

**RELATIVES VALUATION OF  
CHULARAT HOSPITAL PUBLIC COMPANY LIMITED**



**A THEMATIC PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF MANAGEMENT  
COLLEGE OF MANAGEMENT  
MAHIDOL UNIVERSITY**

**2016**

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entitled  
**RELATIVES VALUATION OF  
CHULARAT HOSPITAL PUBLIC COMPANY LIMITED**

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RELATIVES VALUATION OF CHULARAT HOSPITAL PUBLIC COMPANY  
LIMITED

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**ABSTRACT**

This thematic paper aims to value the stock price of Chularat Hospital Public Company Limited (CHG) by using the relative valuation method, the method with using multiples and benchmarks to determine company value, i.e. EV/EBITDA, PER, and PBV. The multiples come from the projection of financial statement which all data given by the Chularat 's investor relationship (IR) and analysis meeting. Forecast for CHG following the guidance of capacity expansion and good management in cost structure. Main drivers are both internal and external factors namely the revenues expansion as its hospital phrase continue to build up, strong growth momentum of global health trend trend and continued growth of international patient arrivals to Thailand.

By using the relative valuation methods, the target price of CHG at the end of 2016 is 2.24 THB per share, compared to current price as of December 2, 2016 at 2.82 THB, the downsize is at 20%. With many supportive factors, the strongly recommendation for CHG is HOLD.

KEY WORDS: CHG/ Healthcare/ Hospital/ Relative Valuation/ Peers

68 pages

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## LIST OF ABBREVIATIONS

ACI	Advancing Care Information, also see meaningful use
AEC	ASEAN Economic Community
AML	Anti Money Laundering
AML/CFT	anti-money laundering and combating the financing of terrorism
ASEAN	Association of South East Asian Nations
BDMS	Bangkok Dusit Medical Services
BOT	Bank Of Thailand
BS	Balance Sheet
CAH	Critical Access Hospital
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditure
CBD	Central business district
CFR	Code of Federal Regulations
CHG	Chularat Hospital PLC
CG	Corporate Governance
CLMV	Cambodia, Laos, Myanmar, and Vietnam
COGS	Cost Of Goods Sold
CSR	Corporate Social Responsibility
D/E	Debt to Equity
DCF	Discounted Cash Flow
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings before interest, taxes, depreciation, and Amortization
EPS	Earnings per share
EU	European Union
EV	Enterprise Value
FY	Fiscal year

## LIST OF ABBREVIATIONS (cont.)

GDP	Gross domestic product
GP	Gross profit
IMF	International Monetary Fund
IOD	Thai Institute of Directors
IPD	In Patient Department
IPO	Initial public offering
IRR	Internal Rate Of Return
IS	Income Statement
L/T	Long Term
Market Cap.	Market Capitalization
MB	Million Thai Baht
MEI	Medicare Economic Index
MIRR	Modified Internal Rate Of Return
MLR	Minimum Loan Rate
MoM	Month over Month
NPV	Net Present Value
OPD	Out Patient Department
PBV	Price to Book Ratio
PER	Price to Earnings Ratio
PHS	Public Health Service
PP&E	Property, Plant And Equipment (PP&E)
ROA	Return on Assets
ROE	Return on Equity
S/T	Short Term
SD	Standard deviation
SEC	Securities and Exchange Commission of Thailand

**LIST OF ABBREVIATIONS (cont.)**

SET	Stock Exchange of Thailand
SG&A	Selling, General & Administrative Expense
THB	Thai Baht currency
TMA	Transitional Medical Assistance
TP	Target Price
USD	United States dollar currency
WACC	Weighted Average Cost Of Capital
YoY	Year over Year
YTD	Year to date





