

BANGKOK DUSIT MEDICAL SERVICES PLC

No. 96/2013

12 November 2013

Company Rating: A+

Outlook: Stable

Rating History:

Date	Company	Issue (Secured/ Unsecured)
10/11/11	A+/Sta	-/A+
17/12/10	A/Pos	-/A
11/02/08	A/Sta	-/A

Rating Rationale

TRIS Rating affirms the company and senior debenture ratings of Bangkok Dusit Medical Services PLC (BGH) at "A+". The ratings reflect BGH's leading market position as the largest private hospital operator in Thailand, the enhanced capacity of its facilities, large franchise network, experienced management team and capable physicians, high quality services, and modern equipment. These strengths are partially offset by the large capital expenditures for BGH's expansion in the medium term and the competitive environment in the healthcare service industry. Competition is expected to rise from both local healthcare providers and healthcare providers in other ASEAN countries.

BGH was established in 1969 to operate Bangkok Hospital, a private hospital. The company is the largest private hospital operator in Thailand with a strong network of hospital brands. At present, BGH owns 31 hospitals, under five well-known local hospital brands, plus one international hospital brand. Sixteen hospitals are operated under the Bangkok Hospital brand, four hospitals under the Samitivej Hospital brand, and one hospital under the BNH Hospital brand. BGH also has two other domestic hospital brands: the Phyathai Hospital Group (PYT) and the Paolo Memorial Hospital Group (Paolo). Two international hospitals are run under the Royal International Hospital brand. At the end of October 2013, BGH had a service capacity of 4,684 inpatient beds, including two hospitals it recently purchased: the 150-bed Samitivej Thonburi Hospital (formerly known as Khruangdhon Hospital) and the 158-bed Bangkok Phitsanulok Hospital. BGH's customer base covers the mid- to high-end segments in various locations. Twelve of BGH's hospitals have achieved Joint Commission International (JCI) accreditation.

BGH's competitive edge is derived from its diverse range of services offered, its customer base, and the locations of hospitals. The company has the largest pool of physicians, nurses, and clinical staff in Thailand, as well as the strongest referral network. BGH's focus on tertiary care helps boost revenue and increase the utilization of medical equipment and laboratories. The company will widen its customer base by adding more secondary care hospitals in the medium term. This effort will let BGH reach more middle income patients. Economies of scale, through the pooling of lab services and the centralized purchasing of medicines, medical supplies, and key medical equipment, are expected to benefit the company in terms of cost effectiveness. In addition, the implementation of a cash pooling system reduced the short-term loan requirements for each hospital and lowered the financing cost across the group.

Revenue from hospital operations grew at a compound annual growth rate (CAGR) of 16% from 2007 through 2012. For the first six months of 2013, the company reported total revenues from hospital operations of Bt23,555 million, up by 12% from the same period last year. The rise was driven by growth in patient volume across its network hospitals, price increase, and rises in severity of disease. For the first six months of 2013, outpatient visits per day amounted to 21,257 persons, or a rise of 7% year-on-year (y-o-y). The average daily census (the average number of inpatients per day) rose by 11% y-o-y to 2,941 patients. About 55% of patient revenue came from inpatients; the remainder came from outpatients. Self-pay patients contributed about 70% of total revenue.

Contacts:

Sarinthorn Sosukpaibul
sarinthorn@trisrating.com

Chanaporn Pinphithak
chanaporn@trisrating.com

Nopalak Rakthum
nopalak@trisrating.com

Suchada Pantu, Ph. D.
suchada@trisrating.com
WWW.TRISRATING.COM

BGH's financial strength is underpinned by its strong operating performance, increasing cash flow, and sufficient liquidity. BGH's financial profile during the past 12 months was near the expectations of TRIS Rating's base-case. The operating margin has been relatively stable at 22%-22.5% during the last three years. The margin slightly dropped to 21% for the first six months of 2013 due to higher expenses for doctors, clinical staff, and administrative expenses. In the medium term, the gross margin is expected to be pressured from a rise in doctors and clinical staff expenses because BGH is preparing its healthcare resources for its new hospitals and for the effects of the upcoming implementation of the ASEAN Economic Community (AEC). However, BGH is expected to achieve economies of scale and have cost-saving from improvements in asset utilization. Funds from operations (FFO) were Bt8,819 million in 2012, climbing from Bt6,772 million in 2011. FFO for the first six months of 2013 held at Bt4,807 million. FFO is expected to continue to grow, reaching Bt10,000-Bt12,000 million annually in 2014 and 2015, driven by the opening of the new hospitals and strong growth in patient volume across its network hospitals.

