrad	32%	23%	19%	20%	20%	18%	17%	22%	23%	21%	22%	22%	21%	22%	23%	25%
Raffles	17%	21%	16%	18%	20%	22%	20%	19%	23%	21%	15%	14%	16%	17%	19%	20%
Bangkok Dusit	11%	14%	13%	11%	13%	12%	13%	12%	11%	11%	11%	12%	13%	13%	14%	15%
Bangkok Chain	14%	19%	17%	18%	19%	16%	13%	17%	13%	10%	10%	9%	9%	10%	11%	12%
IHH	N.A	10%	7%	7%	7%	8%	9%	9%	10%	11%						
KPJ	11%	6%	10%	12%	12%	12%	10%	8%	6%	7%	6%	6%	6%	7%	7%	8%
Average	17%	16%	15%	16%	17%	16%	15%	15%	14%	13%	12%	13%	13%	14%	15%	17%
,																
<b>CROCI Quartiling</b>																
Siloam	N.A	2	2	2	2	2	1	1	1							
Bumrungrad	1	1	1	1	2	2	2	1	2	1	1	1	1	2	2	2
Raffles	2	2	3	2	1	1	1	2	1	2	2	2	2	2	2	2
Bangkok Dusit	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3
Bangkok Chain	3	3	2	3	3	3	4	2	3	3	3	3	3	3	3	3
IHH	N.A	4	4	4	4	4	4	4	4	4						
KPJ	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

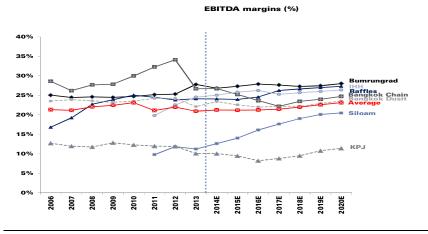
Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 34: Historically, GCI turns are key CROCI differentiators...



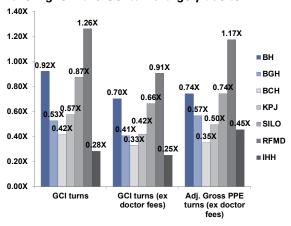
Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 35: ...and EBITDA margins too



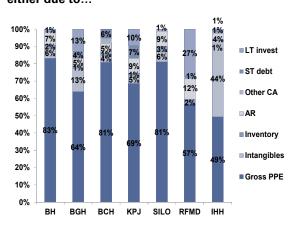
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 36: Single hospitals like RFMD/BH/SILO have higher 2013 GCI turns largely due to...



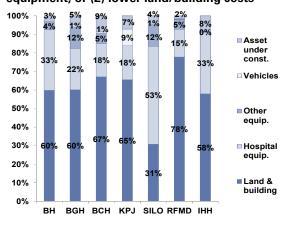
Source: Company data.

Exhibit 37: ...lower gross PPE mix, which is either due to...



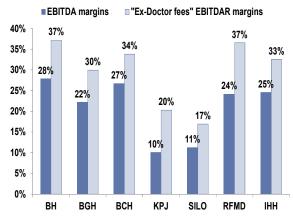
Source: Company data.

Exhibit 38: ...1) more efficient use of medical equipment; or (2) lower land/building costs



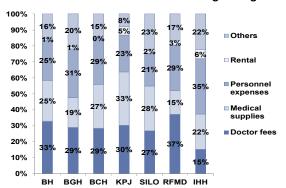
Source: Company data.

# Exhibit 39: 2013 EBITDA margins are highest for BH and BCH due to lack of rental expenses...



Source: Company data.

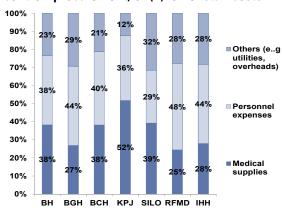
Exhibit 40: ...and low "others" expenses; RFMD and BH ex-doctor fees EBITDAR margins high...



Note: IHH's costs include only doctor fees from Turkey and not Singapore and Malaysia operations.

Source: Company data.

Exhibit 41: ... due to (1) efficient inventory control /procurement; or (2) lower staff costs



Source: Company data.

course. Company data

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### Valuations: Prefer 2016E Director's Cut

We employ a 2-year forward Director's Cut valuation methodology (EV/GCI vs CROCI/WACC) as our back-testing results show that it delivers the highest alpha. We cross-check our 12-m target price to historical valuations. Previously, we used an SOTP valuation methodology for SILO and IHH.

Exhibit 42: Back-testing results suggest Director's Cut offer the highest alpha

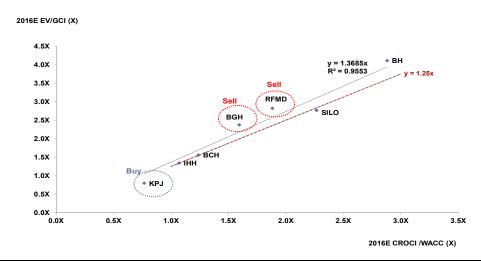
Back-testing for various valuation methodologies using stocks which we are currently initiating on

		A	lpha on Po	rtfolio (Lon	g + Short)						Average Alpha	R-squared
Valuation methodology	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	(2004-2013)	(2004-2013 average)
Director's Cut (2-yr forward)	64%	-43%	164%	128%	24%	23%	46%	29%	45%	9%	49%	62%
Director's Cut (1-yr forward)	-24%	-42%	121%	79%	36%	119%	44%	61%	30%	4%	43%	71%
P/B vs. ROE	-50%	-39%	61%	92%	29%	147%	-10%	41%	54%	60%	39%	51%
EV/DACF	-55%	-36%	121%	79%	52%	69%	44%	30%	45%	10%	36%	96%
P/E	-50%	-24%	82%	97%	26%	116%	-10%	41%	51%	33%	36%	98%
EV/EBITDA	-62%	-21%	88%	28%	41%	92%	25%	76%	45%	14%	33%	97%
EV/GCI vs. DACF growth	102%	-28%	2%	46%	42%	-30%	31%	55%	19%	9%	25%	34%
EV/EBITDA vs. EBITDA growth	90%	-25%	17%	120%	-13%	-6%	53%	2%	43%	-27%	25%	25%
P/E vs. EPS growth	-32%	-59%	9%	70%	62%	5%	75%	14%	40%	10%	19%	32%
EV/DACF vs. DACF growth	23%	-28%	7%	63%	47%	-24%	3%	29%	22%	36%	18%	38%

Note: For the different valuation methodologies we back-tested, the long-short alpha calculated refers to the total returns (local currency) generated by buying the top 20% of stocks (min of 2 stocks) most attractively valued on that metric, and selling the opposite. The list of stocks that constitute the long and short portfolios is rebalanced on a monthly basis. The alpha calculated is based on total returns, local currency and equally weighted.

Source: Company data, Datastream, Goldman Sachs Global Investment Research.

Exhibit 43: We value stocks on 2016E Director's Cut given the superior back-testing results on 1.25X val ratio



Source: Goldman Sachs Global Investment Research.

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**Exhibit 44: Director's Cut TP derivation** 

Company name	Val.ratio (X)	Premium / discount (%)	Implied EV/GCI (X)	Currency	Implied EV	Net debt	МІ	Implied Equity	No. of shares (mn)	DC-value	12-m TP
KPJ Healthcare	1.25X	0%	1.0X	RM	6,005	1,501	108	4,396	1,024	4.30	4.30
Bumrungrad Hospital	1.25X	20%	4.3X	Baht	102,570	-77	218	102,429	866	118.3	118.0
Siloam International Hospitals	1.25X	0%	2.8X	Rp	18,728	941	64	17,723	1,156	15,330	15,500
IHH Healthcare	1.25X	0%	1.3X	RM	38,606	2,084	2,539	33,983	8,135	4.18	4.20
Bangkok Chain Hospital	1.25X	0%	1.5X	Baht	27,257	6,829	1,058	19,370	2,494	7.77	7.80
Raffles Medical	1.25X	0%	2.4X	S\$	1,699	-1	2	1,698	554	3.07	3.10
Bangkok Dusit Medical Services	1.25X	0%	2.0X	Baht	228,087	13,273	3,009	211,805	15,491	13.67	13.70

Note: We apply a 20% premium on quartile 1 stocks (BH) as our back-test shows that quartile 1 stocks generally trade at a 20% val ratio premium. BH no. of shares have been adjusted for potential share dilution from its convertible bonds

Source: Datastream, Goldman Sachs Global Investment Research.

Exhibit 45: Implied valuations do not seem excessive if we look further into 2015E-2016E

Company name	Ticker	Rating		as of	12-m TP	Potential % upside /	Impli	ed EV/EBITD	)A (X)	Historical range	lmį	olied EV/GCI	(X)	Historical range
			UZ-JU	n-2014		(downside)	2014E	2015E	2016E	+/- 1STD (X)	2014E	2015E	2016E	+/- 1STD (X)
KPJ Healthcare	KPJH.KL	Buy	RM	3.30	4.30	30%	21.3X	20.7X	21.7X	5.0X - 16.1X	1.1X	1.0X	1.0X	0.5X - 1.0X
Bumrungrad Hospital	BH.BK	Neutral	Baht	112.5	118.0	5%	20.4X	17.3X	15.3X	9.3X - 15.1X	4.9X	4.3X	3.6X	2.0X - 3.7X
Siloam International Hospitals	SILO.JK	Neutral	Rp	14,950	15,500	4%	40.7X	27.9X	18.7X	24.7X - 28.7X	4.8X	3.5X	2.9X	3.0X - 3.4X
IHH Healthcare	IHHH.KL	Neutral	RM	4.17	4.20	1%	20.5X	17.6X	15.1X	18.2X - 20.4X	1.5X	1.4X	1.3X	1.4X - 1.6X
Bangkok Chain Hospital	BCH.BK	Neutral	Baht	7.85	7.80	-1%	17.3X	16.7X	16.1X	5.5X - 14.3X	1.8X	1.7X	1.6X	1.2X - 1.9X
Raffles Medical	RAFG.SI	Sell	S\$	3.66	3.10	-15%	18.0X	17.3X	15.4X	10.4X - 17.8X	3.2X	2.7X	2.4X	2.1X - 3.7X
Bangkok Dusit Medical Services	BGH.BK	Sell	Baht	16.50	13.70	-17%	18.3X	16.5X	14.7X	7.3X - 16.5X	2.3X	2.2X	2.0X	1.0X - 2.1X

Note: If we take into account potential dilution from BH's convertible bonds (which currently are in the money) and assuming share price as of 2-Jun close, BH's implied 2014E/2015E/2016E EV/EBITDA would be 24.3X / 20.6X / 18.2X and implied 2014E/2015E/2016E EV/GCI would be 5.9X / 5.1X / 4.3X.

Source: Datastream, Goldman Sachs Global Investment Research.

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**Exhibit 46: Global Hospitals valuations comp** 

	Ticker	cer Rating	Market cap						P/E (X)		CROCI (%)				ROE (%)			2014-2016E CAGR		
Company name	TICKET	Rating	(US\$mn)	2-Ju	n-2014	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E	Sales	EBITDA	EPS
Siloam International Hospitals	SILO.JK	Neutral	1,480	Rp	14,950	39.3	27.0	18.1	n.m.	n.m.	n.m.	14%	15%	17%	4%	5%	12%	32%	50%	87%
Indonesia Average						39.3	27.0	18.1	n.m.	n.m.	n.m.	14%	15%	17%	4%	5%	12%	32%	50%	87%
KPJ Healthcare Berhad	KPJH.KL	Buy	1,051	RM	3.3	17.4	17.1	18.0	29.2	29.2	34.5	7%	6%	6%	10%	9%	7%	14%	3%	-8%
IHH Healthcare Bhd	IHHH.KL	Neutral	10,558	RM	4.17	20.3	17.4	15.0	42.3	35.3	29.3	7%	7%	8%	4%	5%	6%	13%	16%	20%
Malaysia Average						18.9	17.3	16.5	35.8	32.3	31.9	7%	7%	7%	7%	7%	6%	14%	10%	6%
Bumrungrad Hospital	BH.BK	Neutral	2,496	Bt	112.5	19.5	16.5	14.6	31.8	26.0	22.1	21%	22%	22%	25%	27%	28%	14%	16%	20%
Bangkok Chain Hospital	BCH.BK	Neutral	596	Bt	7.85	17.3	16.8	16.2	29.5	27.7	27.8	10%	10%	9%	16%	16%	15%	16%	9%	3%
Bangkok Dusit Medical Services	BGH.BK	Sell	7,786	Bt	16.50	21.7	19.6	17.5	34.9	30.5	26.5	11%	11%	12%	17%	18%	18%	14%	11%	15%
Thailand Average						19.5	17.6	16.1	32.1	28.1	25.4	14%	14%	14%	19%	20%	20%	15%	12%	13%
Raffles Medical	RAFG.SI	Sell	1,617	S\$	3.66	21.4	20.5	18.1	28.0	26.4	24.5	21%	15%	14%	14%	14%	14%	11%	12%	7%
Singapore Average						21.4	20.5	18.1	28.0	26.4	24.5	21%	15%	14%	14%	14%	14%	11%	12%	7%
ASEAN Average						22.4	19.3	16.8	32.6	29.2	27.4	13%	12%	13%	13%	13%	14%	16%	17%	21%
Apollo Hospitals Enterprise	APLH.BO	CS	2,140	INR	904	17.0	14.2	n.a.	31.8	26.1	19.1	n.a.	n.a.	n.a.	13%	14%	n.a.	18%	23%	29%
Fortis Healthcare	FOHE.BO	CS	864	INR	109.7	24.9	17.4	n.a.	n.a.	45.9	n.a.	n.a.	n.a.	n.a.	n.a.	2%	n.a.	n.a.	n.a.	n.a.
India Average						21.0	15.8	n.a.	31.8	36.0	19.1	n.a.	n.a.	n.a.	13%	8%	n.a.	18%	23%	29%
AEJ Average						22.1	18.5	16.8	32.5	30.9	26.2	13%	12%	13%	13%	12%	14%	17%	17%	22%
HCA Holdings	HCA	Buy*	24,240	\$	52.99	7.5	6.7	6.1	13.4	10.9	9.4	22%	21%	20%	n.a.	n.a.	n.a.	6%	8%	19%
Universal Health Services	UHS	Buy	8,971	\$	89.57	8.7	8.0	7.2	17.2	16.1	14.9	11%	11%	11%	14%	13%	12%	9%	6%	7%
Tenet Healthcare	THC	Buy	4,567	\$	47	8.3	7.2	6.5	33.0	15.4	12.0	10%	9%	9%	12%	22%	23%	6%	13%	66%
Community Health Systems	CYH	Neutral	4,469	\$	41.77	7.5	6.8	6.4	14.8	10.8	9.6	11%	10%	9%	8%	8%	8%	8%	8%	24%
LifePoint Hospitals	LPNT	Neutral	2,927	\$	61.24	8.6	7.9	7.5	24.2	21.1	19.2	7%	8%	7%	5%	6%	6%	8%	7%	12%
US Average						8.1	7.3	6.8	20.5	14.9	13.0	12%	12%	12%	10%	12%	12%	7%	8%	26%
Ramsay Health Care	RHC.AX	Neutral	8,941	A\$	47.54	13.7	12.1	10.9	27.1	23.6	21.2	12%	12%	13%	21%	22%	22%	8%	10%	13%
Primary Health Care	PRY.AX	Neutral	2,132	A\$	4.53	7.9	7.5	7.1	12.9	11.8	11.1	7%	7%	7%	6%	7%	7%	3%	5%	8%
Australia Average						10.8	9.8	9.0	20.0	17.7	16.1	10%	10%	10%	14%	14%	14%	5%	7%	11%
Al Noor Hospitals Group Plc	ANHA.L	Buy	2,015	р	1,028	18.3	14.6	11.7	21.6	17.8	15.0	40%	40%	41%	43%	38%	34%	17%	19%	20%
NMC Health	NMC.L	Buy	1,511	р	485.0	14.7	12.8	9.5	18.6	18.1	12.9	17%	17%	19%	19%	17%	20%	17%	21%	20%
Mouwasat Medical Services	4002.SE	Buy	1,390	SR	104.25	16.1	13.4	11.7	21.3	17.6	15.7	22%	22%	22%	24%	24%	23%	18%	16%	17%
Dallah Healthcare Holding	4004.SE	Sell	1,246	SR	99	22.6	19.2	16.0	29.9	25.0	21.0	12%	13%	14%	13%	14%	16%	18%	19%	19%
Middle East Average						17.9	15.0	12.2	22.9	19.6	16.2	23%	23%	24%	25%	23%	23%	18%	19%	19%
Rhoen-Klinikum	RHKG.DE	NC	4,517	EUR	23.94	19.5	18.5	17.9	43.0	26.6	22.9	n.a.	n.a.	n.a.	3%	5%	6%	-7%	9%	37%
Mediclin AG	MEDG.DE	NC	272	EUR	4.20	13.4	10.9	8.7	n.a.	42.0	21.0	n.a.	n.a.	n.a.	n.a.	3%	6%	3%	22%	n.a.
Europe Average						16.4	14.7	13.3	43.0	34.3	22.0	n.a.	n.a.	n.a.	3%	4%	6%	-2%	15%	37%
Global Average						16.6	14.2	12.2	26.6	24.0	19.5	15%	14%	15%	14%	14%	15%	12%	14%	22%

<sup>\*</sup>This stock is on our regional Conviction List

Note: CS = coverage suspended; NC = not covered; If we take into account potential dilution from BH's convertible bonds (which are currently in the money) and assuming share price as of 2-Jun close, BH's 2014E/2015E/2016E EV/EBITDA would be 23.2X / 19.6X / 17.3X.

Source: Company data, Bloomberg, Datastream, Goldman Sachs Global Investment Research.

Goldman Sachs Global Investment Research

## **Estimate changes and GS vs. consensus**

For Siloam, we have revised down our 2014E-2020E assumptions for new hospital additions to 3-4 per year, compared with 4-8 previously, as this appears a more realistic target given slower new hospital additions than expected since its listing last year. Consequently, we have reduced SILO's 2014E-2016E EBITDA estimates by 18%-27%. For IHH, we raise our 2014E-2016E EPS by 1%-10% as we factor in stronger inpatient volume growth for its Malaysia hospital operations, based on our deep-dive analysis of long-term healthcare spending.

Exhibit 47: Estimate changes for our existing coverage SILO and IHH

SILO	GSe			GSe (Old)			% change		
SILO	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E
Revenue (Rp bn)	3,578	4,809	6,270	3,945	5,822	8,196	-9%	-17%	-24%
EBITDA (Rp bn)	452	675	1,010	547	906	1,393	-18%	-26%	-27%
EPS (Rp)	55	70	195	106	176	382	-48%	-60%	-49%

ІНН	GSe			GSe (Old)			% change		
INN	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E
Revenue (RM mn)	7,579	8,610	9,763	7,547	8,537	9,438	0%	1%	3%
EBITDA (RM mn	1,898	2,221	2,562	1,892	2,136	2,387	0%	4%	7%
EPS (RM)	0.10	0.12	0.14	0.10	0.11	0.13	1%	5%	10%

Source: Goldman Sachs Global Investment Research.