## CHAPTER I VALUATION

### 1.1 Highlight

Date: December 2, 2016

Ticker: SET: CHG

Price: THB 2.82

Recommendation: HOLD

Target Price 2016F: THB 2.09

**Table 1.1** Financial summary

Historical Performance	CHG			Historical Performance	BDMS		
	2013A	2014A	2015A		2013A	2014A	2015A
<b>Liquidity ratio</b>				<b>Liquidity ratio</b>			
Current ratio	5.2	3.5	2.5	Current ratio	0.9	1.0	1.0
Quick ratio	5.0	1.9	1.2	Quick ratio	0.8	0.9	0.8
Cash conversion cycle	12	4	-25	Cash conversion cycle	-1	2	4
<b>Profitability ratio</b>				<b>Profitability ratio</b>			
Gross margin	35.8%	35.3%	34.5%	Gross margin	37.1%	37.2%	36.9%
Operating Profit margin	23.1%	22.1%	21.1%	Operating Profit margin	16.9%	17.8%	17.2%
Net Profit margin	18.4%	17.7%	16.9%	Net Profit margin	12.4%	13.2%	12.6%
ROA	18.3%	15.4%	15.8%	ROA	10.1%	10.0%	9.4%
ROE	22.1%	17.7%	18.7%	ROE	17.9%	18.5%	17.4%
<b>Operating performance ratio</b>				<b>Operating performance ratio</b>			
Total Asset Turnover	0.99 x	0.87 x	0.93 x	Total Asset Turnover	0.72 x	0.68 x	0.67 x
Fixed Asset Turnover	2.45 x	2.06 x	1.79 x	Fixed Asset Turnover	1.44 x	1.36 x	1.31 x
AR Turnover	6.39 x	7.50 x	16.28 x	AR Turnover	11.38 x	10.80 x	10.60 x
Inv Turnover	20.62 x	21.74 x	21.96 x	Inv Turnover	38.83 x	35.94 x	34.32 x
AP Turnover	5.81 x	5.92 x	5.73 x	AP Turnover	8.67 x	8.70 x	8.84 x
RCP	57	49	22	RCP	32	34	34
ICP	18	17	17	ICP	9	10	11
PDP	63	62	64	PDP	42	42	41
<b>Debt ratio</b>				<b>Debt ratio</b>			
D/E	0.002 x	0.01 x	0.03 x	D/E	0.53 x	0.64 x	0.53 x
Debt to capital	0.002 x	0.012 x	0.024 x	Debt to capital	0.30 x	0.34 x	0.29 x
Capital Leverage	1.21 x	1.15 x	1.18 x	Capital Leverage	1.78 x	1.85 x	1.86 x



**Figure 1.1** Stock Price

**Table 1.2** Market Profile

Market Profile	
52 Week Price Range(THB/Share)	2.42-3.16
Average Daily Volume(THB Mn)	139.48
Beta	1.25
Dividend Yield	1.2%
Share outstanding(THB Mn)	11,000
Market Capitalization(THB Mn)	31,020
Free Float	39.49%
Book Value per Share	0.28
Debt to Total Capital	0.29
Return on Equity	18.89%

**1.1.1 Fundamental and valuation are indicative of Hold:** Our recommendation is “HOLD” and wait with sign of management team. However, the current market situation is partly based on market uncertainty and capital outflow. CHG’s model is strong from view of fundamental analysis with satisfied liquidity volumes. Even though, the target price is slightly lower than the market price. We recommended HOLD rating with multiple methods, EV/EBITDA, based TP of THB 2.15 (Bloomberg Peer EV/EBITDA Average at 22.00x).

**1.1.2 Growth stock with decisive earnings:** The growth stage over 5 years with pattern remaining in the future due to the nature of healthcare industry with less elasticity on price change. From historical information, CHG remains profitable with competitive strategy

**1.1.3 Strong network to support long term growth:** CHG benefit from cost operation control together with the high growth in profit from macro environment. The benefits can be resource sharing and bargaining power of customers and suppliers with high barrier of entry in this business.