BGH's total debt at the end of June 2013 was Bt23,328 million, up from Bt16,792 million at the end of 2011. Total debt increased because BGH invested in new hospitals and affiliated companies. However, as BGH has large equity base and carefully manages its capital structure, the debt to capitalization ratio was relatively stable at about 34% during 2011 and 2012. The ratio rose to 37.2% at the end of June 2013. BGH is entering a new investment cycle as it plans to expand its network hospitals from 31 hospitals to 50 hospitals during the next two years. The company also has set an investment budget for the non-hospital segment, e.g., lab services and pharmaceuticals. BGH plans to spend Bt10,000-Bt12,000 million in capital expenditures per annum during 2013-2015. Going forward, BGH's leverage is likely to rise to accommodate its future capital expenditure requirements. However, TRIS Rating expects BGH's strong operating cash flow and good relationships with financial institutions will provide the company with sufficient financial flexibility to meet its financial requirements when it expands.

Rating Outlook

The "stable" outlook reflects the expectation that BGH will be able to maintain its leading position in both the domestic and regional private hospital markets and to deliver solid operating performance. BGH is expected to expand its hospital network without a material deterioration in its financial profile. Its EBITDA margin (earnings before interest, tax, depreciation and amortization as a percentage of sales) is expected to maintain at around 20% while its debt to capitalization ratio is expected to stay at around 35%-40%.

Bangkok Dusit Medical Services PLC (BGH)

Company Rating:	A+
Issue Ratings:	
BGH143A: Bt1,000 million senior debentures due 2014	A+
BGH146A: Bt1,970 million senior debentures due 2014	A+
BGH153A: Bt2,500 million senior debentures due 2015	A+
BGH166A: Bt1,000 million senior debentures due 2016	A+
BGH233A: Bt4,000 million senior debentures due 2023	A+
Rating Outlook:	Stable

KEY RATING CONSIDERATIONS

Strengths/Opportunities

- Largest private hospital operator in Thailand
- Large and diversified customer base with wide geographic coverage
- Well-known and widely accepted hospital brands offering high quality services
- Experienced management team
- Growth in demand for healthcare

Weaknesses/Threats

- Intense competition
- Large capital expenditures needed for expansion
- Shortage of physicians and healthcare personnel

CORPORATE OVERVIEW

BGH is the largest private hospital operator in Thailand. The company was established in 1969. Bangkok Hospital, its first private hospital, commenced operation in 1972. BGH was listed on the Stock Exchange of Thailand (SET) in 1991.

In 2004, BGH acquired Samitivej PLC, Bangkok Hadyai Co., Ltd., and Bangkok Phuket Hospital Co., Ltd. In 2005, the company launched Bangkok Heart Hospital and Wattanosoth Hospital, which focus on cardiac and cancer treatments, respectively. These two hospitals are located in the same area as Bangkok Hospital. Together, the three hospitals comprise the Bangkok Medical Center (BMC). BGH acquired Bangkok Pattaya Hospital Co., Ltd., Bangkok Rayong Hospital Co., Ltd., Wattanavej Co., Ltd. (BCH), and Bangkok Trat Hospital Co., Ltd. in 2006. During 2007-2008, BGH launched Royal Angkor International Hospital and Royal Rattanak Hospital to provide services for foreign patients in Cambodia.

Table 1: Hospitals in BGH's Portfolio as of Oct 2013

Hospital	Abbrev.	Ownership (%)
Bangkok Hospital	BMC	100.0
Bangkok Heart Hospital		100.0
Wattanosoth Hospital		100.0
Bangkok Hua Hin Hospital	BHN	100.0
Bangkok Pattaya Hospital	BPH	97.3
Bangkok Rayong Hospital	BRH	100.0
Bangkok Chantaburi Hospital	BCH	99.7
Bangkok Hospital Trat	BTH	99.8
Bangkok Hospital Samui	BSH	100.0
Bangkok Phuket Hospital	BPK	99.7
Bangkok Hat Yai Hospital	BHH	98.8
Bangkok Ratchasima Hospital	BKH	90.9
Bangkok Pakchong Hospital	BHP	90.4
Bangkok Prapadaeng Hospital	BPD	79.0
Bangkok Udon Hospital	BUD	100.0
Bangkok Phisanulok Hospital	BPL	100.0
Samitivej Sukhumvit Hospital	SVH	95.8
Samitivej Srinakarin Hospital	SNH	95.8
Samitivej Sriracha Hospital*	SSH	69.7
Samitivej Thonburi Hospital**	STH	47.7
BNH Hospital	BNH	91.5
Phyathai 1 Hospital***	PYT1	100.0
Phyathai 2 Hospital***	PYT2	99.2
Phyathai 3 Hospital***	PYT3	98.2
Phyathai Sriracha Hospital***	PYTS	68.7
Paolo Memorial Phaholyothin Hospital	PMED	100.0
Paolo Memorial Samutprakarn Hospital	PSAMUT	93.4
Paolo Memorial Chokchai 4 Hospital	PCHOK	85.7
Paolo Memorial Nawamin Hospital	PNWM	99.8
Royal Angkor International Hospital	RAH	80.0
Royal Rattanak International Hospital	RRH	70.0