Exhibit 48: GS estimates vs. Bloomberg consensus

KPJ (RM mn)	GSe			Consensus			% difference		
KFJ (KWI IIIII)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E
Revenue	2,595	2,957	3,360	2,573	2,889	3,273	1%	2%	3%
EBITDA	261	280	276	255	295	322	2%	-5%	-14%

CII O (De he)	GSe			Consensus			% difference		
SILO (Rp bn)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E
Revenue	3,578	4,809	6,270	3,840	5,733	7,484	-7%	-16%	-16%
EBITDA	452	675	1,010	470	718	1,022	-4%	-6%	-1%

RFMD (S\$ mn)	GSe				Consensus			% difference		
Krivid (3\$ IIIII)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E	
Revenue	373	409	455	379	424	502	-2%	-4%	-9%	
EBITDA	90	98	112	90	102	127	0%	-4%	-12%	

BGH (Baht mn)	GSe			Consensus			% difference		
BOH (Balit IIIII)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E
Revenue	54,115	61,818	70,621	55,968	63,843	73,712	-3%	-3%	-4%
EBITDA	12,660	13,942	15,553	12,095	13,947	15,871	5%	0%	-2%

BH (Baht mn)	GSe			Consensus			% difference		
DIT (Dalit IIIII)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E
Revenue	15,512	17,939	20,175	15,728	17,794	20,275	-1%	1%	0%
EBITDA	4,161	4,904	5,629	4,373	5,042	5,761	-5%	-3%	-2%

BCH (Baht mn)	GSe				Consensus			% difference		
BCH (Balit IIII)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E	
Revenue	5,377	6,225	7,179	5,274	5,792	6,582	2%	7%	9%	
EBITDA	1,438	1,570	1,699	1,500	1,702	1,948	-4%	-8%	-13%	

IHH (RM mn)	GSe				Consensus			% difference		
IIIII (IXWI IIIII)	2014E	2015E	2016E	2014E	2015E	2016E	2014E	2015E	2016E	
Revenue	7,579	8,610	9,763	7,749	8,975	10,314	-2%	-4%	-5%	
EBITDA	1,898	2,221	2,562	1,923	2,215	2,619	-1%	0%	-2%	

Source: Bloomberg, Goldman Sachs Global Investment Research.

## KPJ Healthcare (KPJH.KL): Key beneficiary of rising healthcare spending; initiate with Buy

### Source of opportunity

- We initiate on KPJ Healthcare with a Buy rating. Our 12-m Director's Cut based TP of RM4.30 implies 30% upside potential. KPJ is Malaysia's largest hospitals group, which is a key beneficiary of the rising private healthcare spending (2014E-2020E industry CAGR of 11%) and medical tourism spending growth (2014E-2020E industry CAGR of 19%) in Malaysia.
- We expect KPJ to deliver 2014E-2016E DACF CAGR of 14% (quartile 2 within our coverage universe), given 11% CAGR in new operating beds over the same period. Long term growth prospects also appear bright, as its new hospitals ramp up/mature and deliver stronger earnings. We forecast 2014E-2020E DACF CAGR of 16%. That said, given the addition of a significant number of new hospitals (7 hospitals over 2014-2016E) in the coming years, we expect KPJ's CROCI to be low at 6%-7% over 2014E-2016E, compared with its historical level of 9% over 2004-2013.
- We believe market is overly concerned about KPJ's ability to sustain margins/returns/growth amid addition of a significant number of new hospitals over 2014E-2016E and weaker than expected results in 2013, and is assuming a CROCI contraction to 4%-5%, which according to our analysis on margin dilution from new hospital additions, appears excessive.
- We note weaker 2013 results were not all due to new hospital additions, but also due to introduction of minimum
  wages in Malaysia and a slower than usual price hike, which we do not expect to recur. The recently released 1Q14
  results we think support our view that margin dilution concern from new hospitals may be overdone.
- Our analysis also suggests that KPJ's share price is overly discounting its long term growth potential, implying only 12% EPS CAGR over the next 10 years (similar to historical levels) versus our estimate of 17% CAGR over 2014-2020E.

### Catalyst

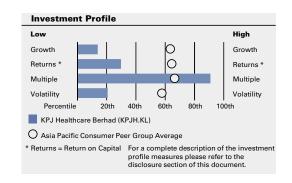
(1) Stable margins / revenue growth announced during the company's quarterly results, (2) additions of new hospitals (7 hospitals over 2014-2016E) and subsequent market share gains, (3) room to increase share of the medical tourism revenues over next 12 months for KPJ, which stands at just 3% of its revenues currently.

### Valuation

We employ 2016E Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks. Our 12-m target price of RM4.30 (30% upside potential) implies 2015E/2016E EV/EBITDA of 20.7X / 21.7X, which is at the high end of its historical range (2006-2014ytd), but we see this as justified given its rising growth profile.

### **Key risks**

(1) Weaker than expected execution and profitability of new hospitals, and (2) adverse litigation outcome—KPJ won an appeal in Dec 2013 on a RM70.5mn lawsuit for an alleged breach of a JV agreement with a partner. According to KPJ, the partner is now appealing.



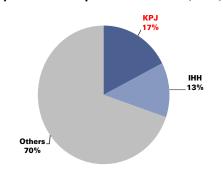
Key data	Current
Price (RM)	3.30
12 month price target (RM)	4.30
Market cap (RM mn / US\$ mn)	3,377.6 / 1,051.2
Foreign ownership (%)	

	12/13	12/14E	12/15E	12/16E
EPS (RM)	0.11	0.11	0.11	0.10
EPS growth (%)	(27.0)	7.4	0.0	(15.3)
EPS (diluted) (RM)	0.10	0.11	0.11	0.09
EPS (basic pre-ex) (RM)	0.11	0.11	0.11	0.10
P/E (X)	38.9	29.2	29.2	34.5
P/B (X)	3.7	2.6	2.5	2.4
EV/EBITDA (X)	20.5	17.4	17.1	18.0
Dividend yield (%)	1.0	1.4	1.4	1.2
ROE (%)	9.7	9.8	8.8	7.1
CROCI (%)	6.0	6.7	6.2	5.7



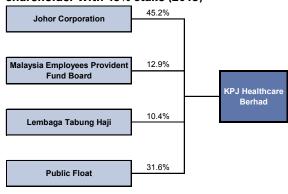
Share price performance (%)	3 month	6 month	12 month
Absolute	(2.1)	(17.8)	(22.8)
Rel. to Kuala Lumpur Composite	(3.6)	(19.8)	(26.8)
Source: Company data, Goldman Sachs Research e	stimates, FactSe	t. Price as of 6/0	2/2014 close.

# Exhibit 49: KPJ is the largest hospital group in Malaysia with 17% private bed share (2013)



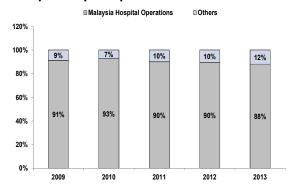
Source: Company data, MOH Malaysia.

# Exhibit 50: Johor Corporation is the largest shareholder with 45% stake (2013)



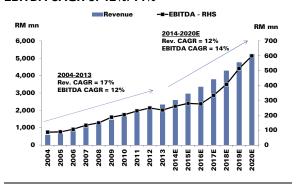
Source: Company data.

# Exhibit 51: Majority of revenues come from Malaysia hospital operations



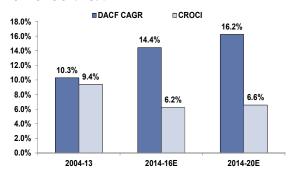
Source: Company data.

### Exhibit 52: We expect 2014-2020E revenue/ EBITDA CAGR of 12%/14%



Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 53: We expect good DACF growth, but low CROCI ahead



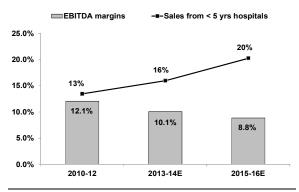
Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 54: Current share price appears overly bearish on new hospital margins

	3	
	2015E	2016E
Current val ratio (X)	1.43X	1.37X
Current EV/GCI (X)	0.9X	0.8X
Assumed WACC (%)	7.5%	7.5%
Share price implied CROCI (%)	4.5%	4.3%
Asset turnover (X) - GSe	0.57X	0.57X
Tax burden (%) - GSe	85%	87%
Cash conversion (%) - GSe	137%	142%
Implied EBITDA margins (%)	6.8%	6.2%
EBITDA margins (%) - GSe	9.5%	8.2%

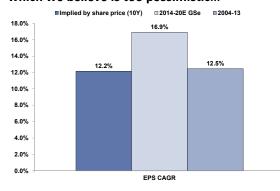
Source: Goldman Sachs Global Investment Research.

# Exhibit 55: Margins likely to decline, but not at share price implied levels



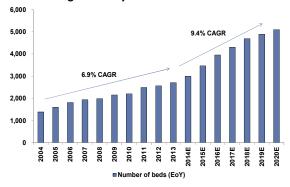
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 56: Stock price assumes 12% EPS CAGR, which we believe is too pessimistic...



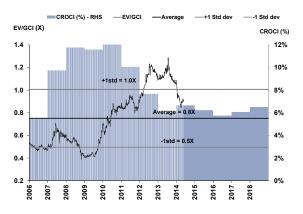
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 57: ... as number of operating beds will increase significantly over 2014E-2020E



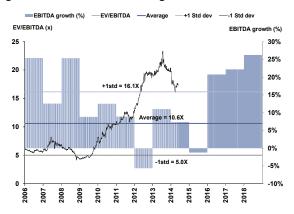
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 58: EV/GCI de-rated significantly on margin concerns



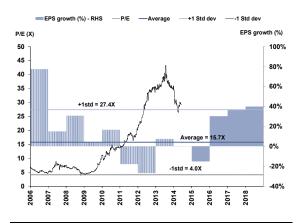
Source: Company data, Datastream, Goldman Sachs Global Investment Research.

# Exhibit 59: EV/EBITDA de-rated, but EBITDA growth concerns bottoming



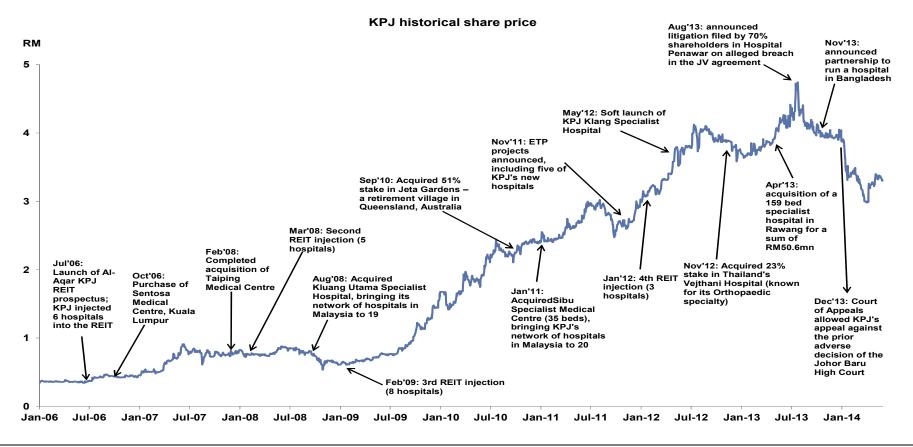
Source: Company data, Datastream, Goldman Sachs Global Investment Research.

### Exhibit 60: P/E has de-rated as well



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

Exhibit 61: KPJ historical share price trend



Source: Company data, Factiva.

**Exhibit 62: KPJ CROCI DuPont** 

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	9%	11%	6%	10%	12%	12%	12%	10%	8%	6%	7%	6%	6%	6%	7%	7%	8%
GCI turnover (X)	0.64X	0.69X	0.76X	0.80X	0.78X	0.79X	0.76X	0.73X	0.66X	0.62X	0.58X	0.57X	0.57X	0.57X	0.59X	0.60X	0.61X
EBITDA margins (%)	15%	13%	13%	12%	12%	13%	12%	12%	12%	10%	10%	9%	8%	9%	10%	11%	11%
Cash conversion (X)	0.99X	1.14X	0.57X	1.03X	1.29X	1.14X	1.30X	1.14X	0.97X	0.97X	1.14X	1.16X	1.23X	1.20X	1.16X	1.11X	1.09X

 $Source: Company \ data, \ Goldman \ Sachs \ Global \ Investment \ Research.$ 

# **KPJ Healthcare Berhad: Summary financials**

Profit model (RM mn)	12/13	12/14E	12/15E	12/16E	Balance sheet (RM mn)	12/13	12/14E	12/15E	12/16
Total revenue	2,331.6	2,595.2	2,956.8	3,359.9	Cash & equivalents	313.0	263.3	277.9	276.
Cost of goods sold	(1,634.2)	(1,819.7)	(2,084.7)	(2,412.9)	Accounts receivable	427.1	481.9	556.4	640.
SG&A	(578.4)	(643.7)	(733.4)	(833.4)	Inventory	52.8	77.9	88.7	100.
R&D					Other current assets	18.2	18.2	18.2	18.
Other operating profit/(expense)	21.8	24.3	27.7	31.4	Total current assets	811.1	841.2	941.1	1,035.
EBITDA	235.0	260.9	280.0	276.5	Net PP&E	1,206.0	1,480.2	1,737.7	1,951.
Depreciation & amortization	(94.1)	(104.9)	(113.6)	(131.5)	Net intangibles	236.0	236.0	236.0	236.0
EBIT	140.9	156.0	166.4	145.0	Total investments	476.1	733.1	789.5	851.9
Interest income	10.6	15.6	13.2	13.9	Other long-term assets	112.5	112.5	112.5	112.
Interest expense	(38.8)	(56.5)	(69.7)	(80.5)	Total assets	2,841.6	3,402.9	3,816.7	4,187.
Income/(loss) from uncons. subs.	46.9	51.0	56.4	62.4					
Others	0.0	0.0	0.0	0.0	Accounts payable	490.0	551.6	638.0	743.
Pretax profits	159.6	166.1	166.2	140.8	Short-term debt	358.6	358.6	358.6	358.
Income tax	(49.2)	(42.5)	(42.5)	(36.0)	Other current liabilities	87.2	87.2	87.2	87.
Minorities	(7.3)	(8.1)	(8.1)	(6.9)	Total current liabilities	935.8	997.5	1,083.9	1,189.
No. Communication of the Commu	400.4	445.5	445.5		Long-term debt	668.9	968.9	1,218.9	1,418.9
Net income pre-preferred dividends	103.1	115.5	115.5	97.8	Other long-term liabilities	64.4	64.4	64.4	64.4
Preferred dividends	0.0	0.0	0.0 <b>115.5</b>	0.0	Total long-term liabilities  Total liabilities	733.3	1,033.3	1,283.3	1,483.
Net income (pre-exceptionals)	103.1	115.5		97.8	Total liabilities	1,669.1	2,030.7	2,367.1	2,672.
Post-tax exceptionals	0.0	0.0 <b>115.5</b>	0.0 <b>115.5</b>	0.0 <b>97.8</b>	Duefermed alterna	0.0	0.0	0.0	•
Net income	103.1	115.5	115.5	97.6	Preferred shares	1,087.5			0.0 1,407.0
EPS (basic, pre-except) (RM)	0.11	0.11	0.11	0.10	Total common equity Minority interest	85.0	<b>1,279.0</b> 93.1	<b>1,348.3</b> 101.2	1,407.
EPS (basic, pre-except) (RM)	0.11	0.11	0.11	0.10	winority interest	85.0	93.1	101.2	108.
EPS (diluted, post-except) (RM)	0.11	0.11	0.11	0.10	Total liabilities & equity	2,841.6	3,402.9	3.816.7	4,187.4
DPS (RM)	0.10	0.11	0.11	0.03	Total liabilities & equity	2,041.0	3,402.5	3,010.7	4,107.
Dividend payout ratio (%)	38.1	40.0	40.0	40.0	BVPS (RM)	1.11	1.25	1.32	1.3
Free cash flow yield (%)	(4.9)	(6.3)	(5.4)	(4.7)	BVI 3 (IIIVI)		1.23	1.32	1.5
Tree cash now yield (70)	(4.5)	(0.3)	(3.4)	(4.7)					
Growth & margins (%)	12/13	12/14E	12/15E	12/16E	Ratios	12/13	12/14E	12/15E	12/16
Sales growth	11.2	11.3	13.9	13.6	CROCI (%)	6.0	6.7 9.8	6.2 8.8	5.1
EBITDA growth	(5.7)	11.0 10.7	7.3 6.6	(1.2) (12.8)	ROE (%)	9.7 4.1	9.8 3.7		7.° 2.4
EBIT growth	(17.4)				ROA (%)			3.2	
Net income growth	(26.4) (27.0)	12.0 7.4	0.0	(15.3)	ROACE (%)	7.7 12.3	7.1 13.1	6.4 14.6	5.4 14.3
EPS growth		29.9	29.5	(15.3)	Inventory days	12.3 58.9	63.9	64.1	65.0
Gross margin EBITDA margin	29.9 10.1	10.1	29.5 9.5	28.2 8.2	Receivables days Payable days	100.4	104.5	104.1	104.
EBIT margin	6.0	6.0	5.6	4.3	Net debt/equity (%)	60.9	77.6	89.7	99.
Ebii margin	6.0	6.0	5.0	4.3	Interest cover - EBIT (X)	5.0	3.8	2.9	2.3
Cash flow statement (RM mn)  Net income pre-preferred dividends	<b>12/13</b> 103.1	<b>12/14E</b> 115.5	<b>12/15E</b> 115.5	<b>12/16E</b> 97.8	Valuation	12/13	12/14E	12/15E	12/16
D&A add-back	94.1	104.9	113.6	131.5	P/E (analyst) (X)	38.9	29.2	29.2	34.
Minorities interests add-back	7.3	8.1	8.1	6.9	P/B (X)	3.7	2.6	2.5	2.4
Net (inc)/dec working capital	(16.6)	(18.1)	1.0	8.7	EV/EBITDA (X)	20.5	17.4	17.1	18.0
Other operating cash flow	(72.6)	(51.0)	(56.4)	(62.4)	EV/GCI (X)	1.2	0.9	0.9	0.8
Cash flow from operations	115.3	159.3	181.9	182.5	Dividend yield (%)	1.0	1.4	1.4	1
Capital expenditures	(317.0)	(379.0)	(371.1)	(345.1)					
Acquisitions	(317.0)	0.0	(3/1.1)	(345.1)					
Divestitures	10.0	11.0	12.0	13.0					
Others	25.5	(217.0)	(12.0)	(13.0)					
Others	(352.3)	(585.0)	(371.1)	(345.1)					
Cash flow from investments									
	,			1					
Dividends paid (common & pref)	(68.3)	(46.2)	(46.2)	(39.1)					
Dividends paid (common & pref) Inc/(dec) in debt	390.3	300.0	250.0	200.0					
Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase)	390.3 14.0	300.0 122.2	250.0 0.0	200.0 0.0					
Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase) Other financing cash flows	390.3 14.0 12.5	300.0 122.2 0.0	250.0 0.0 0.0	200.0 0.0 0.0					
Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase)	390.3 14.0	300.0 122.2	250.0 0.0	200.0 0.0	Note: Last actual year may include report				

Goldman Sachs Global Investment Research

## Raffles Medical Group (RAFG.SI): Robust track record, expensive valuation; initiate with Sell

### Source of opportunity

We initiate on Raffles Medical (RFMD) with a Sell rating. Our 12-m Director's Cut based TP of S\$3.10 implies 15% downside potential.