**1.1.4 Social security program might incur slow profit:** Revenue and profit portion from social security program should be concerned. Due to possibility of higher cost of medical services, the revenue from severe patients might not cover all cost. However, the price and service premium can be adjusted from time to time.

## **1.2 Business Description**

Chularat Hospital Public Company Limited was established in 1986 with the registered capital of 1,100 MB consisting of 5 subsidiary companies and having the hospital and clinics under Chularat group 13 places. The area of service operation covers Suvarnabhumi airport, Pravet, Ladkrabang, East Bangkok, Bang Phli, Bang Pa Kong, Gateway City in Chachoengsao and Prachinburi provinces. The target area covers Eastern area with approximately 5,000 outpatients per day in consistent with the aim to be one of the best private hospitals in East area, growing with the businesses and industries expansion in this area.

Chularat Hospital also is aiming to provide best medical services with its clinical expertise, service capability and patient satisfaction with large investment in high technology medical equipment. In addition, Chularat Hospital focuses on qualified medical services and expertise leading to be accredited by Thai Hospital Accreditation – HA, and Chularat Hospital 3 under Chularat Group has been accredited by JCI (Joint Commission International) – the highest US standard accreditation.

**Table 1.3** Location and capacities

Medical Name	IPD Beds	OPD Rooms
Chularat Clinic Suvabhumi (Chularat 1)	26	5
Chularat 2 Medical Clinic	0	3
Chularat 3 Hospital	134	33
Chularat 4 Medical Clinic	0	3
Chularat 5 Medical Clinic	26	5
Chularat 7 Medical Clinic	0	1
Chularat 8 Medical Clinic	0	2
Chularat 9 Hospital	100	25
Chularat Arkanay medical clinic	0	0
Cholvaej Hospital	28	3
Chularat 11 Medical Clinic	100	22
Chularat Sa Kaew	0	2
Chularat 304 Clinic	0	2
Chularat 12 Medical Clinic	0	2
	414	108

Aiming to be the outstanding private hospital in east area, Chularat Hospital is in the concept “The Star of the East” and striving to be the leader in Tertiary care and recognized domestically and internationally with the goal of sustainable growth. Under the visionary management, Chularat Hospital is one of the leader medical services with concentration on patient focus, fair price and safety under the concept of The Star of the East, with market capitalization of THB 30,360 Million. From 2014 – 2015, the company can penetrate more clients on NHSO portion resulting to higher revenue from growing of number of clients under this scheme. Chularat Hospital finds a lot of opportunities to grow its business in the target area. However, Chularat Hospital has continuously developed chain hospital and network to serve the demand of community effectively and efficiently.

### 1.3 Macro-Economic Analysis

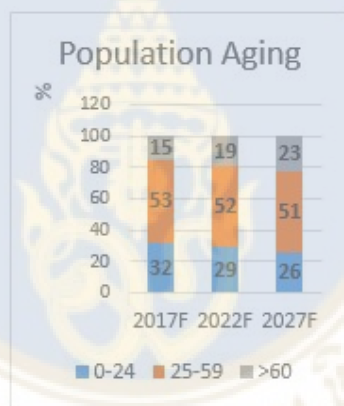
#### 1.3.1 Population aging is one of the key trends during the twenty-first century

Thailand has been one of the most successful countries in bringing down the fertility level within a short period of time. Total fertility rate has declined from over 6 births per women in 1960s to below 2 in the mid of 1990. In the mean time life expectancy at birth has increased from 55.2 to 69.9 years for men and 61.8 years to 74.9



years for women. As a result of past expectancy at birth has increased from 55.2 to 69.9 years for men and 61.8 years to 74.9 years for women. As a result of past high fertility level, older population will be absolutely increasing in the short coming period.