Source: BGH

* Indirect shareholding through Samitivej PLC

** Formerly known as Krungdhon Hospital (KDH)

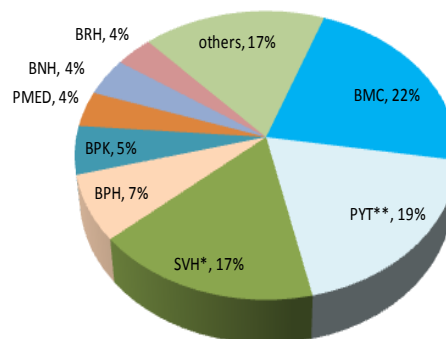
*** Indirect shareholding through Prasit Patana PLC (PPCL), in which BGH owns 98.4%

Revenues from hospital operations increased sharply in 2011 due to the stock swap merger with Health Network PLC (HNC). HNC was the major shareholder of PYT and

Paolo. In 2013, BGH purchased more shares of Thonburi Medical Centre PLC (KDH), formerly known as Krungdhon Hospital. Also in 2013, BGH acquired the entire business of Ratanavej Hospital in Phitsanulok province.

As of March 2013, the major shareholder of BGH was Dr. Prasert Prasarttong-osoith with a shareholding of 18.8%. Currently, 31 hospitals with 4,684 available beds, are operated under the BGH umbrella.

Chart 1: BGH's Revenue Breakdown by Hospital (Jan-Jun 2013)



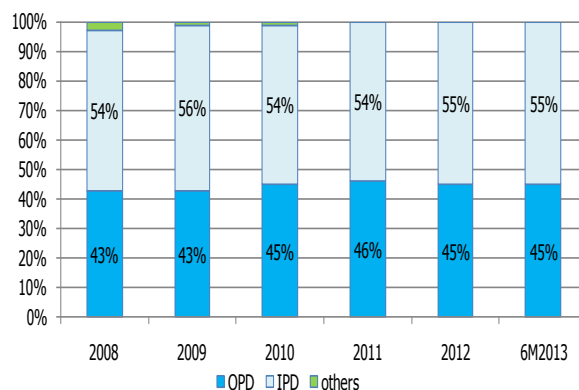
Source: BGH

* SVH includes Samitivej Sukhumvit, Srinakarin, and Sriracha

** PYT includes revenue of Phyathai Hospital Group

For the first half of 2013, revenue from five major groups of hospitals, BMC, PYT, SVH, BPH, and BPK, contributed approximately 70% of total revenue. In terms of EBITDA, the same five major groups of hospitals together made 73% of BGH's EBITDA.

Chart 2: BGH's Revenue Contribution by Service Type



Source: BGH

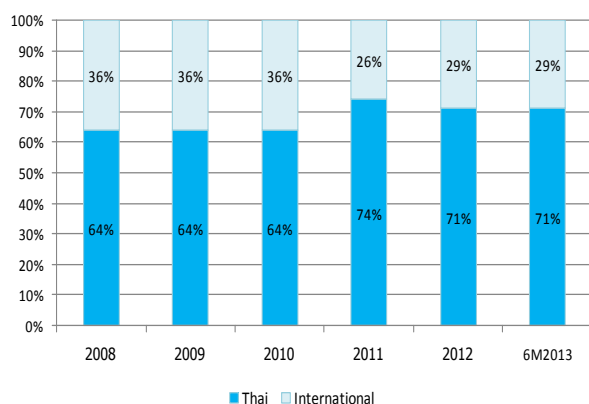
Ten hospitals under BGH have achieved JCI accreditation: Bangkok Hospital Medical Center (BMC)

which includes Bangkok Hospital, Bangkok Heart Hospital, and Wattanosoth Hospital, SVH, SNH, SSH, BNH, BPK, BPH, BHN, BTH and BSH.