- We see RFMD as a high quality hospital operator in Singapore with a robust track record and strong execution capabilities. RFMD is a pure Singapore HC operator at present (except for a few China clinics) with high exposure to Singapore's stable private healthcare spending revenues (2014E-2020E industry CAGR of 9%) and healthy growth in medical tourism revenues (2014E-2020E industry CAGR of 13%). We see a positive long-term growth outlook for RFMD on the back of its new Singapore projects (Holland Village Medical Centre and new hospital extension). Furthermore, we believe RFMD has the potential to transform into a strong regional competitor given it is currently in the process of finalizing 2 hospital investments in China (one in Shenzhen and one in Shanghai).
- That said, RFMD's share price has outperformed peers ytd and current valuations appear high, which implies that these positives have been already priced in. Furthermore, the market may also be overlooking its quartile 4 DACF CAGR of 9% over 2014E-2016E as its new projects will only meaningfully add to earnings 2017E onwards.
- We forecast RFMD to deliver CROCI of 18% over 2014E-2020E, which is attractive as it ranks in quartile 2 within our coverage universe, but lower than its own historical average of 21% over the past 5 years given initial dilution from the new Singapore projects. Further ramp up to optimum levels will take time, and we expect competition to intensify given the new upcoming Farrer Park Hospital and the ongoing ramp-up of IHH's Novena hospital.
- Our analysis also suggests that RFMD's share price may be simply extrapolating historical growth and
  returns, as share price is implying 2015E-2016E CROCI of 16.1% and 10-year EPS CAGR of 12.5%, which is
  higher than our estimates. We believe that the market may already be pricing in the potential benefits from
  the two new China hospitals, which may be premature as these projects have not yet been finalized.

### Catalyst

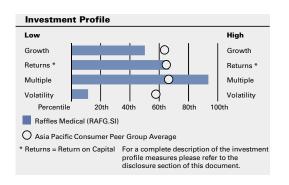
(1) Weaker than expected margins / revenue growth announced during the company's quarterly results, (2) lackluster medical tourists flow from Indonesia over the near-to-medium term due to the weak rupiah and competition from Malaysia, (3) slower than expected domestic patients flow over next 12 months, given the potential opening of competing Farrer Park hospital, (4) Expensive valuations: The stock currently trades at 2015E EV/EBITDA multiple of 20.5X vs sector average of 19.3X despite lower than sector average EBITDA growth.

### Valuation

We employ 2016E Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks. Our 12-m TP of S\$3.10 (15% downside potential) implies 2015E/16E EV/EBITDA of 17.3X / 15.4X, which is at the higher end of historical range (2006-2014 ytd).

### Key risks

Better than expected execution/results, value accretive hospitals acquisitions.



Key data				Current		
Price (S\$)				3.66		
12 month price target (S\$)				3.10		
Market cap (S\$ mn / US\$ m	nn)		2,027.1 / 1,616.9			
Foreign ownership (%)						
EPS (S\$)	<b>12/13</b> 0.12	<b>12/14E</b> 0.13	12/15E 0.14	12/16E 0.15		
EPS (S\$)	0.12	0.13	0.14			
		1.2				
•	11.4	11.5	6.2			
EPS growth (%) EPS (diluted) (S\$)	11.4 0.12	11.5 0.13	6.2 0.14	7.7 0.15		
EPS (diluted) (S\$)				7.7		
EPS (diluted) (S\$) EPS (basic pre-ex) (S\$)	0.12	0.13	0.14	7.7 0.15		
•	0.12 0.15	0.13 0.13	0.14 0.14	7.7 0.15 0.15		

1.6

15.0

23.4

1.4

14.4

20.8

1.5

13.8

15.1

1.6

13.6

14.1

Dividend yield (%)

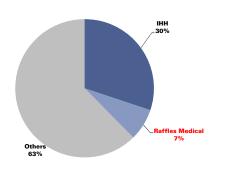
ROE (%)

CROCI (%)



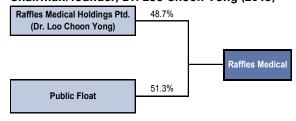
Share price performance (%)	3 month	6 month	12 month
Absolute	13.7	16.6	10.6
Rel. to FTSE Straits Times Index	7.3	12.3	11.9
Source: Company data, Goldman Sachs Research e	stimates, FactSet	. Price as of 6/0	2/2014 close.

# Exhibit 63: Raffles Medical is the second largest private hospital in Singapore by # of beds (2013)



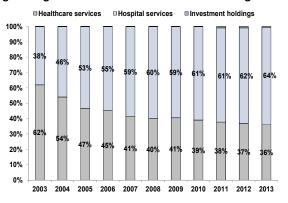
Source: Company data, MOH Singapore.

# Exhibit 64: Largest shareholder is the Executive Chairman/founder, Dr. Loo Choon Yong (2013)



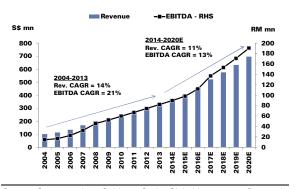
Source: Company data.

# Exhibit 65: Hospital services segment has been growing faster than healthcare services segment



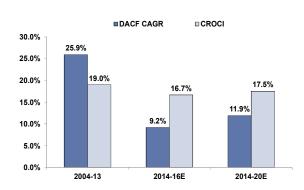
Source: Company data.

### Exhibit 66: We expect 2014E-2020E revenue/ EBITDA CAGR of 11%/13%



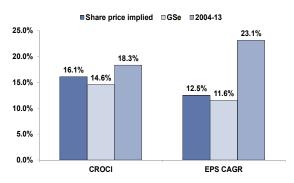
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 67: We expect lower than historical DACF CAGR/CROCI



Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 68: Excessive CROCI expectations by market on new projects (2015E-2016E CROCI; 2014E-2020E EPS CAGR)



Source: Company data, Goldman Sachs Global Investment Research.

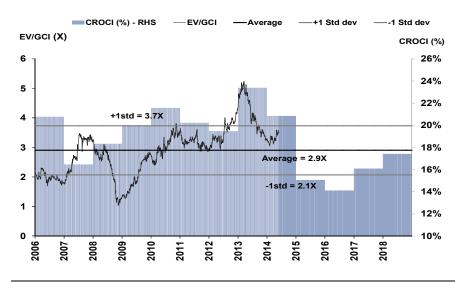
Exhibit 69: China projects appear largely priced in

	Project DCF value S\$ mn	DCF per share (A) S\$	GS TP (B) S\$	Implied value (A + B) S\$	Current share price S\$	Variance %
China projects @ 50% stake	227	0.41	3.10	3.51	3.66	-4%
China projects @60% stake	273	0.49	3.10	3.59	3.66	-2%
China projects @ 70% stake	318	0.57	3.10	3.67	3.66	0%

Note: We assume investment value of S\$400mn, as per company guidance. Scenarios are based on the % stake that the company would take in the projects (50%-70%, as per company guidance). Our DCF calculations use 7.5% WACC (industry average) and 3% terminal growth rate.

Source: Goldman Sachs Global Investment Research.

Exhibit 70: EV/GCI valuations may not have fully factored in CROCI decline



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

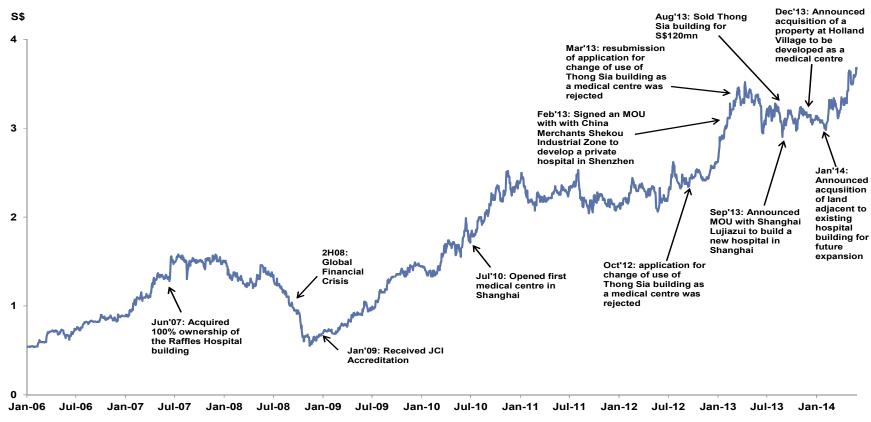
Exhibit 71: EV/EBITDA also looks very high



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

**Exhibit 72: RFMD historical share price** 





Source: Company data, Factiva.

**Exhibit 73: RFMD CROCI DuPont** 

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	13%	17%	21%	16%	18%	20%	22%	20%	19%	23%	21%	15%	14%	16%	17%	19%	20%
GCI turnover (X)	1.09X	1.28X	1.46X	1.05X	0.87X	0.93X	1.00X	0.91X	0.87X	1.08X	0.97X	0.72X	0.67X	0.71X	0.76X	0.82X	0.87X
EBITDA margins (%)	14%	15%	17%	19%	23%	24%	25%	24%	24%	24%	24%	24%	25%	26%	27%	27%	27%
Cash conversion (X)	0.85X	0.90X	0.85X	0.82X	0.93X	0.90X	0.86X	0.90X	0.93X	0.90X	0.89X	0.87X	0.86X	0.86X	0.86X	0.85X	0.85X

Source: Company data, Goldman Sachs Global Investment Research.

# **Raffles Medical: Summary financials**

Profit model (S\$ mn)	12/13	12/14E	12/15E	12/16E	Balance sheet (S\$ mn)	12/13	12/14E	12/15E	12/16E
Total revenue	341.0	372.7	409.0	455.3	Cash & equivalents	265.9	110.3	101.2	131.0
Cost of goods sold	(71.1)	(77.0)	(84.1)	(93.9)	Accounts receivable	44.2	50.2	57.1	65.9
SG&A	(177.4)	(194.2)	(213.1)	(237.2)	Inventory	9.1	11.2	12.3	13.7
R&D					Other current assets	0.0	0.0	0.0	0.0
Other operating profit/(expense)	(18.6)	(20.1)	(22.1)	(24.6)	Total current assets	319.2	171.7	170.6	210.5
EBITDA	82.2	89.7	98.0	111.9	Net PP&E	153.7	372.4	504.6	577.4
Depreciation & amortization	(8.3)	(8.3)	(8.3)	(12.3)	Net intangibles	0.2	0.2	0.2	0.2
EBIT	73.9	81.4	89.7	99.6	Total investments	0.0	0.0	0.0	0.0
Interest income	1.0	1.3	0.6	0.5	Other long-term assets	100.4	100.4	100.4	100.4
Interest expense	0.0	0.0	(0.4)	(1.0)	Total assets	573.4	644.6	775.8	888.4
Income/(loss) from uncons. subs.	0.0	0.0	0.0	0.0					
Others	20.4	0.0	0.0	0.0	Accounts payable	72.7	81.5	89.4	99.6
Pretax profits	95.2	82.7	89.8	99.1	Short-term debt	4.8	4.8	79.8	129.8
Income tax	(9.9)	(9.9)	(12.6)	(15.9)	Other current liabilities	20.1	20.1	20.1	20.1
Minorities	(0.4)	(0.3)	(0.4)	(0.4)	Total current liabilities	97.5	106.4	189.3	249.4
					Long-term debt	0.0	0.0	0.0	0.0
Net income pre-preferred dividends	84.9	72.4	76.9	82.8	Other long-term liabilities	2.1	2.1	2.1	2.1
Preferred dividends	0.0	0.0	0.0	0.0	Total long-term liabilities	2.1	2.1	2.1	2.1
Net income (pre-exceptionals)	84.9	72.4	76.9	82.8	Total liabilities	99.6	108.5	191.4	251.0
Post-tax exceptionals	(20.4)	0.0	0.0	0.0					
Net income	64.5	72.4	76.9	82.8	Preferred shares	0.0	0.0	0.0	0.0
500 (L. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	0.45				Total common equity	472.5	534.5	582.4	634.5
EPS (basic, pre-except) (S\$)	0.15	0.13	0.14	0.15	Minority interest	1.3	1.6	2.0	2.4
EPS (basic, post-except) (S\$)	0.12	0.13	0.14	0.15					
EPS (diluted, post-except) (S\$)	0.12	0.13	0.14	0.15	Total liabilities & equity	573.4	644.6	775.8	888.4
DPS (S\$)	0.05	0.05	0.06	0.06	P1 (P0 (OA)	0.05	0.97	1.05	1.15
Dividend payout ratio (%)	42.6	40.0	40.0	40.0	BVPS (S\$)	0.85	0.97	1.05	1.15
Free cash flow yield (%)	3.6	(7.2)	(2.7)	0.5					
Growth & margins (%)	12/13	12/14E	12/15E	12/16E	Ratios	12/13	12/14E	12/15E	12/16E
Sales growth EBITDA growth	9.4 10.7	9.3 9.1	9.8 9.2	11.3 14.2	CROCI (%) ROE (%)	23.4 15.0	20.8 14.4	15.1 13.8	14.1 13.6
EBIT growth	11.4	10.1	10.2	11.1	ROA (%)	12.1	11.9	10.8	10.0
•			6.2	7.7		32.5	22.3		14.0
Net income growth EPS growth	13.5 11.4	12.3 11.5	6.2	7.7	ROACE (%) Inventory days	32.5 37.3	48.0	15.5 50.9	50.4
Gross margin	79.1	79.3	79.4	7.7	Receivables days	44.1	46.2	47.9	49.3
EBITDA margin	24.1	24.1	24.0	24.6	Payable days	356.6	365.7	370.9	367.5
EBIT margin	21.7	21.8	21.9	21.9	Net debt/equity (%)	(55.1)	(19.7)	(3.7)	(0.2)
LDIT margin	21.7	21.0	21.3	21.5	Interest cover - EBIT (X)	NM	NM	NM	183.9
Cash flow statement (S\$ mn)	12/13	12/14E	12/15E	12/16E	Valuation	12/13	12/14E	12/15E	12/16E
Net income pre-preferred dividends	84.9	72.4	76.9	82.8	Valuation	12/13	12/ 146	12/ 13E	12/100
D&A add-back	8.3	8.3	8.3	12.3	P/E (analyst) (X)	27.0	28.0	26.4	24.5
Minorities interests add-back	0.4	0.3	0.4	0.4	P/B (X)	3.7	3.8	3.5	3.2
Net (inc)/dec working capital	(3.4)	0.8	(0.2)	0.0	EV/EBITDA (X)	18.0	21.4	20.5	18.1
Other operating cash flow	(19.0)	0.0	0.0	0.0	EV/GCI (X)	5.5	3.9	3.1	2.8
Cash flow from operations	71.2	81.9	85.4	95.6	Dividend yield (%)	1.6	1.4	1.5	1.6
Capital expenditures	(8.2)	(227.0)	(140.5)	(85.0)					
Acquisitions	0.0	0.0	0.0	0.0					
Divestitures	0.0	0.0	0.0	0.0					
Others	119.3	0.0	0.0	0.0					
Cash flow from investments	111.2	(227.0)	(140.5)	(85.0)					
		(10.5)	(29.0)	(30.8)					
Dividends paid (common & pref)	(10.0)		(23.0)						
Dividends paid (common & pref)	(10.0)		75.0	50.0					
Inc/(dec) in debt	(15.0)	0.0	75.0 0.0	50.0					
Inc/(dec) in debt Common stock issuance (repurchase)	(15.0) 6.1	0.0 0.0	0.0	0.0					
Inc/(dec) in debt Common stock issuance (repurchase) Other financing cash flows	(15.0) 6.1 (0.1)	0.0 0.0 0.0	0.0 0.0	0.0 0.0					
Inc/(dec) in debt Common stock issuance (repurchase)	(15.0) 6.1	0.0 0.0	0.0	0.0	Note: Last actual year may include reporte	d and estimated data			

Goldman Sachs Global Investment Research

## Bangkok Dusit Medical Services (BGH.BK): Valuations stretched; initiate with Sell

### Source of opportunity

- We initiate on Bangkok Dusit Medical Services (BGH) with a Sell rating. Our 12-m Director's Cut based TP of Baht13.70 implies 17% downside potential. BGH is the largest and most diversified Thailand hospitals group with exposure to domestic private sector, medical tourism and public sector spending through social security schemes.
- BGH has been the best performing hospitals company in the past decade, as it delivered strong growth
  performance (Exhibit 32). Looking forward, we expect BGH to deliver DACF CAGR of 13% over 2014E-2020E,
  which would rank it in quartile 3 within our coverage universe. We also expect CROCI to rank in quartile 3,
  despite an 80bps improvement over 2014E-2016E.
- However, the market appears to be assigning a premium to BGH's valuations—2015-2016 EV/EBITDA multiples of 19.6X/17.5X vs sector average of 19.3X/16.8X—despite generally below average growth/returns. Our analysis suggests that BGH's share price is implying 2015E-2016E CROCI of 18.6% versus GSe of 11.7%, which we think is excessive as it overlooks the fact that new hospital additions will be mainly greenfield in nature, versus brownfield previously, which will be more margin/returns dilutive in the initial years. The share price is implying 17.5% 10-year forward EPS CAGR, which is slightly higher than GSe 2014E-2020E EPS CAGR of 16.8%.
- While its balance sheet is not overly stretched, which implies acquisition of more brownfield hospitals may be likely (e.g. BGH recently announced that it intends to acquire Sanamchan Hospital Co. Ltd in July Sanamchan fully owns 1 hospital and has associate stakes in 2 other hospitals; we have not factored this into our earnings, but if the deal were to materialize, we think it could potentially add c.2% to 2014E earnings), we believe that BGH is currently more focused on fully integrating operations, enhancing margins (given the weak results in 2013), and ramping up its greenfield hospitals in the near-medium term, and we do not expect BGH to engage in many such brownfield acquisitions.

### Catalyst

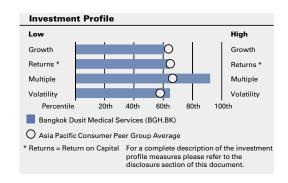
(1) Slow ramp-up in new greenfield hospitals and limited new brownfield hospital additions to be margins/returns dilutive over next 12 months, (2) Weaker than expected revenue growth announced during the company's quarterly results, (3) DACF CAGR slipping to quartile 3 over 2014E-2016E from quartile 1 over 2004-2013; (4) Higher than sector average valuations at 2015E/2016E EV/EBITDA of 19.6X/17.5X vs. current sector average of 19.3X/16.8X.