Hence, the demand for healthcare service and medical treatment will upsurge and the business can grow much further because the society gets news quickly through social media. People put more serious on health condition. The elder population will be around 15% of total population in 2017 and 19% in 2022. Apart from older population, working age people 30-60 year are also the result of past high fertility rate. Chularat Hospital focus on clients from working adults from the industrial estate over the eastern region because the company has been continuously penetrating this group and it counted for 49% of total revenue in FY 2015 under SSO and NHSO scheme. The trend has been stable over a period of time.

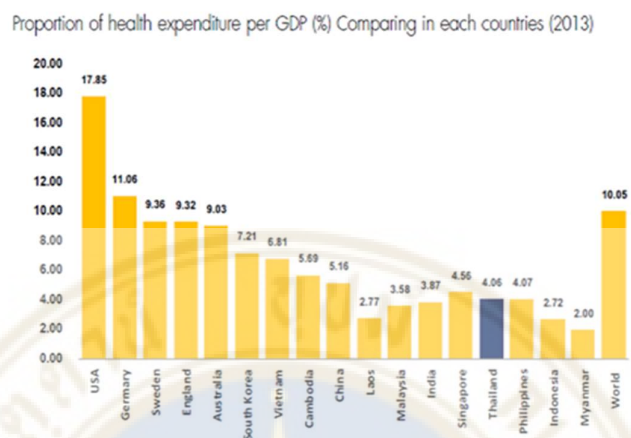


**Figure 1.2** Population Aging

### **1.3.2 The proportion of health expenditures is lower than other countries.**

The proportion of overall health expenditures (both the government spending and the private expenditures) of various countries comparing to GDP, the comparison showed that Thailand has 4.06 percent which is lower than the average of all countries (10.05 percent) and lower than other Asian countries countries (except Indonesia and Myanmar, which accounted for 2.72 percent and 2.0 percent, respectively). The government has a policy to encourage public access to health services

and nowadays the health trend is coming, resulting in the increase of health awareness and its expenditures.



**Figure 1.3** Health Expenses / GDP

## 1.4 Industry Analysis

### 1.4.1 The Healthcare Index remains a strong and consistent pattern

The historical Healthcare Index from 2013 – 2016 shown a rapidly rising starting from Year 2013 with Total Index Return (TRI) of 51,543.10 to 114,818 in Year 2016. Percentage change in 2013 showing in 9.84 into year 2016 of 12.04. Thus SETHEATH has been out performed in stock market since year 2013.

## Historical Indices

[Favourite Stock](#)
[Favourite Query](#)