Revenues from the outpatient department (OPD) comprised approximately 45% of total revenues, while revenues from the inpatient department (IPD) contributed 55%.

During 2008-2010, BGH's revenue was derived mainly from the Thai patients (64%), with the remainder (36%) from international patients. From 2011 through the first half of 2013, revenue from Thai patients rose to 71%-74% of total revenue from hospitals, as most patients at PYT and Paolo are Thai patients. Of BGH's total revenue, 70% is from self-pay patients, 24% is from insurance payments and corporate contracts, while the remaining is from social security and others.

Chart 3: BGH's Revenue Contribution by Patient Nationality



Source: BGH

RECENT DEVELOPMENTS

▪ **Purchased more shares in KDH**

Since 2012, BGH has held 3,002,029 shares, or 20.01% of the total issued shares of Thonburi Medical Centre PLC (KDH). In the first quarter of 2013, Royal Bangkok Healthcare Co., Ltd. (RBH), BGH's wholly-owned subsidiary, acquired another 25.01% of the total issued shares of KDH. The total share purchase cost was Bt206.3 million, funded by the operating cash flow. At the end of March 2013, BGH, together with RBH, held 45.02% of KDH.

KDH, formerly known as Khruangdhon Hospital, is a basic tertiary care hospital located on the west side of Bangkok. BGH's investment in KDH will allow BGH to serve residents in western Bangkok. The hospital has 150 beds, and generated Bt294 million in revenues and Bt38 million in EBITDA in 2012. KDH has been rebranded as Samitivej Thonburi Hospital (STH) since 1 May 2013. Currently, the hospital is under renovation and targets its grand-opening in December 2013.

▪ **Acquired Ratanavej Hospital**

In mid-2013, BGH acquired the entire business of Ratanavej Hospital Co., Ltd. (Ratanavej), which operates two private hospitals in Phitsanulok province. The total investment was Bt577 million, funded by a share swap and a cash payment.

Ratanavej operates two private hospitals: a 58-bed hospital for children and the 100-bed Ratanavej Hospital 2. Ratanavej is a secondary care hospital targeting middle income patients in Phitsanulok province and neighboring provinces. BGH is renovating these two hospitals and has changed their names to Bangkok Phitsanulok Hospital. In 2012, Ratanavej's revenues reached Bt355 million, and net profit was Bt2 million.

▪ **JCI accreditation at BSH and BTH**

Bangkok Hospital Samui (BSH) achieved JCI accreditation in 2012. They join the ranks of nine other BGH hospitals which have already achieved JCI accreditation.

INDUSTRY ANALYSIS

The private healthcare segment of the healthcare service industry in Thailand has good growth prospects. Demand is being driven by an aging population, the upcoming AEC in 2015, and Thailand's widely-accepted reputation among foreign patients for good medical care. The Thai government tries to promote Thailand as a medical hub in Southeast Asia. However, a shortage of medical personnel and political instability will be major concerns for private hospital operators.

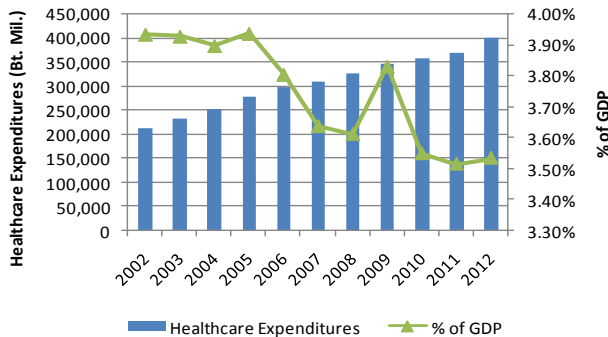
▪ **Healthcare expenditures are expected to rise**

The Thai healthcare industry has grown steadily over the past 10 years. The CAGR of healthcare expenditures was around 6.5% from 2002 through 2012. Healthcare expenditures rose from around Bt214 billion in 2002 to Bt402 billion in 2012. The growth was driven mainly by the public sector. After the introduction of the universal healthcare scheme in 2002, Thai citizens are covered by at least one of three public health protection schemes. The three schemes are the universal healthcare scheme covering 75% of the population, the social security scheme (16%), and the civil servant medical benefit scheme (8%). Because of the expanded coverage, government healthcare expenditures increased from around 63% of total healthcare expenditures in 2002 to around 75% in the past five years.