### Valuation

We employ 2016E Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks. Our 12-m target price of Bt13.70 (17% downside potential) implies lower than sector average 2015E/2016E EV/EBITDA of 16.5X / 14.7X, which we see as justified given generally below sector average growth and returns.

### **Key risks**

Higher than expected new hospital additions from brownfield activity, stronger than expected execution/margins on greenfield operations.



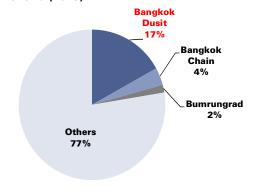
16.50
13.70
255,600.8 / 7,785.6

	12/13	12/14E	12/15E	12/16E
EPS (Bt)	0.40	0.47	0.54	0.62
EPS growth (%)	0.9	19.6	14.3	15.2
EPS (diluted) (Bt)	0.40	0.47	0.54	0.62
EPS (basic pre-ex) (Bt)	0.40	0.47	0.54	0.62
P/E (X)	36.4	34.9	30.5	26.5
P/B (X)	5.5	5.7	5.2	4.6
EV/EBITDA (X)	22.4	21.7	19.6	17.5
Dividend yield (%)	1.4	1.4	1.6	1.9
ROE (%)	15.8	17.1	17.7	18.4
CROCI (%)	10.9	11.2	11.5	12.0



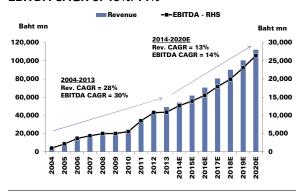
Share price performance (%)	3 month	6 month	12 month
Absolute	28.9	27.4	(2.4)
Rel. to Bangkok S.E.T Price Index	18.6	21.5	5.8
Source: Company data, Goldman Sachs Research	estimates, FactSe	t. Price as of 6/0	02/2014 close.

# Exhibit 74: BGH is the largest private hospital in Thailand (2013)



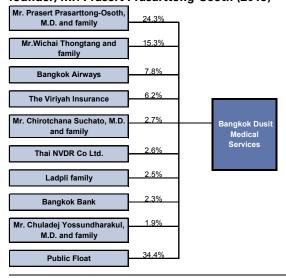
Source: Company data, MOPH Thailand.

### Exhibit 77: We expect 2014-2020E revenue/ EBITDA CAGR of 13%/14%



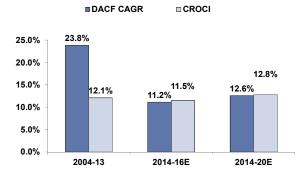
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 75: Largest shareholder is the Chairman/founder, Mr. Prasert Prasarttong-Osoth (2013)



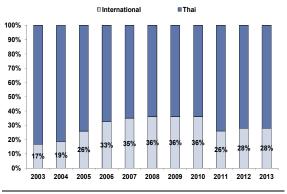
Source: Company data.

# Exhibit 78: BGH to deliver decent DACF CAGR/CROCI through 2020E



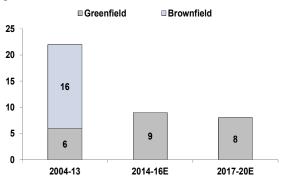
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 76: 28% of revenues come from medical tourists (Top 3: Japan, Australia, Myanmar)



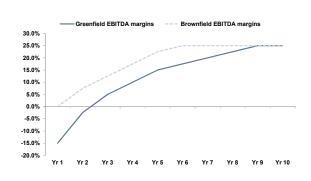
Source: Company data.

# Exhibit 79: Future expansion comes more from greenfield (ex Sanamchan deal)...



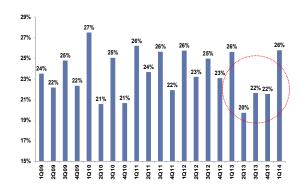
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 80: ...which takes longer to contribute to profits, and embeds higher risk



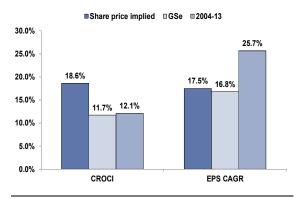
Source: Goldman Sachs Global Investment Research.

# Exhibit 81: Significant EBITDA margin woes in 2013



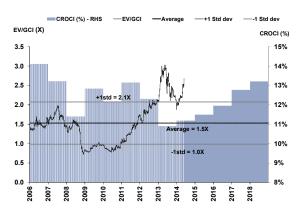
Source: Company data.

# Exhibit 82: Share price implies higher 2015E-16E CROCI/2014-20E EPS CAGR than GS estimates



Source: Datastream, Goldman Sachs Global Investment Research.

# Exhibit 83: EV/GCI already factoring in most of the improvement in CROCI



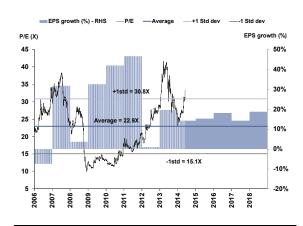
Source: Company data, Datastream, Goldman Sachs Global Investment Research.

# Exhibit 84: Multiple still high, EBITDA growth ahead solid



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

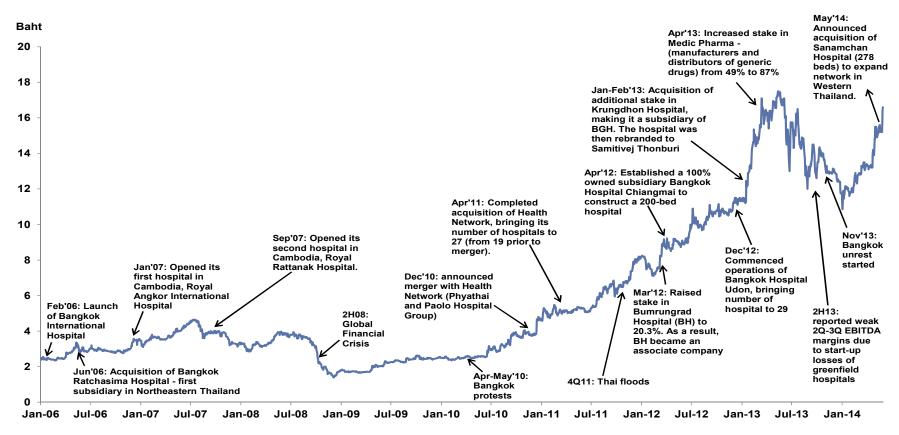
### Exhibit 85: BGH also looks expensive on P/E



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

#### **Exhibit 86: BGH historical share price**

#### BGH historical share price



Source: Company data, Factiva.

**Exhibit 87: BGH CROCI DuPont** 

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	10%	11%	14%	13%	11%	13%	12%	13%	12%	11%	11%	11%	12%	13%	13%	14%	15%
GCI turnover (X)	0.46X	0.56X	0.63X	0.61X	0.63X	0.58X	0.59X	0.63X	0.57X	0.56X	0.56X	0.60X	0.64X	0.68X	0.71X	0.73X	0.76X
EBITDA margins (%)	19%	21%	24%	24%	24%	23%	24%	24%	24%	22%	23%	23%	22%	22%	22%	23%	24%
Cash conversion (X)	1.15X	0.94X	0.96X	0.91X	0.76X	0.95X	0.88X	0.86X	0.88X	0.89X	0.86X	0.85X	0.85X	0.85X	0.84X	0.84X	0.84X

Source: Company data, Goldman Sachs Global Investment Research.

### **Bangkok Dusit Medical Services: Summary financials**

Profit model (Bt mn)	12/13	12/14E	12/15E	12/16E	Balance sheet (Bt mn)	12/13	12/14E	12/15E	12/16
Total revenue	49,169.9	54,114.7	61,817.6	70,620.6	Cash & equivalents	4,061.3	5,392.6	7.388.8	9,528.
Cost of goods sold	(32,977.0)	(35,483.5)	(40,752.3)	(46,623.0)	Accounts receivable	4,925.1	5,555.6	6,501.0	7,603.
SG&A	(10,548.7)	(11,609.5)	(13,262.0)	(15,150.6)	Inventory	918.7	1,082.3	1,236.4	1,412.
R&D					Other current assets	324.0	324.0	324.0	324.
Other operating profit/(expense)	1,988.6	2,188.6	2,500.1	2,856.1	Total current assets	10,229.0	12,354.5	15,450.1	18,867.
EBITDA	10,877.1	12,659.9	13,942.1	15,553.2	Net PP&E	38,875.0	40,889.3	42,454.2	44,402.
Depreciation & amortization	(3,244.2)	(3,449.6)	(3,638.8)	(3,850.0)	Net intangibles	12,567.7	12,407.0	12,246.4	12,085.
EBIT	7,632.8	9,210.2	10,303.3	11,703.2	Total investments	13,592.9	14,611.1	15,823.6	17,213.
Interest income	62.7	70.9	94.1	129.0	Other long-term assets	1,134.5	1,134.5	1,134.5	1,134.
Interest expense	(957.0)	(1,021.7)	(1,021.7)	(1,021.7)	Total assets	76,399.0	81,396.3	87,108.8	93,703.
Income/(loss) from uncons. subs.	1,025.4	1,018.2	1,212.5	1,390.3					
Others	148.1	0.0	0.0	0.0	Accounts payable	4,020.7	4,490.4	5,151.4	5,891.
Pretax profits	7,912.0	9,277.7	10,588.3	12,200.7	Short-term debt	4,072.4	4,072.4	4,072.4	4,072.
Income tax	(1,392.0)	(1,651.9)	(1,875.2)	(2,162.1)	Other current liabilities	3,668.3	3,668.3	3,668.3	3,668.
Minorities	(258.5)	(302.4)	(345.5)	(398.0)	Total current liabilities	11,761.3	12,231.1	12,892.0	13,632.
					Long-term debt	18,728.8	18,728.8	18,728.8	18,728.8
Net income pre-preferred dividends	6,261.5	7,323.4	8,367.7	9,640.6	Other long-term liabilities	3,265.3	3,265.3	3,265.3	3,265.
Preferred dividends	0.0	0.0	0.0	0.0	Total long-term liabilities	21,994.1	21,994.1	21,994.1	21,994.
Net income (pre-exceptionals)	6,261.5	7,323.4	8,367.7	9,640.6	Total liabilities	33,755.4	34,225.2	34,886.1	35,626.
Post-tax exceptionals	(148.1)	0.0	0.0	0.0					
Net income	6,113.4	7,323.4	8,367.7	9,640.6	Preferred shares	0.0	0.0	0.0	0.
					Total common equity	40,680,6	44,905.8	49.611.7	55.068.
EPS (basic, pre-except) (Bt)	0.40	0.47	0.54	0.62	Minority interest	1,963.0	2,265.4	2,610.9	3,008.9
EPS (basic, post-except) (Bt)	0.40	0.47	0.54	0.62	•				
EPS (diluted, post-except) (Bt)	0.40	0.47	0.54	0.62	Total liabilities & equity	76,399.0	81,396.3	87,108.8	93,703.9
DPS (Bt)	0.20	0.24	0.27	0.31		,,,,,,	, , , , , , ,		
Dividend payout ratio (%)	50.6	50.0	50.0	50.0	BVPS (Bt)	2.63	2.90	3.20	3.5
Free cash flow yield (%)	0.2	1.7	2.2	2.4					
Growth & margins (%)	12/13	12/14E	12/15E	12/16E	Ratios	12/13	12/14E	12/15E	12/16
Sales growth	11.0	10.1	14.2	14.2	CROCI (%)	10.9	11.2	11.5	12.0
EBITDA growth	1.3	16.4	10.1	11.6	ROE (%)	15.8	17.1	17.7	18.4
EBIT growth	(2.0)	20.7	11.9	13.6	ROA (%)	8.4	9.3	9.9	10.
Net income growth	1.0	19.8	14.3	15.2	ROACE (%)	12.5	13.3	14.3	15.
EPS growth	0.9	19.6	14.3	15.2	Inventory days	9.4	10.3	10.4	10.4
Gross margin	32.9	34.4	34.1	34.0	Receivables days	34.2	35.3	35.6	36.4
EBITDA margin	22.1	23.4	22.6	22.0	Payable days	42.3	43.8	43.2	43.2
EBIT margin	15.5	17.0	16.7	16.6	Net debt/equity (%)	43.9	36.9	29.5	22.9
					Interest cover - EBIT (X)	8.5	9.7	11.1	13.
Cash flow statement (Bt mn)	12/13	12/14E	12/15E	12/16E	Valuation	12/13	12/14E	12/15E	12/16
Net income pre-preferred dividends	6,261.5	7,323.4	8,367.7	9,640.6					
D&A add-back	3,244.2	3,449.6	3,638.8	3,850.0	P/E (analyst) (X)	36.4	34.9	30.5	26.
Minorities interests add-back	258.5	302.4	345.5	398.0	P/B (X)	5.5	5.7	5.2	4.
Net (inc)/dec working capital	(370.2)	(324.5)	(438.4)	(538.1)	EV/EBITDA (X)	22.4	21.7	19.6	17.
Other operating cash flow	(867.0)	(1,018.2)	(1,212.5)	(1,390.3)	EV/GCI (X)	2.6	2.7	2.6	2.
Cash flow from operations	8,527.0	9,732.7	10,701.0	11,960.3	Dividend yield (%)	1.4	1.4	1.6	1.5
Capital expenditures	(7,978.2)	(5,303.3)	(5,043.1)	(5,637.2)					
Acquisitions	0.0	0.0	0.0	0.0					
Divestitures	0.0	0.0	0.0	0.0					
Others	359.3	0.0	0.0	0.0					
Cash flow from investments	(7,618.9)	(5,303.3)	(5,043.1)	(5,637.2)					
		(3,098.2)	(3,661.7)	(4,183.8)					
Dividends paid (common & pref)	(2,781.7)	(3,030.2)							
	(2,781.7) 2,689.1	0.0	0.0	0.0					
Inc/(dec) in debt			0.0	0.0 0.0					
Dividends paid (common & pref) Inc/(dec) in debt Common stock issuance (repurchase) Other financing cash flows	2,689.1	0.0							
Inc/(dec) in debt  Common stock issuance (repurchase)  Other financing cash flows	2,689.1 0.0	0.0 0.0	0.0	0.0					
Inc/(dec) in debt Common stock issuance (repurchase)	2,689.1 0.0 (343.7)	0.0 0.0 0.0	0.0 0.0	0.0 0.0	Note: Last actual year may include report	ed and estimated data.			

### Bumrungrad Hospital (BH.BK): Top Thai medical tourism idea, fairly valued; initiate Neutral

#### Investment view

We initiate on Bumrungrad Hospital (BH) with a Neutral rating. Our 12-m Director's Cut-based TP of Bt118 implies 5% upside potential.

- We see BH known as Thailand's most premium hospital and pioneer in attracting international patients as a key beneficiary of Thailand's high growth medical tourism revenues (2014E-2020E industry CAGR of 18%), and forecast BH to deliver DACF CAGR of 13% and CROCI expansion of 250bp over 2014E-2020E, which would rank it in quartile 2 in terms of DACF CAGR and quartile 1 / 2 for CROCI during 2014E-2017E / 2018E-2020E.
- In the near-to-medium term, we expect BH's DACF growth to come mainly from pricing hikes (historically c.9% p.a.). By 2017E, we expect the new hospital block (Petchburi Project) to be completed and add 43% new inpatient beds capacity, which we expect will help BH drive volume growth over the long term.
- That said, given the recent share outperformance vs. peers, we believe that the market is already factoring in BH's strong returns profile and its ability to drive long-term growth.

#### Core drivers of growth

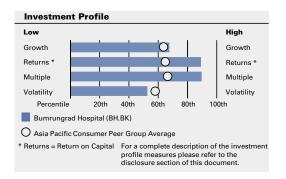
We see higher medical tourists inflow to Thailand, strong domestic demand from ageing population and higher income levels, higher revenue intensity given rising demand for more complex treatments as key growth drivers over 2014E-2020E.

#### Valuation

We employ 2016E Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks. We apply 20% premium for BH given its quartile 1 CROCI status. Our 12-m target price of Bt118 (5% upside potential) implies 2015E/2016E EV/EBITDA of 17.3X / 15.3X (20.6X / 18.2X if we take into account potential dilution from BH's convertible bonds), which is at the high-end of the historical range (2006-2014 ytd), but which we see as fair against its prospective growth and returns.

#### Risks to the investment case

Better-/worse-than expected Thailand political situation, higher-/lower-than-expected competition to capture medical tourists, higher-/lower-than expected cost inflation.



Key data	Current
Price (Bt)	112.50
12 month price target (Bt)	118.00
Market cap (Bt mn / US\$ mn)	81,959.6 / 2,496.5
Foreign ownership (%)	

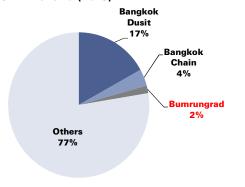
	12/13	12/14E	12/15E	12/16E
EPS (Bt)	3.38	3.54	4.32	5.10
EPS growth (%)	45.3	4.6	22.2	17.9
EPS (diluted) (Bt)	2.84	2.97	3.63	4.28
EPS (basic pre-ex) (Bt)	3.46	3.54	4.32	5.10
P/E (X)	24.8	31.8	26.0	22.1
P/B (X)	6.8	8.0	6.9	6.0
EV/EBITDA (X)	15.2	19.5	16.5	14.6
Dividend yield (%)	2.3	1.7	2.1	2.5
ROE (%)	27.2	25.3	27.2	27.9
CROCI (%)	22.6	21.4	22.2	21.6



Share price performance (%)	3 month	6 month	12 month
Absolute	26.4	23.6	35.5
Rel. to Bangkok S.E.T Price Index	16.3	17.9	46.9
Source: Company data, Goldman Sachs Research	estimates, FactSe	t. Price as of 6/0	02/2014 close.

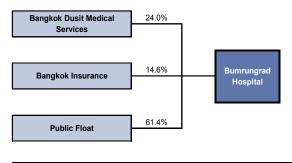


### Exhibit 88: BH has 2% market share of private beds in Thailand (2013)



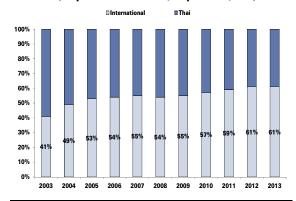
Source: Company data, MOPH Thailand.

### Exhibit 89: Largest shareholder is Bangkok Dusit Medical Services (2013)



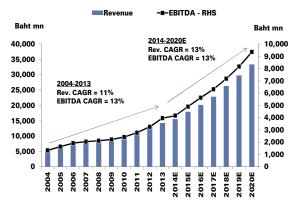
Source: Company data.

### Exhibit 90: 61% of revenues come from medical tourists (Top 3: Middle East, Myanmar, US)



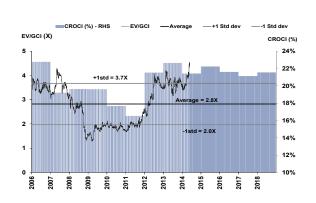
Source: Company data.