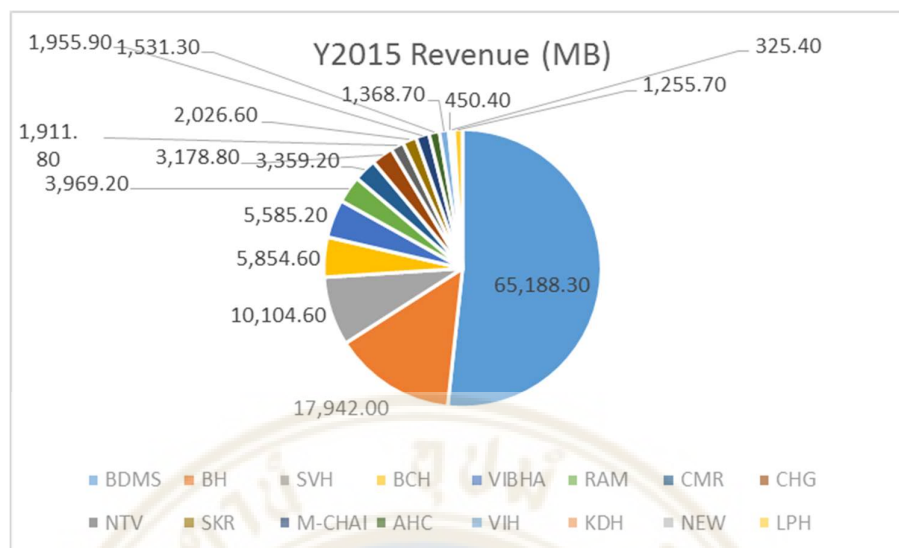

Sector: -- HELTH   
 Display: Highlight   
 Period: Yearly  Year: 2013  To: 2016

ITEMS	2016		2015		2014		2013	
	Jan - 06 Dec	%Chg	Jan - Dec	%Chg	Jan - Dec	%Chg	Jan - Dec	%Chg
<b>Trading</b>								
<b>Price Index</b>								
Close	5,838.18	+10.38	5,289.04	+29.97	4,069.45	+48.33	2,743.51	+8.23
High (Close)	5,957.03	+12.63	5,289.04	+16.91	4,523.90	+24.11	3,645.13	+41.57
Low (Close)	5,075.81	+22.90	4,129.87	+59.63	2,587.19	+2.21	2,531.24	+58.65
Value/Day (M.Baht)	1,704.65	+100.29	851.11	+15.37	737.72	-1.12	746.04	+17.33
<b>Total Return Index (TRI)</b>								
Close	114,818.00	+12.04	102,480.15	+31.80	77,753.93	+50.85	51,543.10	+9.84
High (Close)	116,454.19	+13.64	102,480.15	+18.60	86,406.53	+26.56	68,272.44	+43.32
Low (Close)	98,405.89	+24.71	78,908.21	+62.34	48,606.30	+3.73	46,856.79	+61.34

**Figure 1.4** SET SMART total return healthcare sector indices (2013-2016)

#### 1.4.2 Number 6 in ranking of Healthcare Sector Market share reaffirms strong fundamental of Thailand's Healthcare Industry

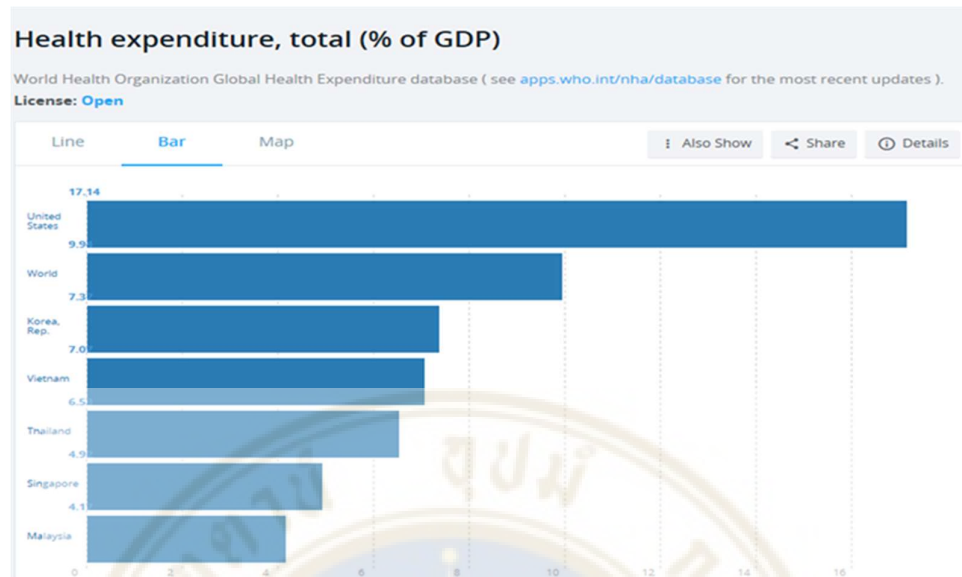
Below pie chart showing is contained market share in revenue based on year 2015, data set is from stocks which are listed in healthcare stock market. The majority market share who takes part in this sector is Bangkok Dusit Medical Services- BDMS (52% of market share), the second is Bamrungrad Hospital PLC - BH (14% of market share), the third market share Samitivej hospital -SVH (8% of market share). Chularat Hospital (CHG) is ranked in No.6 of market share with revenue on year 2015 - 3,178.80 million baht.