Currently, Thailand is considered an aging society because the population aged more than 60 years old accounted for more than 10% of the total population. The National Economic and Social Development Board (NESDB) estimated that number of people aged 60 years old or

higher will increase from 12% of the total population in 2010 to 18% in 2020 and 25% in 2030. The rising proportion of elderly will increase the demand for healthcare services from both the public and private sectors.

Chart 4: Thailand's Healthcare Expenditures

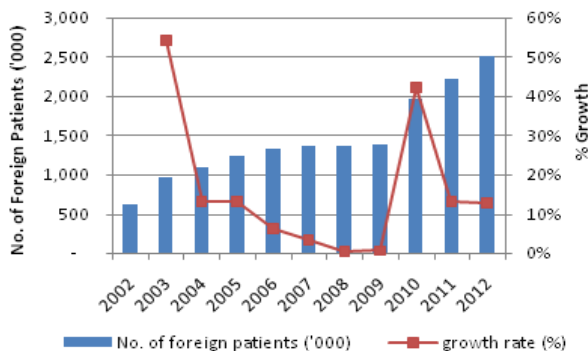


Source: National Economic and Social Development Board (NESDB)

■ **Good prospects in medical tourism**

Thailand is regarded as the most competitive destination for medical tourism, due to the availability of sophisticated medical care and treatments, lower costs, the service-minded attitude of Thai people, and the fact that Thailand is an attractive tourist destination. The private healthcare services available in Thailand have been widely accepted by foreign patients and international health insurance companies. The most popular medical services include health check-ups, cosmetic surgery, and dentistry.

Chart 5: No. of Foreign Patients Travelling to Thailand for Medical Services



Source: Department of Export Promotion, Ministry of Commerce

Over the past 10 years, the number of foreign patients in Thailand grew at a CAGR of 15%. However, the 2008 global financial crisis affected medical tourism. The number of foreigners traveling to Thailand for medical

services did not grow during 2008 and 2009. The number rebounded sharply in 2010. The Ministry of Public Health (MOPH) estimates that medical tourism generates around Bt140 billion towards national income, of which around Bt70 billion is from private hospitals. Most foreign patients are from Japan, the United States (US), the United Kingdom (UK), United Arab Emirates (UAE), Qatar, and Australia. The number of foreign patients from neighboring countries is also growing significantly, especially patients from Myanmar.

■ **Investments are continuing**

Due to the upcoming AEC in 2015 and the growing number of foreign patients, major Thai private hospital operators have prepared themselves by merging with each other, expanding their existing capacities, and diversifying their networks of hospitals. Thus, the amount of investment in this industry is expected to continue over the next two to three years. Some of the major investments, which have already been announced, are: BGH's plan to increase the number of hospitals under its umbrella from 31 hospitals to 50 hospitals within 2015, BH's plan to build a new 200-bed hospital on Phetchaburi road and expand its existing campus, and BCH's plan to invest in three more hospitals in Bangkok, Nonthaburi, and Chiang Rai. The total amount of capital expenditures (excluding maintenance capital expenditures) at these three major hospitals during 2013-2016 is expected to be around Bt30 billion.

■ **Shortage of healthcare personnel is a concern**

Thailand's healthcare industry is developing rapidly and it continues to expand. The extent of coverage, services offered, and health care spending in both the public sector as well as the private sector continue to rise. Currently, the healthcare system covers around 67 million Thai people and around 2-2.5 million foreign patients. Going forward, the market will expand to cover a larger base, taking into account potential customers from ASEAN countries after the opening of the AEC. According to World Health Statistics 2011, using the average values across 2000 to 2010, Thailand had only three physicians and 15 nursing personnel per 10,000 population. These figures are relatively low compared with developed countries and major ASEAN countries. Therefore, the shortage of healthcare professionals is a major concern. Currently, some private hospitals have had to import nursing personnel from the Philippines.

**Table 2: Health Workforce 2000-2010:
Average Density per 10,000 Population**

Country	Physicians	Nursing Personnel	Dentistry Personnel
Thailand	3.1	15.2	0.7
Singapore	18.3	59.0	3.2
Malaysia	9.4	27.3	1.4
United States	26.7	98.2	16.3
United Kingdom	27.4	103.0	5.2
Japan	20.6	41.4	7.4

Source: World Health Statistics 2011, World Health Organization

BUSINESS ANALYSIS

BGH's solid business profile reflects its strong market position as the largest private hospital operator in Thailand. BGH's competitive strength reflects its large franchise network and the diversity of services provided, plus its enhanced customer base, and geographic diversity.