## Exhibit 91: We expect 2014E-2020E revenue/EBITDA CAGR of 13%/13%



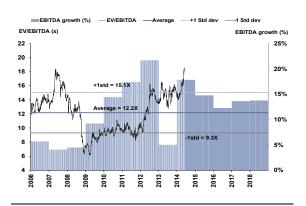
Source: Company data, Goldman Sachs Global Investment Research.

Exhibit 92: BH appears fairly valued on EV/GCI,



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

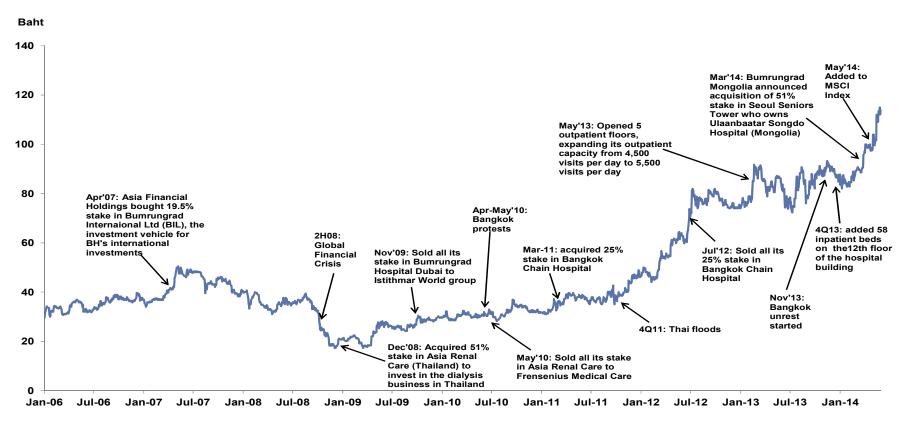
#### Exhibit 93: ... similarly on EV/EBITDA



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

#### **Exhibit 94: BH historical share price**





Source: Company data, Factiva.

**Exhibit 95: BH CROCI DuPont** 

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	30%	32%	23%	19%	20%	20%	18%	17%	22%	23%	21%	22%	22%	21%	22%	23%	25%
GCI turnover (X)	1.31X	1.30X	1.27X	1.10X	0.95X	0.90X	0.89X	0.81X	0.89X	0.99X	0.95X	0.97X	0.93X	0.91X	0.94X	1.00X	1.08X
EBITDA margins (%)	23%	25%	25%	24%	25%	24%	25%	25%	25%	28%	27%	27%	28%	28%	27%	27%	28%
Cash conversion (X)	0.98X	1.01X	0.72X	0.71X	0.84X	0.89X	0.80X	0.81X	0.96X	0.82X	0.84X	0.84X	0.83X	0.84X	0.84X	0.83X	0.83X

Source: Company data, Goldman Sachs Global Investment Research.

## **Bumrungrad Hospital: Summary financials**

Profit model (Bt mn)	12/13	12/14E	12/15E	12/16E	Balance sheet (Bt mn)	12/13	12/14E	12/15E	12/16
Total revenue	14,250.6	15,511.5	17,938.7	20,175.0	Cash & equivalents	5,857.2	6,244.7	6,464.5	5,219.
Cost of goods sold	(8,836.1)	(9,712.7)	(11,009.1)	(12,157.3)	Accounts receivable	1,307.0	1,461.4	1,734.9	2,001.
SG&A	(2,527.1)	(2,750.7)	(3,181.1)	(3,577.7)	Inventory	304.5	341.3	394.7	443.
R&D					Other current assets	83.1	83.1	83.1	83.
Other operating profit/(expense)	192.2	209.3	242.0	272.2	Total current assets	7,551.8	8,130.4	8,677.2	7,747.
EBITDA	3,961.9	4,161.4	4,903.7	5,628.6	Net PP&E	9,095.7	9.935.9	11,201.9	14,200.9
Depreciation & amortization	(882.3)	(904.0)	(913.4)	(916.5)	Net intangibles	189.3	172.1	151.7	128.
EBIT	3,079.6	3,257.3	3,990.4	4,712.2	Total investments	236.3	242.5	248.9	255.8
Interest income	154.1	146.4	156.1	161.6	Other long-term assets	178.4	178.4	178.4	178.4
Interest expense	(147.9)	(154.3)	(154.3)	(154.3)	Total assets	17,251.5	18,659.3	20,458.2	22,511.
Income/(loss) from uncons. subs.	5.9	6.2	6.5	6.8					
Others	54.4	0.0	0.0	0.0	Accounts payable	858.9	980.3	1,115.9	1,237.0
Pretax profits	3,146.2	3,255.7	3,998.7	4,726.3	Short-term debt	0.0	0.0	0.0	0.
Income tax	(625.4)	(649.9)	(798.4)	(943.9)	Other current liabilities	1,266.2	1,266.2	1,266.2	1,266.
Minorities	0.0	(25.6)	(47.7)	(64.4)	Total current liabilities	2,125.1	2,246.5	2,382.1	2,503.
					Long-term debt	5,142.5	5,142.5	5,142.5	5,142.
Net income pre-preferred dividends	2,520.8	2,580.1	3,152.5	3,718.0	Other long-term liabilities	387.0	387.0	387.0	387.0
Preferred dividends	(2.9)	(3.0)	(3.6)	(4.3)	Total long-term liabilities	5,529.5	5,529.5	5,529.5	5,529.
Net income (pre-exceptionals)	2,517.9	2,577.2	3,148.9	3,713.8	Total liabilities	7,654.6	7,776.0	7,911.5	8,032.
Post-tax exceptionals	(54.4)	0.0	0.0	0.0					
Net income	2,463.5	2,577.2	3,148.9	3,713.8	Preferred shares	1.5	1.5	1.5	1.9
					Total common equity	9,595.5	10,776.2	12,391.8	14,259.2
EPS (basic, pre-except) (Bt)	3.46	3.54	4.32	5.10	Minority interest	0.0	105.6	153.3	217.
EPS (basic, post-except) (Bt)	3.38	3.54	4.32	5.10	,				
EPS (diluted, post-except) (Bt)	2.84	2.97	3.63	4.28	Total liabilities & equity	17,251.5	18.659.3	20,458.2	22,511.
DPS (Bt)	1.90	1.95	2.38	2.80		,	12,000.0		,
Dividend payout ratio (%)	56.2	55.0	55.0	55.0	BVPS (Bt)	12.42	14.04	16.25	18.8
Free cash flow yield (%)	1.7	2.1	2.1	0.7					
<u> </u>									
Growth & margins (%) Sales growth	<b>12/13</b> 10.8	12/14E 8.8	<b>12/15E</b> 15.6	12/16E 12.5	Ratios CROCI (%)	12/13 22.6	<b>12/14E</b> 21.4	<b>12/15E</b> 22.2	<b>12/16</b> i 21.0
EBITDA growth	21.7	5.0	17.8	14.8	ROE (%)	27.2	25.3	27.2	27.
EBIT growth	20.9	5.8	22.5	18.1	ROA (%)	14.8	14.4	16.1	17.:
Net income growth	45.3	4.6	22.2	17.9	ROACE (%)	30.8	28.0	30.4	29.4
EPS growth	45.3	4.6	22.2	17.9	Inventory days	11.1	12.1	12.2	12.
Gross margin	38.0	37.4	38.6	39.7	Receivables days	33.8	32.6	32.5	33.8
EBITDA margin	27.8	26.8	27.3	27.9	Payable days	34.3	34.6	34.7	35.
EBIT margin	21.6	21.0	22.2	23.4	Net debt/equity (%)	(7.4)	(10.1)	(10.5)	(0.5
EBH Margin	21.0	21.0	22.2	23.4	Interest cover - EBIT (X)	NM	415.2	(10.5) NM	(0.5 NN
Cash flow statement (Bt mn)	12/13	12/14E	12/15E	12/16E	Valuation	12/13	12/14E	12/15E	12/16
Net income pre-preferred dividends	2,520.8	2,580.1	3,152,5	3,718.0	valuation	12/13	12/ 14E	12/ 13E	12/10
D&A add-back	882.3	904.0	913.4	916.5	P/E (analyst) (X)	24.8	31.8	26.0	22.
Minorities interests add-back	0.0	25.6	47.7	64.4	P/B (X)	6.8	8.0	6.9	6.
Net (inc)/dec working capital	16.2	(69.7)	(191.4)	(194.8)	EV/EBITDA (X)	15.2	19.5	16.5	14.
Other operating cash flow	(145.0)	(6.2)	(6.5)	(6.8)	EV/GCI (X)	3.9	4.7	4.1	3.
Cash flow from operations	3,274.3	3,433.9	3,915.7	4,497.3	Dividend yield (%)	2.3	1.7	2.1	2.
Capital expenditures	(2,231.6)	(1,727.0)	(2,159.0)	(3,892.0)					
Acquisitions	(2,231.6)	0.0	(2,159.0)	(3,892.0)					
Divestitures	0.0	0.0	0.0	0.0					
Others	164.0	0.0	0.0	0.0					
Cash flow from investments	(2,067.6)	(1,727.0)	(2,159.0)	(3,892.0)					
Oush How Hom myestillents	(2,007.0)	(1,727.0)	(2,133.0)	(3,032.0)					
Dividends paid (common & pref)	(1,386.1)	(1,399.4)	(1,536.9)	(1,850.6)					
Inc/(dec) in debt	35.4	0.0	0.0	0.0					
Common stock issuance (repurchase)	0.0	0.0	0.0	0.0					
Other financing cash flows	(32.9)	80.0	0.0	0.0					
Cash flow from financing	(1,383.5)	(1,319.5)	(1,536.9)	(1,850.6)					
	. , ,								
Total cash flow	(176.9)	387.5	219.8	(1,245.3)	Note: Last actual year may include report	ed and estimated data.			

### Bangkok Chain (BCH.BK): Mass market hospital with balanced risk-reward; initiate Neutral

#### Investment view

We initiate on Bangkok Chain Hospital (BCH) with a Neutral rating. Our 12-m Director's Cut-based TP of Bt7.80 implies 1% downside potential.

- We see BCH as the leading low-to-mid end hospital in Thailand, focusing on both cash-paying mid-end customers and Social Security patients. BCH has ventured into the higher-end patients segment through the opening of World Medical Centre in 2013, but this diversification strategy remains uncertain as occupancy levels and demand for this new hospital remains weak at present (2013 EBITDA margins fell to 26.7%, from 34.1% in 2012, mainly due to opening of World Medical Centre).
- We forecast BCH to deliver DACF CAGR of 12% over 2014E-2020E which would place it in quartile 4 in terms of DACF growth and expect CROCI to remain under pressure at 9%-12% over 2014E-2020E lower than historical levels of 13%-19% over 2005-2013 as BCH's new hospitals especially its World Medical Centre (second one coming up in 2016E) will take time to reach optimum profitability.

#### Core drivers of growth

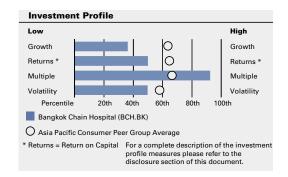
We see strong domestic demand from ageing population and higher income levels, higher revenue intensity given rising demand for more complex treatments, and higher capitation for Social Security patients reimbursements as key growth drivers over 2014-2020E.

#### **Valuation**

We employ 2016E Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks. Our 12-m target price of Bt7.80 (1% downside potential) implies 2015E/16E EV/EBITDA of 16.7X/16.1X, lower than the sector average of 19.3X/16.8X, which we think is fair given its lower than sector average growth/returns.

#### Risks to the investment case

Stronger-/weaker-than expected Thailand GDP, higher-/lower-than-expected competition, higher-/lower-than expected cost inflation.



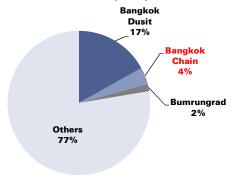
Key data	Current
Price (Bt)	7.85
12 month price target (Bt)	7.80
Market cap (Bt mn / US\$ mn)	19,575.9 / 596.3
Foreign ownership (%)	

	12/13	12/14E	12/15E	12/16E
EPS (Bt)	0.23	0.27	0.28	0.28
EPS growth (%)	(35.6)	13.6	6.4	(0.2)
EPS (diluted) (Bt)	0.23	0.27	0.28	0.28
EPS (basic pre-ex) (Bt)	0.23	0.27	0.28	0.28
P/E (X)	33.2	29.5	27.7	27.8
P/B (X)	4.9	4.6	4.2	3.9
EV/EBITDA (X)	18.5	17.3	16.8	16.2
Dividend yield (%)	2.1	1.7	1.8	1.8
ROE (%)	15.4	16.1	15.9	14.7
CROCI (%)	12.9	10.5	9.7	9.3



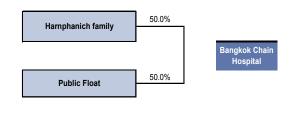
Share price performance (%)	3 month	6 month	12 month
Absolute	34.2	20.8	(17.4)
Rel. to Bangkok S.E.T Price Index	23.4	15.2	(10.4)
Source: Company data, Goldman Sachs Research	estimates, FactSe	t. Price as of 6/0	02/2014 close.

### Exhibit 96: Bangkok Chain has 4% market share of private beds in Thailand (2013)



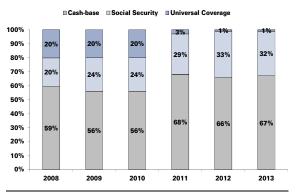
Source: Company data, MOPH Thailand.

## Exhibit 97: Largest shareholder is the founding family (Harphanich family) (2013)



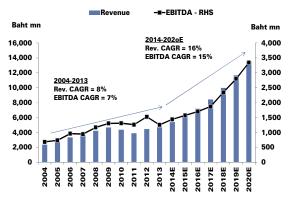
Source: Company data.

#### Exhibit 98: Main patient base comes from cashpaying patients followed by SS patients



Source: Company data.

#### Exhibit 99: We expect 2014E-2020E revenue/ EBITDA CAGR of 16%/15%



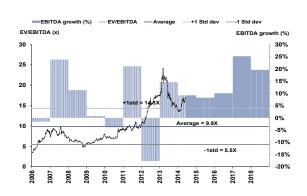
Source: Company data, Goldman Sachs Global Investment Research.

### Exhibit 100: BCH appears overvalued on EV/GCI,



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

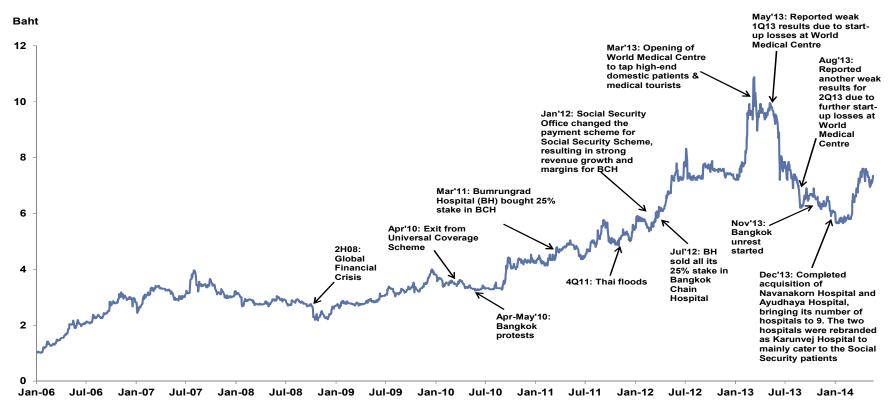
# Exhibit 101: ... but undervalued on EV/EBITDA; Overall , we see BCH as fairly valued



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

#### **Exhibit 102: BCH historical share price**

#### **BCH** historical share price



Source: Company data, Factiva.

**Exhibit 103: BCH CROCI DuPont** 

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	14%	19%	17%	18%	19%	16%	13%	17%	13%	10%	10%	9%	9%	10%	11%	12%
GCI turnover (X)	0.55X	0.68X	0.71X	0.78X	0.81X	0.70X	0.58X	0.57X	0.47X	0.43X	0.43X	0.43X	0.45X	0.48X	0.51X	0.56X
EBITDA margins (%)	27%	29%	26%	28%	28%	30%	32%	34%	27%	27%	25%	24%	22%	23%	24%	25%
Cash conversion (X)	0.95X	0.99X	0.92X	0.82X	0.84X	0.77X	0.69X	0.90X	1.03X	0.90X	0.90X	0.91X	0.91X	0.89X	0.88X	0.87X

Source: Company data, Goldman Sachs Global Investment Research.