**Figure 1.5** Healthcare Market Share on Revenue Based

### 1.4.3 The effects of healthy trend, cheaper treatment fee and AEC: Thailand's experience

Due to the Healthcare Industry has played the important role of Thai economy. Nowadays people are concerned of their health in many ways as a result they are seeking advice from nutritious or even go for health check-up in order to be health and keep fit. Cheaper treatment fee Thailand has 4.9% of GDP compares to word 7.3%, South Korea 7% Vietnam 6.5% of GDP. Recently Thailand government policy is also escalate Thailand to be a medical Hub in Asia.



**Figure 1.6** Healthcare Expenditure per GDP (%) comparing with others countries (Year 2014)

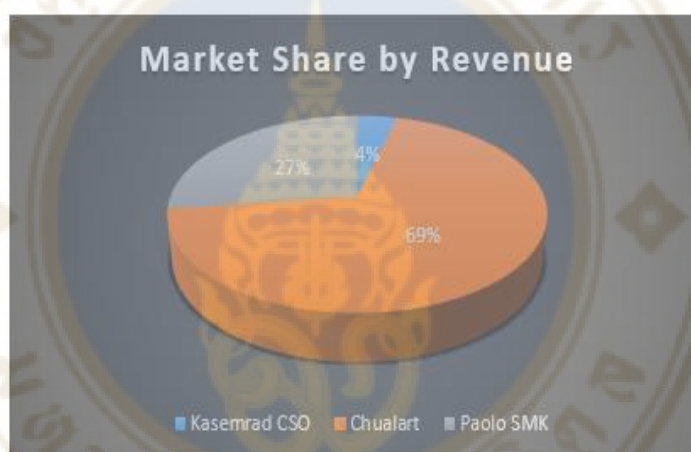
## 1.5 Competition Analysis

### 1.5.1 Mid-Tier market focus

Meanwhile in healthcare industry, Chularat Hospital has to compete with hospitals domestically. However, as a strong position of Chularat hospital as a moderate medical service provider with the limited numbers of direct competitors in the market segment (Mid-Tier market) and expanding continuously. Thus, it is another barrier for new entry to win over.

**Table 1.4** Competitors in the length of 10 kilometer length.

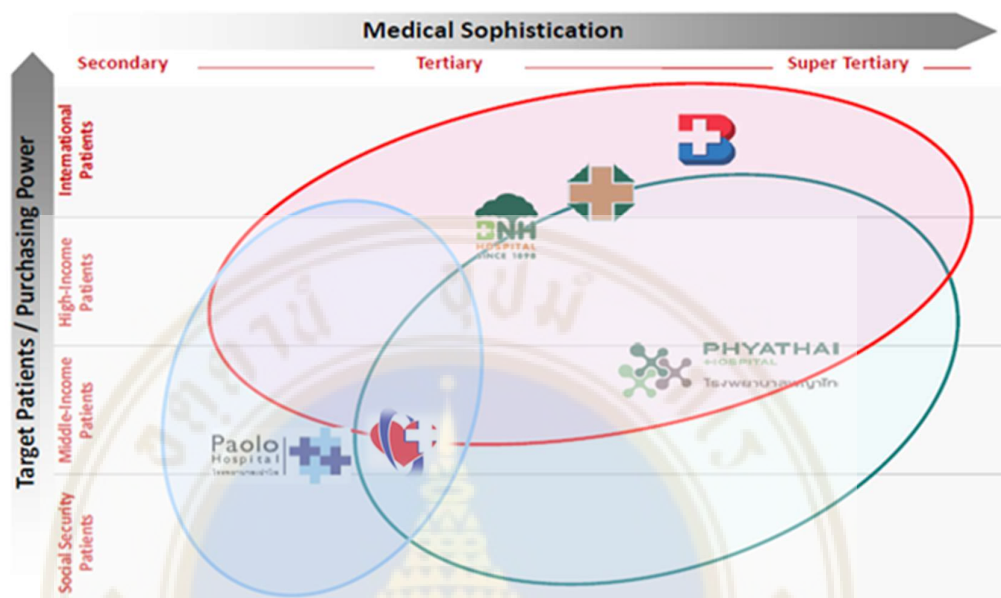
Chularat Hospital	Competitors	Location
Chularat 3	Piyamin Hospital	Samutprakarn
	Central Park Hospital	Samutprakarn
	Bangna 5 Hospital	Samutprakarn
	Paolo Memorial Samutprakarn Hospital	Samutprakarn
	Muengsamut Paknam Hospital	Samutprakarn
	Samrong Karnphat Hospital	Samutprakarn
Chularat 9	Thai Nakarin Hospital	Bangkok-Bangna Trad
	Bangna 1 Hospital	Bangkok-Bangna Trad
	Sikarin Hospital	Bangkok-Bangna Trad
Chularat 11	Ruamchai Pracharak Hospital	Samutprakarn
	Bangna 2 Hospital	Samutprakarn
	Kasemrat Chachoengsao Hospital	Chachoengsao
	Viparam Amata Hospital	Chachoengsao