▪ Largest private hospital operator in Thailand

BGH has the large franchise hospital network, covering 31 hospitals located in several parts of Thailand. BGH's customer base is wide, as it targets medium to premium local and foreign patients in various locations. Including the patients from the Phyathai and Paolo hospital groups, BGH's customer base has extended into the social security and civil servant segments. BGH's diversified customer base help stabilize its operating performance. BGH has gradually become less dependent on revenue from BMC. Revenue from BMC, as a percentage of total revenue, declined from 31% in 2010, to 22% during 2012 through the first half of 2013.

Going forward, BGH plans to expand its hospital network both in Thailand and in neighboring countries. The company plans to add 20 more secondary care hospitals and tertiary care hospitals during the next three years.

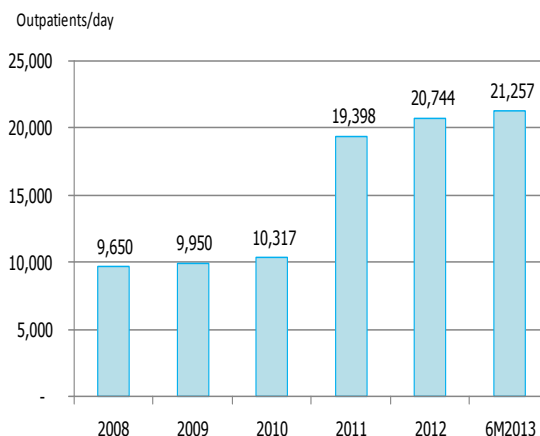
▪ Solid growth in patient volume

BGH's outpatients visit per day and the average daily census each grew at a CAGR of 6% from 2006 through 2010. After the mergers with Phyathai Hospital Group and Paolo Memorial Hospital Group in 2011, BGH's outpatients visit per day and the average daily census increased substantially. Outpatient visits per day for the first six months of 2013 was 21,257 persons, up from 10,317 persons in 2010. The average daily census jumped to 2,941 patients for the first half of 2013, compared with 1,499 patients in 2010.

The revenue from outpatients grew by over 29% y-o-y in 2012, and by 12% y-o-y for the first half of 2013. Inpatient revenue increased by 26% y-o-y in 2012, and by 12% y-o-y for the first half of 2013. The growth came from almost all BGH's network hospitals. Of all BGH's

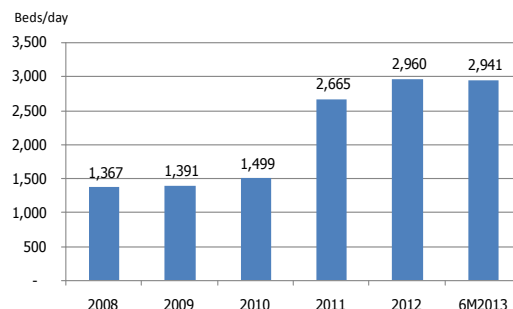
hospitals, the hospitals in eastern and southern areas of Thailand, e.g., BRH, BHH, BHN, and SSH grew most rapidly at an annual rate of more than 15%.

Chart 6: BGH's Outpatient Visits Per Day



Source: BGH

Chart 7: BGH's Average Daily Census



Source: BGH

▪ Well-established brands and high service quality

Bangkok Hospital, Samitivej Hospital, BNH Hospital, Phyathai Hospital, and Paolo Memorial Hospital are five major domestic brands under BGH's umbrella. These major hospitals are well-known among Thai patients because of their strong medical teams and the high-quality services offered at each hospital. By combining BGH's five major groups of hospitals, BGH will have the largest pool of physicians, nurses, and clinical staff in the industry. In 2013, BGH has 8,827 numbers of doctors and about 6,000 nurses across its network of hospitals.

BGH also has the strong referral network in Thailand. Most of the physicians in the major hospitals have obtained board certifications in their specialties. BMC's clinical staff are well-recognized for their skill in cardiology, cancer, and neurology. SVH specializes in kidney, liver, and bone marrow transplants, while SNH is well-known as a children hospital and teen center. BNH specializes in joint and spine care and infertility. BNH is able to attract a lot of

foreign patients and people working in the surrounding area. Hospitals like BPH, BPK, and BKH are positioned as tertiary care centers in the eastern, southern, and northeastern regions, respectively.

▪ **Experienced management team**

BGH's management team has more than a decade of experience in the healthcare industry. The competence of the management team has allowed BGH to maintain its market-leading position. The management team has a proven track record in making successful investments, as well as mergers and acquisitions. The team also has proven its ability to plan and execute its strategy. The success of their efforts is evidenced by improvement in operating performance of several hospitals acquired by BGH.