## **Bangkok Chain Hospital: Summary financials**

Profit model (Bt mn)	12/13	12/14E	12/15E	12/16E	Balance sheet (Bt mn)	12/13	12/14E	12/15E	12/16
Total revenue	4,701.6	5,376.9	6,224.6	7,179.4	Cash & equivalents	984.6	605.7	563.3	612.
Cost of goods sold	(3,191.5)	(3,607.0)	(4,248.6)	(5,052.4)	Accounts receivable	722.1	839.3	987.2	1,156.
SG&A	(599.9)	(686.1)	(794.3)	(916.1)	Inventory	163.7	188.2	217.9	251.
R&D					Other current assets	365.6	365.6	365.6	365.
Other operating profit/(expense)	0.0	0.0	0.0	0.0	Total current assets	2,236.1	1,998.7	2,133.8	2,385.
EBITDA	1,255.3	1,437.9	1,569.9	1,699.0	Net PP&E	7,426.7	9,211.5	10,937.3	12,363.
Depreciation & amortization	(345.1)	(354.1)	(388.1)	(488.1)	Net intangibles	274.3	260.4	246.4	232.
EBIT	910.2	1,083.8	1,181.8	1,210.9	Total investments	2.3	2.3	2.3	2.3
Interest income	0.0	0.0	0.0	0.0	Other long-term assets	84.6	84.6	84.6	84.0
Interest expense	(106.2)	(159.4)	(196.4)	(233.4)	Total assets	10,024.0	11,557.5	13,404.5	15,068.
Income/(loss) from uncons. subs.	0.0	0.0	0.0	0.0					
Others	94.8	99.6	104.6	109.8	Accounts payable	522.7	602.6	720.4	867.0
Pretax profits	898.8	1,024.0	1,089.9	1,087.3	Short-term debt	724.8	724.8	724.8	724.
Income tax	(177.6)	(204.8)	(218.0)	(217.5)	Other current liabilities	567.8	567.8	567.8	567.
Minorities	(136.5)	(155.0)	(165.0)	(164.6)	Total current liabilities	1,815.3	1,895.2	2,013.0	2,160.2
					Long-term debt	3,516.8	4,516.8	5,716.8	6,716.8
Net income pre-preferred dividends	584.7	664.2	707.0	705.3	Other long-term liabilities	152.6	152.6	152.6	152.0
Preferred dividends	0.0	0.0	0.0	0.0	Total long-term liabilities	3,669.4	4,669.4	5,869.4	6,869.4
Net income (pre-exceptionals)	584.7	664.2	707.0	705.3	Total liabilities	5,484.7	6,564.5	7,882.4	9,029.
Post-tax exceptionals	0.0	0.0	0.0	0.0					
Net income	584.7	664.2	707.0	705.3	Preferred shares	0.0	0.0	0.0	0.0
					Total common equity	3,965.8	4,264.4	4,628.6	4,980.
EPS (basic, pre-except) (Bt)	0.23	0.27	0.28	0.28	Minority interest	573.5	728.5	893.5	1,058.
EPS (basic, post-except) (Bt)	0.23	0.27	0.28	0.28					
EPS (diluted, post-except) (Bt)	0.23	0.27	0.28	0.28	Total liabilities & equity	10,024.0	11,557.5	13,404.5	15,068.
DPS (Bt)	0.16	0.13	0.14	0.14					
Dividend payout ratio (%)	68.2	50.0	50.0	50.0	BVPS (Bt)	1.59	1.71	1.86	2.00
Free cash flow yield (%)	(3.7)	(5.0)	(4.4)	(2.9)					
Growth & margins (%)	12/13	12/14E	12/15E	12/16E	Ratios	12/13	12/14E	12/15E	12/16
Sales growth	5.3	14.4	15.8	15.3	CROCI (%)	12.9	10.5	9.7	9.3
EBITDA growth	(17.6)	14.6	9.2	8.2	ROE (%)	15.4	16.1	15.9	14.
EBIT growth	(29.3)	19.1	9.0	2.5	ROA (%)	6.8	6.2	5.7	5.0
Net income growth	(35.6)	13.6	6.4	(0.2)	ROACE (%)	12.1	10.9	9.8	8.
EPS growth	(35.6)	13.6	6.4	(0.2)	Inventory days	17.4	17.8	17.4	16.9
Gross margin	32.1	32.9	31.7	29.6	Receivables days	59.2	53.0	53.5	54.
EBITDA margin	26.7	26.7	25.2	23.7	Payable days	52.4	56.9	56.8	57.4
EBIT margin	19.4	20.2	19.0	16.9	Net debt/equity (%)	71.8	92.9	106.5	113.
					Interest cover - EBIT (X)	8.6	6.8	6.0	5.2
Cash flow statement (Bt mn)	12/13	12/14E	12/15E	12/16E	Valuation	12/13	12/14E	12/15E	12/16
Net income pre-preferred dividends	584.7	664.2	707.0	705.3					
D&A add-back	345.1	354.1	388.1	488.1	P/E (analyst) (X)	33.2	29.5	27.7	27.8
Minorities interests add-back	136.5	155.0	165.0	164.6	P/B (X)	4.9	4.6	4.2	3.
Net (inc)/dec working capital	186.4	(61.7)	(59.7)	(55.6)	EV/EBITDA (X)	18.5	17.3	16.8	16.3
Other operating cash flow	141.2	0.0	0.0	0.0	EV/GCI (X)	2.1	1.8	1.7	1.
Cash flow from operations	1,393.9	1,111.6	1,200.4	1,302.4	Dividend yield (%)	2.1	1.7	1.8	1.
Capital expenditures	(2,127.4)	(2,125.0)	(2,100.0)	(1,900.0)					
Acquisitions	(101.5)	0.0	0.0	0.0					
Divestitures	0.0	0.0	0.0	0.0					
Others	(29.3)	0.0	0.0	0.0					
Cash flow from investments	(2,258.1)	(2,125.0)	(2,100.0)	(1,900.0)					
Dividends paid (common & pref)	(418.9)	(365.5)	(342.8)	(353.1)					
Inc/(dec) in debt	1.752.5	1,000.0	1,200.0	1,000.0					
Common stock issuance (repurchase)	0.0	0.0	0.0	0.0					
	(78.7)	0.0	0.0	0.0					
Other financing cash flows									
Other financing cash flows									
Other financing cash flows  Cash flow from financing  Total cash flow	1,254.8 390.6	634.5 (379.0)	857.2 (42.4)	646.9 49.3	Note: Last actual year may include report	ad and actimated data			

### Siloam (SILO.JK): Leveraged to highest growth market, but priced in; maintain Neutral

#### What's changed

We have revised down our 2014E-2020E assumptions for new hospital additions for Siloam to 3-4 per year (4-8 previously), as this appears a more realistic target given slower new hospital additions than expected since its listing last year. Consequently, we have reduced SILO's 2014E-2016E EBITDA by 18%-27% and EPS by 48%-60%. We believe our new hospital addition forecasts are achievable, as SILO has added 3-5 new hospitals per year over 2011-2013.

#### **Implications**

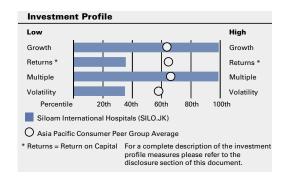
- Our revised forecast still points to a 1,190bp expansion in CROCI and a DACF CAGR of 36% for SILO over 2014E-2020E, which would rank it in quartile 1 for growth and quartile 2/1 for CROCI during 2014E-2017E/2018E-2020E.
- SILO is a leading hospital company operating in the highest growth ASEAN-4 healthcare market Indonesia, and we expect SILO to leverage its strong brand power and ride on its parent company Lippo Karawaci's (one of Indonesia's leading property developer) aggressive roll-out of townships and property projects to grow its hospitals footprint and capture the strong underlying growth.
- That said, given recent share price performance (outperforming Jakarta index by 34% in the past 3 months), we believe that the positive prospects ahead have been priced in, as stock valuations look high relative to peer average, and hence we maintain our Neutral rating. Our analysis suggests that the share price is already assuming 2015E-2016E CROCI of 17.4%, which is higher than GSe of 16.1%, although the share price implied 10-year forward EPS CAGR of 47% is still lower than our 2014E-2020E EPS CAGR of 63%.

#### Valuation

We now employ 2-year forward Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks. Consequently, we raise our 12-m TP to Rp15,500 (+4% upside potential; prior TP of Rp10,000 was based on SOTP). The stock does not have a long trading history, but it trades at a premium to peers, which we think is fair given its superior growth prospects and our expectations that it will achieve quartile 1 CROCI by 2018E. Our TP implies 2015E/2016E EV/EBITDA of 27.9X / 18.7X.

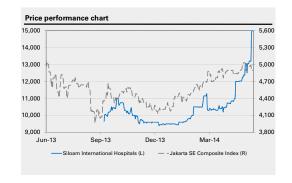
#### Key risks

Delays / faster-than-expected ramp-up in hospital additions, higher/lower than expected competition, higher/lower than expected barriers of entry to growth.



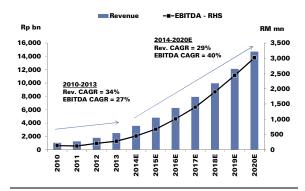
Key data	Current
Price (Rp)	14,950
12 month price target (Rp)	15,500
Market cap (Rp bn / US\$ mn)	17,283.7 / 1,480.4
Foreign ownership (%)	

	12/13	12/14E	12/15E	12/16E
EPS (Rp)	48	55	70	195
EPS growth (%)	(5.6)	16.5	26.1	178.2
EPS (diluted) (Rp)	48	55	70	195
EPS (basic pre-ex) (Rp)	48	55	70	195
P/E (X)	NM	NM	NM	76.8
P/B (X)	7.1	10.3	9.9	8.8
EV/EBITDA (X)	36.9	39.3	27.0	18.1
Dividend yield (%)	0.0	0.0	0.0	0.2
ROE (%)	5.4	3.9	4.7	12.1
CROCI (%)	13.6	14.3	15.3	17.0



Share price performance (%)	3 month	6 month	12 month
Absolute	42.4	55.7	
Rel. to Jakarta SE Composite Index	33.9	37.0	
Source: Company data, Goldman Sachs Research	estimates, FactSe	t. Price as of 6/0	02/2014 close.

#### Exhibit 104: We expect 2014E-2020E revenue/ EBITDA CAGR of 29%/40%



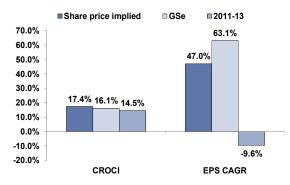
Source: Company data, Goldman Sachs Global Investment Research.

#### Exhibit 107: SILO to move to 1Q CROCI by 2018E

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>CROCI Quartiling</b>								
Siloam	2	2	2	2	2	1	1	1
Bumrungrad	2	1	1	1	1	2	2	2
Raffles	1	2	2	2	2	2	2	2
Bangkok Dusit	3	3	3	3	3	3	3	3
Bangkok Chain	3	3	3	3	3	3	3	3
IHH	4	4	4	4	4	4	4	4
KPJ	4	4	4	4	4	4	4	4

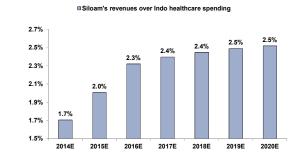
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 105: Share price implies higher-than-GSe 2015E-2016E CROCI; lower-than-GSe 10-year EPS CAGR



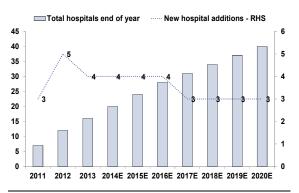
Source: Company data, Goldman Sachs Global Investment Research.

### Exhibit 108: Still expect SILO to outgrow the overall HC market



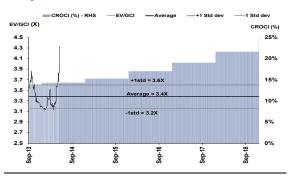
Source: Goldman Sachs Global Investment Research.

### Exhibit 106: We believe 3-4 hospital additions p.a. is realistic



Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 109: High EV/GCI, but supported by rising CROCI



Source: Company data, Datastream, Goldman Sachs Global

#### **Exhibit 110: SILO's CROCI DuPont**

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	14%	14%	15%	17%	19%	22%	24%	26%
GCI turnover (X)	1.08X	1.08X	1.06X	1.05X	1.10X	1.20X	1.27X	1.35X
EBITDA margins (%)	11%	13%	14%	16%	18%	19%	20%	20%
Cash conversion (X)	1.13X	1.05X	1.03X	1.00X	0.97X	0.95X	0.93X	0.92X

Source: Company data, Goldman Sachs Global Investment Research.

### **Siloam International Hospitals: Summary financials**

Profit model (Rp bn)	12/13	12/14E	12/15E	12/16E	Balance sheet (Rp bn)	12/13	12/14E	12/15E	12/16
Total revenue	2,503.6	3,578.2	4,808.7	6,269.9	Cash & equivalents	515.4	737.9	786.4	955.8
Cost of goods sold	(1,844.9)	(2,585.9)	(3,403.5)	(4,268.8)	Accounts receivable	270.8	396.0	544.2	725.
SG&A	(582.8)	(840.9)	(1,130.1)	(1,473.4)	Inventory	94.8	135.5	182.1	237.
R&D					Other current assets	26.4	26.4	26.4	26.
Other operating profit/(expense)	2.8	0.0	0.0	0.0	Total current assets	907.5	1,295.8	1,539.1	1,944.
EBITDA	281.2	451.5	674.6	1,010.1	Net PP&E	1,402.3	1,889.3	2,354.3	2,581.
Depreciation & amortization	(202.5)	(300.0)	(399.5)	(482.5)	Net intangibles	188.1	188.1	188.1	188.
EBIT	78.7	151.5	275.2	527.6	Total investments	0.0	0.0	0.0	0.
Interest income	12.0	15.5	22.1	23.6	Other long-term assets	102.9	102.9	102.9	102.
Interest income	(18.9)	(69.4)	(160.6)	(203.8)	Total assets	2,600.8	3,476.2	4,184.4	4,817.
Income/(loss) from uncons. subs.	0.0	0.0	0.0	0.0	Total assets	2,000.0	3,470.2	4,104.4	4,017.
	0.0	0.0	0.0	0.0	A	164.0	231.7	306.5	388.
Others					Accounts payable				
Pretax profits	71.8	97.6	136.7	347.5	Short-term debt	16.7	16.7	16.7	16.
Income tax	(21.6)	(29.3)	(45.0)	(101.0)	Other current liabilities	115.2	115.2	115.2	115.
Minorities	(0.3)	(4.2)	(10.8)	(21.4)	Total current liabilities	295.9	363.7	438.5	520.
					Long-term debt	430.0	1,130.0	1,630.0	1,880.
Net income pre-preferred dividends	49.9	64.1	80.9	225.1	Other long-term liabilities	235.8	275.2	323.3	386.
Preferred dividends	0.0	0.0	0.0	0.0	Total long-term liabilities	665.9	1,405.2	1,953.3	2,266.
Net income (pre-exceptionals)	49.9	64.1	80.9	225.1	Total liabilities	961.8	1,768.9	2,391.8	2,786.
Post-tax exceptionals	0.0	0.0	0.0	0.0					
Net income	49.9	64.1	80.9	225.1	Preferred shares	0.0	0.0	0.0	0.
					Total common equity	1,611.4	1,675.5	1,750.0	1,967.
EPS (basic, pre-except) (Rp)	48	55	70	195	Minority interest	27.6	31.8	42.6	64.
EPS (basic, post-except) (Rp)	48	55	70	195	Willionty interest	27.0	31.0	72.0	04.
EPS (diluted, post-except) (Rp)	48	55 55	70	195	Total liabilities & equity	2.600.8	3,476.2	4.184.4	4.817.
		6	70	26	Total liabilities & equity	2,000.0	3,470.2	4,104.4	4,017.
DPS (Rp)	0		· · · · · · · · · · · · · · · · · · ·		D) (DC (D.)	4.004	4 440	4 -44	4 70
Dividend payout ratio (%)	0.0	10.0	10.0	13.3	BVPS (Rp)	1,394	1,449	1,514	1,70
Free cash flow yield (%)	(1.9)	(2.8)	(2.6)	(0.4)					
Growth & margins (%)	12/13	12/14E	12/15E	12/16E	Ratios	12/13	12/14E	12/15E	12/16
Sales growth	40.0	42.9	34.4	30.4	CROCI (%)	13.6	14.3	15.3	17.0
EBITDA growth	32.8	60.6	49.4	49.7	ROE (%)	5.4	3.9	4.7	12.
EBIT growth	(14.0)	92.5	81.6	91.7	ROA (%)	2.4	2.1	2.1	5.0
Net income growth	(1.2)	28.6	26.1	178.2	ROACE (%)	4.4	5.8	7.7	13.
EPS growth	(5.6)	16.5	26.1	178.2	Inventory days	16.8	16.3	17.0	17.
Gross margin	26.3	27.7	29.2	31.9	Receivables days	33.4	34.0	35.7	36.
EBITDA margin	11.2	12.6	14.0	16.1	Payable days	31.6	27.9	28.9	29.
EBIT margin	3.1	4.2	5.7	8.4	Net debt/equity (%)	(4.2)	23.9	48.0	46.3
· <b>3</b>					Interest cover - EBIT (X)	11.4	2.8	2.0	2.9
Cash flow statement (Rp bn)	12/13	12/14E	12/15E	12/16E	Valuation	12/13	12/14E	12/15E	12/16
Net income pre-preferred dividends	49.9	64.1	80.9	225.1					
D&A add-back	202.5	300.0	399.5	482.5	P/E (analyst) (X)	NM	NM	NM	76.
Minorities interests add-back	0.3	4.2	10.8	21.4	P/B (X)	7.1	10.3	9.9	8.
Net (inc)/dec working capital	(94.8)	(98.1)	(120.0)	(154.6)	EV/EBITDA (X)	36.9	39.3	27.0	18.
Other operating cash flow	31.5	39.4	48.1	62.7	EV/GCI (X)	3.6	4.7	3.4	2.
Cash flow from operations	189.4	39.4	419.3	637.0	Dividend yield (%)	0.0	0.0	0.0	0.
Capital expenditures	(385.6)	(787.1)	(864.4)	(709.5)					
Acquisitions	(163.2)	0.0	0.0	0.0					
Divestitures	0.0	0.0	0.0	0.0					
Others	(211.9)	0.0	0.0	0.0					
Cash flow from investments	(760.6)	(787.1)	(864.4)	(709.5)					
Dividends paid (common & pref)	0.0	0.0	(6.4)	(8.1)					
	(422.7)	700.0	500.0	250.0					
	\722.11			0.0					
Inc/(dec) in debt	1 226 4	0.0							
Inc/(dec) in debt Common stock issuance (repurchase)	1,326.4	0.0	0.0						
Inc/(dec) in debt Common stock issuance (repurchase) Other financing cash flows	14.1	0.0	0.0	0.0					
Inc/(dec) in debt Common stock issuance (repurchase)					Note: Last actual year may include reporte				

### IHH Healthcare (IHHH.KL): Growth potential priced in; maintain Neutral

#### What's changed

Based on our deep dive analysis of the HC systems, trends and competitive landscape which points to a positive outlook for ASEAN-4, we believe that Malaysia's private hospital sector outlook – especially from medical tourism – is stronger than our initial expectations. We hence raise our 2014E-2016E EPS by 1%-10% to mainly factor in stronger inpatient volume growth for its Malaysia hospital operations.

Our revised forecast points to a 470bp expansion in CROCI and a DACF CAGR of 13% for IHH over 2014E-2020E, which would rank IHH in quartile 2 for growth and quartile 4 for CROCI within our coverage universe over 2014E-2016E.

#### **Implications**

We maintain our Neutral rating on IHH as while we like IHH's dominant position in all key markets – Singapore, Malaysia and Turkey – and its new ventures into India and HK, we believe that valuations have largely priced it in.

We also expect IHH's growth trajectory to slow in the longer term – our forecasts suggest that IHH will drop to quartile 3 within our coverage universe in terms of DACF growth post 2016E – due to more limited growth prospects in Singapore (although partly to be offset by opening of new HK hospital) once Novena ramps up to a more mature level. We also expect many other hospital companies to exhibit stronger growth as they will have very sizeable new projects that will kick in post 2016E.

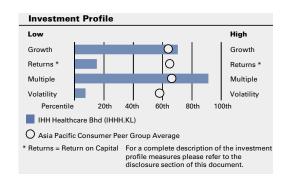
#### Valuation

We now employ 2-year forward Director's Cut (EV/GCI vs. CROCI/WACC) methodology to value the ASEAN healthcare stocks.

We raise our 12-m TP to RM4.20 (+1% upside potential; prior TP of RM3.50 was based on SOTP) to reflect our earnings revisions and shift to a new valuation methodology (2016E Director's Cut now vs. 2014 SOTP previously). Our TP implies 2015E/16E EV/EBITDA of 17.6X / 15.1X.

#### **Key risks**

Stronger/weaker than expected execution on new hospitals; lower/higher than expected volatility in FX/interest rates.



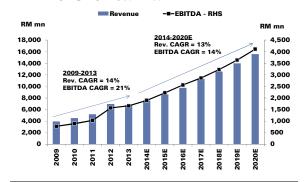
Key data	Current
Price (RM)	4.17
12 month price target (RM)	4.20
Market cap (RM mn / US\$ mn)	33,922.8 / 10,558.0
Foreign ownership (%)	

	12/13	12/14E	12/15E	12/16E
EPS (RM)	0.08	0.10	0.12	0.14
EPS growth (%)	38.8	22.8	20.0	20.5
EPS (diluted) (RM)	0.08	0.10	0.12	0.14
EPS (basic pre-ex) (RM)	0.08	0.09	0.12	0.14
P/E (X)	48.1	42.3	35.3	29.3
P/B (X)	1.7	1.8	1.7	1.7
EV/EBITDA (X)	21.4	20.3	17.4	15.0
Dividend yield (%)	0.5	0.5	0.6	0.7
ROE (%)	3.7	4.4	5.0	5.8
CROCI (%)	6.7	6.5	7.4	8.0



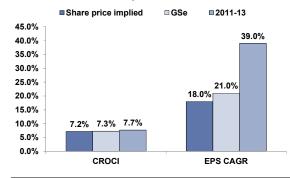
Share price performance (%)	3 month	6 month	12 month
Absolute	8.6	2.2	4.5
Rel. to Kuala Lumpur Composite	6.9	(0.3)	(0.8)
Source: Company data, Goldman Sachs Research	h estimates, FactSe	t. Price as of 6/0	02/2014 close.

#### Exhibit 111: We expect 2014E-2020E revenue/ EBITDA CAGR of 13%/14%



Source: Company data, Goldman Sachs Global Investment Research.

#### Exhibit 112: Share price implies similar 2015E-2016E CROCI and 10-year EPS CAGR as GSe



Source: Company data, Goldman Sachs Global Investment Research.

## Exhibit 113: Expect bed additions and occupancy rates to improve in 2014E-2016E



Source: Company data, Goldman Sachs Global Investment

# Exhibit 114: IHH to stay in 4Q in terms of CROCI through 2020E

	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
<b>CROCI Quartiling</b>								
Siloam	2	2	2	2	2	1	1	1
Bumrungrad	2	1	1	1	1	2	2	2
Raffles	1	2	2	2	2	2	2	2
Bangkok Dusit	3	3	3	3	3	3	3	3
Bangkok Chain	3	3	3	3	3	3	3	3
ІНН	4	4	4	4	4	4	4	4
KPJ	4	4	4	4	4	4	4	4

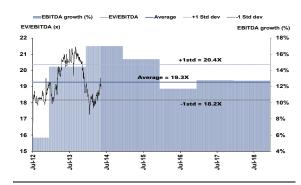
Source: Company data, Goldman Sachs Global Investment Research.

# Exhibit 115: EV/GCI is at 0.5X standard deviation currently, above average but supported by rising CROCI



Source: Goldman Sachs Global Investment Research.

#### Exhibit 116: EV/EBITDA multiple appears fair



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

#### Exhibit 117: IHH's CROCI DuPont

	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
CROCI (%)	10%	7%	7%	7%	8%	9%	9%	10%	11%
GCI turnover (X)	0.30X	0.29X	0.31X	0.32X	0.35X	0.39X	0.42X	0.46X	0.50X
EBITDA margins (%)	23%	25%	25%	26%	26%	25%	26%	26%	26%
Cash conversion (X)	1.44X	0.93X	0.86X	0.89X	0.88X	0.88X	0.88X	0.87X	0.87X

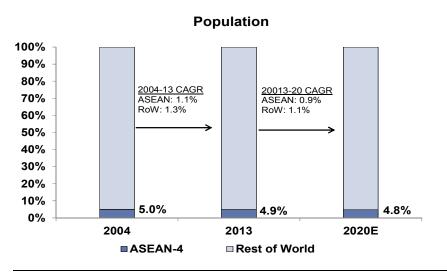
Source: Company data, Goldman Sachs Global Investment Research.

## **IHH Healthcare Bhd: Summary financials**

Profit model (RM mn)	12/13	12/14E	12/15E	12/16E	Balance sheet (RM mn)	12/13	12/14E	12/15E	12/16
Total revenue	6,756.5	7,578.6	8,609.7	9,762.8	Cash & equivalents	2,144.8	1,840.9	1,914.0	2,377.
Cost of goods sold	(2,450.2)	(2,541.7)	(2,816.5)	(3,118.9)	Accounts receivable	1,002.2	1,143.0	1,320.1	1,521.
SG&A	(2,717.3)	(3,191.4)	(3,613.7)	(4,077.7)	Inventory	153.0	151.6	172.2	195.
R&D					Other current assets	114.4	114.4	114.4	114.
Other operating profit/(expense)	(531.4)	(596.1)	(677.2)	(767.9)	Total current assets	3,414.4	3,250.0	3,520.7	4,208.
EBITDA	1,658.3	1,897.9	2,220.8	2,562.2	Net PP&E	9,365.7	10,494.9	11,495.2	12,305.
Depreciation & amortization	(600.9)	(648.5)	(718.4)	(763.8)	Net intangibles	11,509.4	11,440.0	11,370.7	11,301.3
EBIT	1,057.5	1,249.4	1,502.4	1,798.3	Total investments	226.8	232.8	240.5	250.2
Interest income	59.1	69.7	59.8	62.2	Other long-term assets	2,745.0	2,745.0	2,745.0	2,745.0
Interest expense	(138.9)	(146.7)	(146.7)	(146.7)	Total assets	27,261.3	28,162.7	29,372.1	30,810.9
Income/(loss) from uncons. subs.	2.2	6.0	7.6	9.8					
Others	(98.3)	(70.0)	0.0	0.0	Accounts payable	1,331.2	1,478.4	1,660.1	1,860.4
Pretax profits	881.6	1,108.5	1,423.2	1,723.6	Short-term debt	291.0	291.0	291.0	291.
Income tax	(147.7)	(191.5)	(235.8)	(293.2)	Other current liabilities	220.9	220.9	220.9	220.
Minorities	(102.7)	(187.8)	(228.4)	(274.9)	Total current liabilities	1,843.2	1,990.4	2,172.1	2,372.
					Long-term debt	4,170.2	4,170.2	4,170.2	4,170.
Net income pre-preferred dividends	631.2	729.2	959.0	1,155.5	Other long-term liabilities	1,324.9	1,324.9	1,324.9	1,324.9
Preferred dividends	0.0	0.0	0.0	0.0	Total long-term liabilities	5,495.2	5,495.2	5,495.2	5,495.
Net income (pre-exceptionals)	631.2	729.2	959.0	1,155.5	Total liabilities	7,338.3	7,485.5	7,667.3	7,867.
Post-tax exceptionals	19.4	70.0	0.0	0.0					
Net income	650.6	799.2	959.0	1,155.5	Preferred shares	0.0	0.0	0.0	0.0
					Total common equity	18,075.1	18,641.6	19,440.8	20,404.
EPS (basic, pre-except) (RM)	0.08	0.09	0.12	0.14	Minority interest	1,847.8	2,035.6	2,263.9	2,538.
EPS (basic, post-except) (RM)	0.08	0.10	0.12	0.14					
EPS (diluted, post-except) (RM)	0.08	0.10	0.12	0.14	Total liabilities & equity	27,261.3	28,162.7	29,372.1	30,810.9
DPS (RM)	0.02	0.02	0.02	0.03					
Dividend payout ratio (%)	24.9	20.0	20.0	20.0	BVPS (RM)	2.22	2.29	2.39	2.5
Free cash flow yield (%)	(0.3)	(0.4)	0.6	1.8					
Growth & margins (%)	12/13	12/14E	12/15E	12/16E	Ratios	12/13	12/14E	12/15E	12/16
Sales growth	(3.0)	12.2	13.6	13.4	CROCI (%)	6.7	6.5	7.4	8.0
EBITDA growth	5.7	14.4	17.0	15.4	ROE (%)	3.7	4.4	5.0	5.8
EBIT growth	(0.2)	18.2	20.2	19.7	ROA (%)	2.5	2.9	3.3	3.8
Net income growth	61.5	22.8	20.0	20.5	ROACE (%)	3.7	4.3	5.3	6.
EPS growth	38.8	22.8	20.0	20.5	Inventory days	21.6	21.9	21.0	21.
Gross margin	63.7	66.5	67.3	68.1	Receivables days	50.9	51.7	52.2	53.
EBITDA margin	24.5	25.0	25.8	26.2	Payable days	199.2	201.7	203.4	206.0
EBIT margin	15.7	16.5	17.4	18.4	Net debt/equity (%)	11.6	12.7	11.7	9.
					Interest cover - EBIT (X)	13.3	16.2	17.3	21.3
Cash flow statement (RM mn)	12/13	12/14E	12/15E	12/16E	Valuation	12/13	12/14E	12/15E	12/16
Net income pre-preferred dividends	631.2	729.2	959.0	1,155.5					
D&A add-back	600.9	648.5	718.4	763.8	P/E (analyst) (X)	48.1	42.3	35.3	29.3
Minorities interests add-back	102.7	187.8	228.4	274.9	P/B (X)	1.7	1.8	1.7	1.
Net (inc)/dec working capital	(149.6)	7.7	(15.9)	(24.1)	EV/EBITDA (X)	21.4	20.3	17.4	15.
Other operating cash flow	142.9	(6.0)	(7.6)	(9.8)	EV/GCI (X)	1.5	1.5	1.4	1.3
Cash flow from operations	1,328.0	1,567.2	1,882.3	2,160.5	Dividend yield (%)	0.5	0.5	0.6	0.
Capital expenditures	(1,426.1)	(1,708.4)	(1,649.3)	(1,504.9)					
Acquisitions	(11.8)	0.0	0.0	0.0					
Divestitures	0.0	0.0	0.0	0.0					
Others	(118.0)	0.0	0.0	0.0					
Cash flow from investments	(1,555.9)	(1,708.4)	(1,649.3)	(1,504.9)					
Dividends paid (common & pref)	0.0	(162.7)	(159.8)	(191.8)					
Inc/(dec) in debt	665.5	0.0	0.0	0.0					
Common stock issuance (repurchase)	159.0	0.0	0.0	0.0					
Other financing cash flows	(74.3)	0.0	0.0	0.0					
			(159.8)						
Cash flow from financing	750.1	(162.7)							
Cash flow from financing Total cash flow	750.1 522.2	(162.7) (303.9)	73.1	(191.8) 463.7	Note: Last actual year may include report	ed and estimated data			

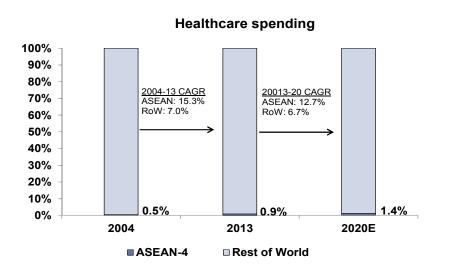
### **Appendix 1: Overview of ASEAN healthcare market**

#### Exhibit 118: ASEAN forms c.5% of world population...



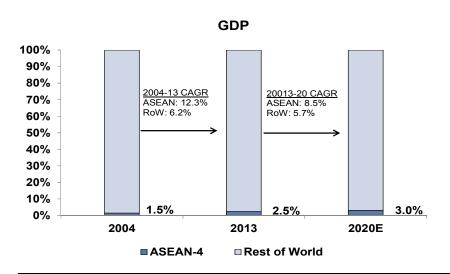
Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 120: ...but only c.1% of world healthcare spending



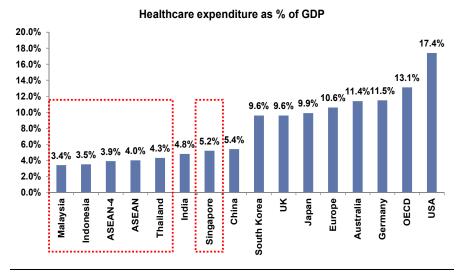
Source: Euromonitor, Goldman Sachs Global Investment Research.

Exhibit 119: ...c.3% of world GDP...



Source: Euromonitor, Goldman Sachs Global Investment Research.

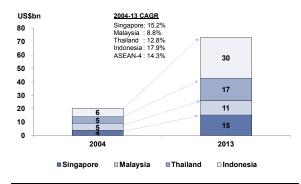
Exhibit 121: Healthcare expenditure as % of GDP of ASEAN countries is among the lowest globally (2013)



Source: Euromonitor.

June 5, 2014

### Exhibit 122: ASEAN-4 HC spending showed strong growth at 1.2X of GDP growth and...



Source: Euromonitor.

Exhibit 123: ...2X its global market share in the last decade; this is driven by....



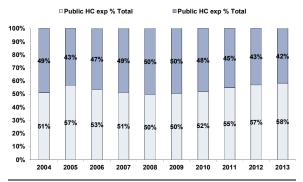
Source: Euromonitor.

Exhibit 124: ...rising needs and affordability for better healthcare from individuals...

	Singapore	Thailand	Indonesia	Malaysia
Obesity/overweight as % population				
2004	31%	29%	17%	39%
2013	36%	34%	22%	44%
R-square with HC % GDP	84%	81%	41%	2%
Median age (yrs)				
2004	34.6	31.8	25.7	24.9
2013	35.9	35.4	28.9	27.6
R-square with HC % GDP	81%	80%	42%	8%
GDP per capita (US\$)				
2004	27,046	2,506	1,145	4,982
2013	54,226	5,679	3,513	10,788
R-square with HC % GDP	69%	73%	27%	9%

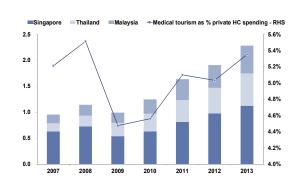
Source: Euromonitor.

# Exhibit 125: ...decent government support, though lagging private spending, and...



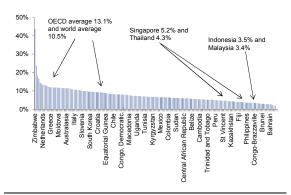
Source: Euromonitor.

Exhibit 126: ...from robust medical tourism spending trends during this period



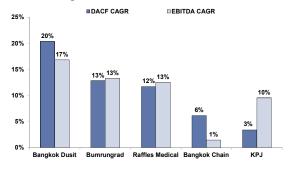
Source: Frost & Sullivan.

Exhibit 127: Outlook is bright as HC expenditure as % of GDP still low relative to other countries (2013)



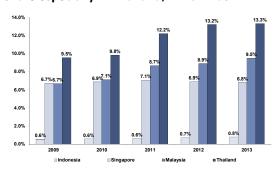
Source: Euromonitor.

# Exhibit 128: ASEAN hospitals generally show solid DACF growth over 2009-2013 due to....



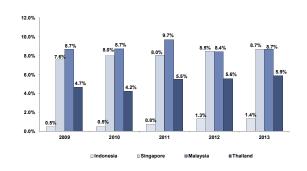
Source: Company data.

Exhibit 129: ...strong gains in revenue market share especially in Thailand, which was...



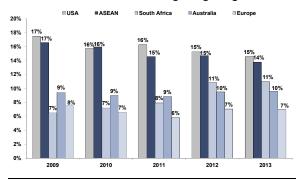
Source: Company data, Euromonitor.

# Exhibit 130: ....achieved by growing beds, increasing market share and price increases



Source: Company data, MOH Malaysia, MOPH Thailand, MOH Indonesia, MOH Singapore.

Exhibit 131: ASEAN hospitals have high CROCI, similar to US, but less leverage/higher growth



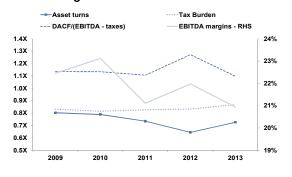
Source: Company data, Bloomberg.

Exhibit 132: CROCI did decline for some hospitals as new capacity takes time to be utilized and...

	2009	2010	2011	2012	2013
CROCI (%)					
Siloam	N.A	N.A	N.A	N.A	14%
Bumrungrad	20%	18%	17%	22%	23%
Raffles	20%	22%	20%	19%	23%
Bangkok Dusit	13%	12%	13%	12%	11%
Bangkok Chain	19%	16%	13%	17%	13%
IHH	N.A	N.A	N.A	10%	7%
KPJ	12%	12%	10%	8%	6%
Average	17%	16%	15%	15%	14%

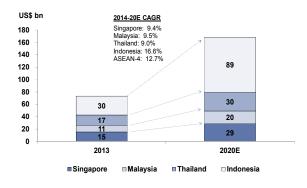
Source: Company data.

Exhibit 133: ...this depressed asset turns / EBITDA margins



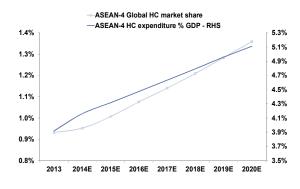
Source: Company data.

# Exhibit 134: Healthcare spending to grow 1.5X GDP by 2020E (1.2X in past 10 years) as Indo hits more sweet spots



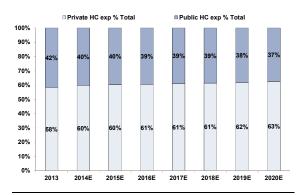
Source: Euromonitor, Goldman Sachs Global Investment Research.

# Exhibit 135: ASEAN-4 global HC market share and HC expenditure as % of GDP to continue to rise



Source: Euromonitor, Goldman Sachs Global Investment Research.

### Exhibit 136: Private to outgrow public, as we expect govt. funding to be increasingly stressed



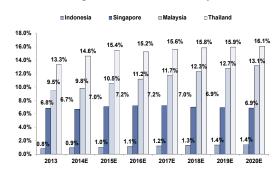
Source: Euromonitor, Goldman Sachs Global Investment Research.

## Exhibit 137: Rising contribution from China/LCMV tourists a driver for private HC expenditure



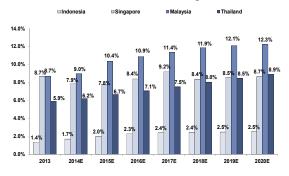
Source: Frost & Sullivan, Goldman Sachs Global Investment Research.

# Exhibit 138: GS-covered Indo hospitals' revenues mkt. share to gain most, followed by TH/MY/SG



Source: Euromonitor, Goldman Sachs Global Investment Research.

## Exhibit 139: ...given the roadmap of beds additions ahead, and not including M&A



Source: Euromonitor, Goldman Sachs Global Investment Research.