▪ **Expanded its network nationwide**

BGH has expanded its network of hospitals nationwide and is preparing the medical resources needed for its new hospitals and for the AEC. The company has a target to increase the number of hospitals in its network from 31 hospitals to 50 hospitals during the next two years. Number of total beds across its network will rise to 7,000 beds.

Table 3: Hospitals Opening During 2014-2015

	Hospitals	Total Beds	1 st Phase	Project Details	Commission Date
1.	Royal Phnom Penh Hospital, Cambodia	104	40	Basic tertiary care hospital targeting Cambodian and expatriates	1Q2014
2.	Bangkok Hospital Chinatown	58	18	Basic tertiary care hospital aiming to tap into affluent ethnic Thai- Chinese residents	1Q2014
3.	Deebuk Hospital (Bangkok Hospital Phuket 2)	100	20	Secondary care hospital targeting middle income patients	1Q2014
4.	Bangkok Hospital Khon Kaen	120	50	Basic tertiary care hospital targeting patients living in Khon Kaen and neighboring provinces	1Q2014
5.	Bangkok Hospital Chiangmai	185	21	Hub tertiary care hospital targeting Thai & international patients	Mid 2014
6.	Sri Rayong Hospital (Soonthornphu Hospital)	195	25	Secondary care hospital targeting middle income patients	Mid 2014
7.	Jomtien Hospital (Bangkok Hospital Pattaya 2)	250	100	Secondary care hospital targeting middle income patients	Mid 2015
8.	Samitivej Chonburi Hospital	220	100	Basic tertiary care hospital targeting patients living in Chonburi	2015
9.	Paolo Rangsit Hospital	150	100	Secondary care hospital targeting middle income patients living in Rangsit and Pathum Thani area	2015

Source: BGH

BGH plans to have its medical hubs in each part of Thailand. Currently, BGH has Bangkok Phuket Hospital as its medical hub in the south, while Bangkok Pattaya

Hospital is the medical hub in the eastern part of Thailand. BGH will add more medical hubs in the northern and northeastern regions by constructing two new hospitals: Bangkok Hospital Chiang Mai and Bangkok Hospital Khon Kaen, respectively. In addition, BGH plans to widen its customer base by adding more secondary care hospitals. By adding more secondary care hospitals, BGH can reach more patients at a lower investment cost. BGH's larger patient base will benefit the company in terms of cost effectiveness. In addition, these secondary care hospitals will network with BGH's medical hub hospitals in each region.

FINANCIAL ANALYSIS

BGH's financial profile is characterized by strong growth in revenue, increasing operating cash flow, and acceptable liquidity. A larger base of customers brings good prospects in terms of revenue, cash flow, and profitability. These strengths are partly mitigated by the large capital expenditures required for its expansion efforts.

▪ **Strong revenue growth is expected to continue**

BGH's financial profile is underpinned by its solid revenue growth and large revenue base. Revenue from hospital operations grew at a CAGR of 14% during 2007-2011. Revenue from hospital operations grew by 26% y-o-y to Bt44,307 million in 2012, partly due to the full consolidation of revenue from PYT and Paolo. Revenue for the first six months of 2013 was Bt23,555 million, up by 12% from the same period of the previous year. The rise was mainly due to the growth in patient volume across its network hospitals, rising prices for healthcare, and rises in severity of disease.

Onward, BGH's revenue is expected to continue to grow at a strong growth rate. For the next three years, TRIS Rating's base case expects BGH's revenues will range between Bt50-Bt70 billion per annum, with an annual growth rate of 10%-13%. The growth drivers are the opening of its new hospitals and strong growth in patient volume across its hospital network.

▪ **Margin dropped slightly**

BGH's operating margin (operating income before depreciation and amortization as a percentage of revenue) has been relatively stable, ranging from 22%-22.5% during the last three years. In the first half of 2013, the operating margin slightly dropped to 21.0%. The decline in the operating margin was largely due to higher expenses for doctors, clinical staff, and administrative expenses.

Currently, BGH is preparing its healthcare resources for its new hospitals and for the effects of the upcoming AEC implementation. Under TRIS Rating's base case, BGH is

expected to keep its operating margin at around 20%-21% over the next three years.

Going forward, BGH is expected to achieve economies of scale and have cost saving from improvements in asset utilization and shared services within the group. In addition, an expansion in the non-hospital segment which offers higher return will help improve BGH's profit margin in the medium term.