### Appendix 2: Diverse HC systems across ASEAN; SG/Thai seen as the best to learn from

#### Exhibit 140: Not all countries have a proper Universal Healthcare Coverage system, and hence private spending as % of total healthcare spending is high

Public healthcare system	Singapore	Malaysia	Thailand	Indonesia	Philippines
Current system	Public hospitals operate under co-pay system. Government subsidizes up to 80% of the bill under certain conditions. Free market and individual accountability principle to achieve most cost efficient effect. Considered to have achieved Universal Healthcare Coverage.	Free access to public hospitals for everyone paid by government. However quality of care and accessibility is not complete and hence significant usage of private sector. Not considered to have achieved Universal Healthcare Coverage.	Universal Healthcare Coverage with 99% of population covered comprehensively under one of 3 schemes (end 2009); SS (Social Security - all private employees) 16%; CSMB (CVI) Servant Medical Benefit - government workers and families) 8% and UC (Universal Care - everyone else) 76%.	Rolling out Universal Healthcare Coverage (National Health Insurance scheme) by merging existing schemes (Jamkesda, PT Askes, Jamsotek, Asabh) and introducing coverage for unprotected. Current roll-out covers 78% of Indonesians and target to hit 100% by 2019. Accessibility however is very weak even as the funding may be available to be utilized.	Continues to roll out Universal Healthcare (NHIP - National Health Insurance Program). Currently covers 81% of population
Public HC Spend % Total HC Spend (2013)	31%	34%	77%	29%	31%
History of healthcare	Post independence in 1965, Singapore has adopted a co- payment scheme for cost containment reasons, though the co- pay was only nominal initially. With healthcare reforms in 1981, the financial burden of healthcare shifted from government to individual and employer. Medisave (compulsory contribution) was implemented in 1984 to ensure this, though there is no pool sharing structure, and each person's medisave pool can only be used for that person and the immediate family, and it can be used for both publiciphrivate hospitals. Government also introduced other safety nets e.g. Medishield in 1990 and Medifund in 1993. Hospitals were also 'restructured' in 1985, which means the granting of autonomy to public sector hospitals to instill business/financial discipline.	community clinic (1:4000) to provide more comprehensive care. Over time, more services (e.g. dental, lab, pharmacy) were introduced. That said, there was no major change to the free healthcare policy, which is fully borne by the government. The only more significant event was that the government (under Private facility of the properties of the properties of the Private of the properties of the private of the properties of the properties of the private of the private of the private of private of private priva	Free medical care for poor was launched in 1975. However it was only when UCS introduced in 2001 - to address deficiencies in previous overage plans like Medical Welfare Scheme and Voluntary Health Card - which resulted in a sharp increase in coverage to 75% (from 45% 50% prior) by 2001. All three Schemes brogether, Thailand achieved 92% coverage by 2002 and 99% by 2008. The UCS was conceived in late 1990s and was pushed forth by the Thai Rak Thai party as one of its nine priorities. It used to be called the 300aht scheme (or-pay with every visit; scrapped since 2006). Additional spending for UCS was estimated to be 30th or bat in first year (53% of total govt health spending pre-reform) but it was easily absorbed by the government.	Historically, healthcare has not been a major priority for Indonesia. Starting early 2000s, there was a surge in local health insurance programs that vary greatly from region to region (due to local electoral politics and gradual) decentralization process of Indonesia) funded by a mix of public budgets and user fees. Most involve a district or provincial government subsidizing basic medical services, which created an uneven and incomprehensive system through Indonesia. Traditional medicines (e.g. Jamu) remain popular and widespread.	Post independence in 1946, free healthcare was provided for a in public hospitals. In 1972, Medicare (for formal and informal sector) was implemented, but given the difficulty of the system (need to have wider coverage and better quality), a new Universal Healthcare Program (Philitealth) was started in 1992 (100% target by 2010) which merged the existing scheme and started introducing Sponsored Program for poor, coverage significantly improved form 2011 nowards after President Aquino made healthcare a key focus in 2010. By 2013, 81% of Filipinos were covered under this system.
Regulatory body	МОН	мон	МОРН	мон	DOH
Types of healthcare schemes	Single scheme	Single scheme	SSS (employee; employer, government 1.5% of salary each); CSMBS (tax); UCS (tax)	JKN (employee pay 1% and employer pay 4% on wages for private sector employees; employees pay 2% and government pay 3% for civil services; informal sector pay Rp20,500-58,600 per month to cover entire family and government pays Rp19,225 per month for poor/unemployed).	Five schemes under Philhealth: (1) Employed sector (1.5% employee and 1.5% employer): (2) Individually paying (informa sector - PHP2400.3600 per year); (3) Sponsored program (for poor - PHP2400 per person) and by gov(); (4) Overseas Filipinc Workers (PHP2400 per person); (5) Lifetime Payment program (free for those members who have made 120 monthly contributions).
Funding stucture	Mixture of taxes, compulsory contribution (medisave - 7-9.5% of monthly wages; capped at S\$427.5/mthl), catastrophic liness insurance (medishield - paid from medisave S\$4-99/mth) and emergency funds (medifund).	Tax funded; the compulsory contributions to EPF (all formal work force) or SOSCO (formal workforce earning less than RM3000 per mth) can be utilized for medical use, but amount allowed and coverage provided is minimal.	Mainly tax funded; small compulsory contribution (only for SSS)	Tax funded and compulsory contribution.	Tax funded and compulsory contribution.
Extent of coverage	Comprehensive	Comprehensive	Comprehensive; limited exclusion (e.g. cosmetic, infertility). CSMBS most comprehensive, followed by UCS (excludes 15 conditions) /SSS (excludes 12 conditions).	Comprehensive	Comprehensive
Payor	MOH (financed by MOF) pays for subsidies. Indivisual will pay the rest of the bill through utilizing medisave or medishield or cash.	MOH (financed by annual health budgets from MOF; budgets are based on past spending plus any additional increment determined by estimated rise in CPI). MOE and other national agencies also spend some as they also own a few hospitals.	NHSO for UCS; SSO for SSS and MOF (at CGD level) for CSMBS	BPJS	PhilHealth
Payment structure	Fees regulated by MOH. Public hospitals will ask for approval from MOH for increases. Subsidies to public dependent on type of procedure and level of service.	Fixed budget system. Limited co-payment with a nominal fee for each treatment/procedure is stated (i.e. 2% of spending).	SSS (capitation for OP and case-based i.e. DRG for IP); CSMBS (fee for service); UCS (capitation for OP and DRG for IP). Limited co-payment.	Capitation for OP and case-based (DRG) for IP	Capitation for OP and fee for service for IP (specified fee for each service; patient co-pays if it goes beyond a certain celling; except for SP and certain packages like maternity care package)
Facilities	Subsidies (and Medishield/Medifund) are only available for public hospitals. Medisave can be used for both public/private hospitals.	Public hospitals only	Public and private (those who have signed up for the schemes) for SSS and UCS; Public hospitals only for CSMBS.	Public and private (those who have signed up for the scheme)	Public and private hospitals (those who sign up for the program
Doctor compensation structure	Doctor fees are generally lower than private, though quite competitive.	Doctors are paid lower than private sector. While doctor fees are regulated in private sector, doctors can still earn a lot more in the private sector.	Lower than private sector, though not vastly underpaid. Mainly fixed salary with some variable depending on extra hours or surgical operations. Doctors can choose to work simultaneously for public and private sector.	Lower than private sector significantly, Doctors can work both public and private concurrently.	Lower than private sector (paid on fixed salaries vs private sector on fee for service).
Challenges	Aging population and higher dependency ratio; 2) Rising medical costs due to technology advancements and increased demand for better quality and rising burden to individuals (tamilies getting smaller; risk-pooling less effective); 3) Lack of quality and economical manpower	More availability/access of healthcare; 2) Quality medical professionals; 3) Rising medical treatment costs and better funding structure.	Inequitable systems for SSS, CMBS, UCS; 2) Aged population and rising dependency ratio; 3) Rising medical treatment costs and rising stress on funding structure.	Accessibility of healthcare facilities; 2) shortage of medical professionals; 3) potential funding shortage (e.g. Rp19,225 per person is 1/3 of necessary, according to Indonesia Medical Association; voluntary contribution required by informal sector may not also work).	Fragmented and inequitable financing system - payout more than contributions; significant co-pay by patients; payment made by local government units which makes financing dependent on the finances of provincial/district governments; IPP not pay consistently; 2) naccessibility of health facilities especially in rural areas.
Future plans	More preventive care: 2) Encourage more private insurance and increase public spending to bolster coverage; 3) Encourage overseas treatment and provide affordable facilities for long term care.	Increase public sector efficiency through DRG systems and rewarding outcomes rather than service / telemedicine to improve rural healthcare quality. 2 Encourage more private sector participation to increase availabilitylaccess, 3 Consider adding or moving to a compulsory contribution model (e.g., the proposed 1 care / Malaysia model will give equal access to pte and public care through employees/employers contributing 10% of salaries).		Increasing public sector spending on healthcare (e.g. funded from cutting fuel subsidies); 2) encourage more private sector participation; 3) Increase public sector efficiency	Increase healthcare efficiency / costs through DRG systems and rewarding outcomes; 2) Increase incentive for informal sector to pay contribution; 3) Encourage more private sector participation to increase availability/access

Source: MOH Malaysia, MOPH Thailand, MOH Indonesia, MOH Singapore, Euromonitor.

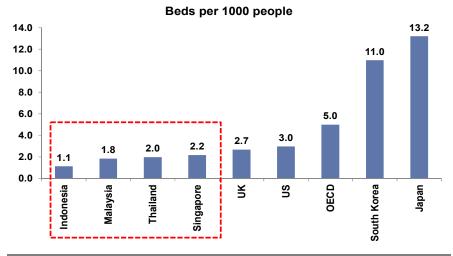


Exhibit 141: ASEAN-4 income levels, median age and obesity levels generally still well below developed markets' average

As of 2013	GDP per capita (US\$)	Median age (years)	% obese / overweight population
Indonesia	3,469	28.9	22%
Malaysia	10,516	27.6	44%
Thailand	5,978	35.4	34%
Singapore	54,767	35.9	36%
Japan	36,056	46.0	25%
South Korea	24,368	39.6	40%
US	53,142	37.5	72%
UK	37,875	39.8	64%
OECD	42,632	38.7	57%

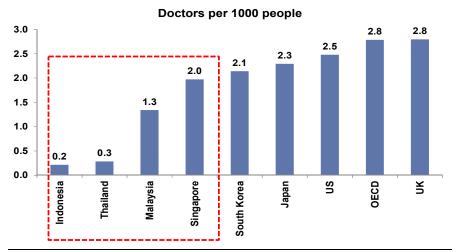
Source: Euromonitor

Exhibit 142: ASEAN-4 markets beds availability remains insufficient relative to developed markets (2013)



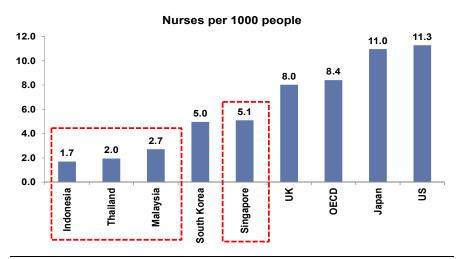
Source: Euromonitor

Exhibit 143: Similarly, ASEAN-4 doctors availability also much lower (2013)



Source: Euromonitor

Exhibit 144: This is true also for the availability of nurses (2013)



Source: Euromonitor

### **Appendix 3: Operational snapshot of coverage companies**

Exhibit 145: Operational snapshot of coverage companies (2013)

		Thailand		Malaysia	Singapore / Malaysia	Singapore	Indonesia
Company	Bumrungrad	Bangkok Dusit	Bangkok Chain	КРЈ	ІНН	Raffles	Siloam
No. of hospitals (#)	1	29 (Thailand), 2 (Cambodia)	7	23	33	1	16
No.of licensed beds (#)	563	5,616	1,660	2,985	> 5,000 380		3,785
Available beds (#)	543	4,652	984	2,714	5,000	200	2,045
Domestic private beds market share (%)	2%	17%	4%	17%	Singapore: 30% Malaysia: 13% Turkey: 6%	7%	6%
Beds utilization (%)	68%	66%	54%	66%	SG ex-Novena: 65% Novena: 50% Malaysia: 65% Turkey: 60%	63%	50%
No.of doctors (#)	> 1,200	9,000	900	988	Singapore: 1,200 Malaysia: 600-700 Turkey: 2,000 doctors	260	1,500
No. of nurses (#)	> 2,000	10,000	1,500	3,500	7,000	600	3,600
Doctors as employee	No	No	No	No	No, except Turkey	Yes	No
Doctors' fee as part of revenue	Yes	Yes	Yes	Yes	No, except Turkey	Yes	Yes
Average length of inpatient stay (days)	4.4	3.0	2.5	2.5	Singapore: 3.2 Malaysia: 2.8 Turkey: 3.5	3.2	4.3
Average revenue per inpatient (US\$)	7,626	2,285	969	1,221	Singapore: 6,800 Malaysia: 1,400 Turkey: 3,000	7,259	1,641
Foreign / domestic patients revenue mix (%)	61 % / 39%	28% / 72%	2% / 98%	3% / 97%	Singapore: 40% / 60% Malaysia: 6% / 94% Turkey: 10% / 90%	40% / 60%	0% / 100%
EBITDA per bed (US\$'000/yr)	231	74	40	30	Singapore: 200 Malaysia: 56 Turkey: 72	238	13
Hospital brands	Bumrungrad Hospital	Bangkok Hospital, Samitivej Hospital, BNH Hospital, Paolo Memorial Hospital, Phyathai Hospital, Royal International Hospital	Kasemrad, World Medical Centre, Karunvej	KPJ	Mount Elizabeth, Gleneagles, Parkway, Pantai, Acibadem	Raffles Hospital	Siloam
Patient segments	Medical tourists, High income domestic patients	Middle to high income domestic patients, Medical tourists, Social Security Patients	Social Security patients, Low-to-middle income patients, High income patients & medical tourists (World Medical Centre)	Middle income domesic patients	Middle to high income domestic patients, Medical tourists	Middle to high income domestic patients, Medical tourists	Middle to high income domestic patients
Expansion plans	Petchburi Project (200-250 beds): construction to start in 1H2014 with expected construction period of 2-2.5 years	Plans 9 new hospitals over 2014- 2016 (total 1,400 beds) to be opened in phases	Plans to open 1-2 new hospitals each year	Plans 7 new hospitals in Malaysia over 2014-2016 (total 1,250 beds) to be opened in phases	Plans 5 new hospitals in Malaysia (700 beds) over 2014-2015, 1 new hospital in HK (500 beds) to start operational in end-2016 / early- 2017, and 5 new hospitals in Turkey (+ 3 extension projects) in the next 2-3 years	Raffles Hospital extension with additional area of 200K sqft (c. 65% of existing area) to start operations in phases starting 2017; Holland Villlage Medical Centre to start operations in 2016	Targets 50 hospitals (10,000 beds) over the next five years
Payor's structure	72% self-pay, 16% corporate contracts, 12% insurance	69% self-pay, 17% insurance, 7% contract, 3% Social Security, 4% others	67% self-pay, 32% Social Security, 1% Universal Coverage	45% self-pay; 55% corporate contracts & insurance	30% self-pay; 70% corporate contracts / insurance	Inpatients: 80% self-pay / insurance; 20% corporate Outpatients: 70% corporate; 30% self-pay / insurance	66% self-pay, 34% corporate / insurance

Source: Company data.



■ Malaysia

### **Appendix 4: Competition snapshot**

Exhibit 146: Fragmented market - Top 5 companies except for Indonesia/Philippines tend to dominate 25% or > of private hospital market - Singapore most consolidated, followed by Malaysia and then Thailand

Top five largest hospital groups	p five largest hospital groups Indonesia		Malaysia	Thailand	Philippines	
#1	Siloam International Hospitals ( > 3,700 beds)	IHH (> 800 beds)	KPJ ( > 2,700beds)	Bangkok Dusit ( > 5,600 beds)	Metro Pacific ( > 2,000 beds)	
#2	Mitra Keluarga Group (1,200 beds)	Raffles Medical (380 beds)	IHH ( > 2, 000 beds)	Bangkok Chain Hospital ( > 1,700 beds)	St. Luke (1,000 beds)	
#3	Awal Bros Group (1,000 beds)	Mount Alvernia (303 beds)	Columbia Asia (695 beds)	Bumrungrad Hospital (580 beds)	Medical City (500 beds)	
#4	Sari Asih Group (900 beds)	Thomson Medical (190 beds)	Sime Darby (613 beds)	Ramkhamhaeng Hospital (499 beds)	n.a.	
#5	Hermina Hospital Group (820 beds)	West Point Hospital (58 beds)	Health Management International (498 beds)	Vibhavadi Hospital (350 beds)	n.a.	

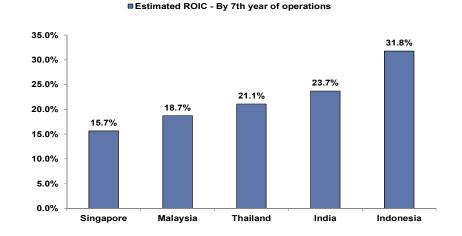
Source: Company data.

Exhibit 147: Barriers of entry are high (licensing, employing doctors etc) and returns will come only years after investment, and hence despite attractive steady-state ROIC (especially for Indonesia), competition has been relatively subdued over time and usually is only among the leading hospitals...

Exhibit 148: ... as evident by significant beds market share gains by our coverage companies across most regions except Singapore over 2009-2013 and as projected through to 2020E

■ Singapore

■ Thailand



14.0% 12.3% 12.0% 10.0% 8.<mark>9%</mark>8.7% 8.7% 8.7% 8.7% 8.0% 7.6% 5.9% 6.0% 4.7% 4.0% 2.5% 1.4% 2.0% 0.5% 0.0% 2009 2013 2020E

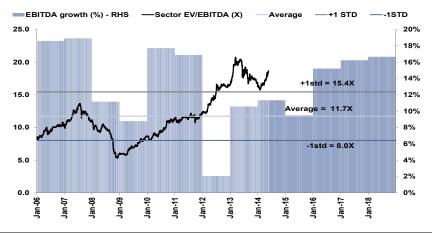
Source: Goldman Sachs Global Investment Research.

Source: Company data, Goldman Sachs Global Investment Research.

□Indonesia

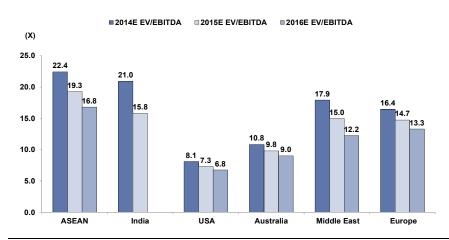
### Appendix 5: Why high ASEAN healthcare valuations will likely sustain

Exhibit 149: ASEAN's industry-wide valuations (exclude SILO/IHH due to short trading history) look high relative to history; we however expect valuations to stay elevated as growth is accelerating in coming years...



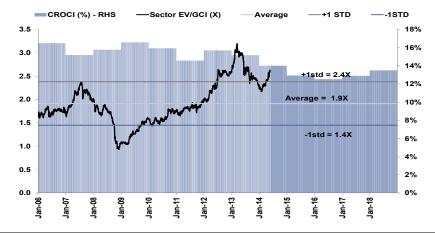
Source: Company data, Datastream, Goldman Sachs Global Investment Research.

Exhibit 151: Valuations also look high versus other countries...



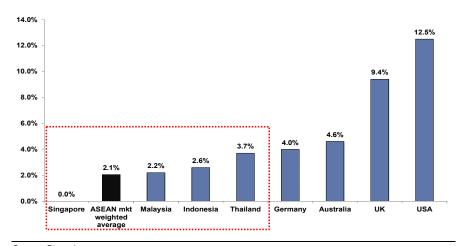
Source: Bloomberg, Datastream, Goldman Sachs Global Investment Research.

Exhibit 150: ...and returns are back on the rise



Source: Company data, Datastream, Goldman Sachs Global Investment Research.

Exhibit 152: ... but we think this is justified by the smaller healthcare industry market cap versus the country's index market cap



Source: Bloomberg



### **Disclosure Appendix**

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