▪ ***Strong cash flow supports liquidity profile***

BGH's ability to generate cash is now stronger. FFO climbed from Bt6,772 million in 2011, to Bt8,819 million in 2012, and stood at Bt4,676 million for the first half of 2013. The FFO to total debt ratio was relatively stable, ranging from 40%-44% during 2010-2012. The ratio at the end of June 2013 was 39.5%, based on the trailing 12 months. The EBITDA interest coverage ratios improved from 10 times in 2010, to 14 times in 2012, backed by BGH's growing earnings.

BGH is expected to generate Bt10,000-Bt13,000 million in FFO per annum during 2014-2016 as a result of large network and strong growth in patient volume. BGH

has about Bt2,000-Bt4,000 million of debts maturing each year during 2014-2016. The level of FFO is sufficient to service the debt obligations which will be due over the next 12 months.

▪ ***Large investments raise leverage***

Due to the investment in new hospitals and affiliate companies, BGH's total debt rose from Bt16,792 million at the end of 2011 to Bt23,328 million as of June 2013. However, the debt to capitalization remained relatively stable at about 34% per annum during 2011 and 2012 because BGH has strong earnings growth and carefully manages its capital structure. The ratio rose to 37.2% at the end of June 2013.

During the next three years, BGH plans to spend about Bt10,000-Bt12,000 million per annum in maintenance capital expenditures and the network expansion. Thus, BGH's debt level is expected to rise to accommodate its future capital expenditure requirements. However, with its strong earning growth, the company is expected to keep its debt to capitalization ratio lower than 40% during the next three years.

Financial Statistics and Key Financial Ratios*

Unit: Bt million

		----- Year Ended 31 December -----				
	Jan-Jun 2013	2012	2011	2010	2009	2008
Sales and services	24,179	45,478	36,234	23,734	21,752	21,348
Gross interest expense	458	849	770	584	641	647
Net income from operations	3,164	6,142	3,907	2,295	1,725	1,662
Funds from operations (FFO)	4,676	8,819	6,772	4,436	4,059	3,893
Capital expenditures	3,862	5,791	3,560	1,192	1,496	1,976
Total assets	73,327	68,461	58,792	32,197	30,359	27,931
Total debts	23,328	19,916	16,792	10,751	12,256	11,440
Shareholders' equities	39,330	38,387	33,417	16,283	14,747	12,988
Operating income before depreciation and amortization as % of sales	21.0	22.5	22.2	22.2	22.2	22.2
Pretax return on permanent capital (%)	20.4 **	16.3	16.5	13.9	11.6	12.8
Earnings before interest, tax, depreciation, and amortization (EBITDA) interest coverage (times)	13.0	13.9	11.8	10.1	8.2	8.1
FFO/total debt (%)	39.7 **	44.3	40.3	41.3	33.1	34.0
Total debt/capitalization (%)	37.2	34.2	33.4	39.8	45.4	46.8

* Consolidated financial statements

** Annualized with trailing 12 months

TRIS Rating Co., Ltd.

Tel: 0-2231-3011 ext 500 / Silom Complex Building, 24th Floor, 191 Silom Road, Bangkok 10500, Thailand www.trisrating.com

© Copyright 2013, TRIS Rating Co., Ltd. All rights reserved. Any unauthorized use, disclosure, copying, republication, further transmission, dissemination, redistribution or storing for subsequent use for any purpose, in whole or in part, in any form or manner or by any means whatsoever, by any person, of the credit rating reports or information is prohibited. The credit rating is not a statement of fact or a recommendation to buy, sell or hold any debt instruments. It is an expression of opinion regarding credit risks for that instrument or particular company. The opinion expressed in the credit rating does not represent investment or other advice and should therefore not be construed as such. Any rating and information contained in any report written or published by TRIS Rating has been prepared without taking into account any recipient's particular financial needs, circumstances, knowledge and objectives. Therefore, a recipient should assess the appropriateness of such information before making an investment decision based on this information. Information used for the rating has been obtained by TRIS Rating from the company and other sources believed to be reliable. Therefore, TRIS Rating does not guarantee the accuracy, adequacy, or completeness of any such information and will accept no liability for any loss or damage arising from any inaccuracy, inadequacy or incompleteness. Also, TRIS Rating is not responsible for any errors or omissions, the result obtained from, or any actions taken in reliance upon such information. All methodologies used can be found at http://www.trisrating.com/en/rating_information/rating_criteria.html.