**Figure 1.7** Year 2015 Market Shares by Revenue

In the domestic market, no matter what in term of sale revenue or in term of services, medical expenses, state-of-the-art medical equipment and the establishment of specialized medical center. Only Paolo Memorial Hospital & Kasemrad Hospital in the same level. Other private hospitals are much higher competitive.

Hereunder information given from Kasemrad Chachoengsao hospital and Paolo memorial Samutprakarn Hospital are registered in Bangkok Chain Hospital (BCH) and Bangkok Dusit Medical Services (BDMS) respectively. The best select leader to compare with Chularat Hosital is BDMS Largest private hospital operator in Thailand in terms of revenues from patient services and market capitalization.

## Diversification of Patient Mix










**Figure 1.8** Diversification of patient mix

### 1.5.2 Patient focus is what CHG management is focus on

Whereas BDMS as proven patient referral system and creating efficiency through scale: strong patient referral system within and across each hub and spoke, enhance synergies and benefits of scale among hospitals within the group, share supporting services among multiple hubs which enhance efficiency and competitiveness, established system provides a platform for future expansion.

At the mean time key drivers for CHG are location and patient focus: with the concept “The star of East” CHG has 13 facility places around the east area in purpose to fully serve patient in particular coverage area for example Suvarnabhumi, Prawet, Ladkrabang, King kaew, Bangplee, Prachinburi , Chachoengsao and Chonburi. In the other hand CHG patient focuses on Industrial Zone with clinic and specialized surgery in heart disease, stroke, neurosurgery, orthopedics, obstetrics & gynecology and more.



 Brand	No. of Hospitals	No. of Beds*
 Bangkok Hospital	20	3,136
 Phyathai Hospital	5	1,340
 Samitivej Hospital	5	1,195
 Paolo Hospital	5	960
 BNH Hospital	1	144
 Royal Hospital	2	130
Local Hospital	6	926

\* Maximum number of beds according to structure of the hospitals

Figure 1.9 BDMS brands with numbers of beds

## 1.6 Investment Summary

### 1.6.1 Decisively high earnings growth compared with industry peers resulted from competitive strategies.

CHG earnings has been continuously increasing with the smart strategies. They offer high quality of services with competing price to peer companies such as BCH. They have been expanding business to the potential areas with 3 hospitals and 7 medical clinics around Samutprakarn, East of Bangkok and Chachoengsao including Suvarnabhumi airport and industrial zones to penetrate potential target. Moreover, their network is strong to implement economies of scale with the following points

1. Medical equipment and tools are shared for usage within the network
2. Rotation system for inventory management
3. The company has medical experts to be circled within the group of hospital
4. The committee for procurement of medical equipment with best offer only.

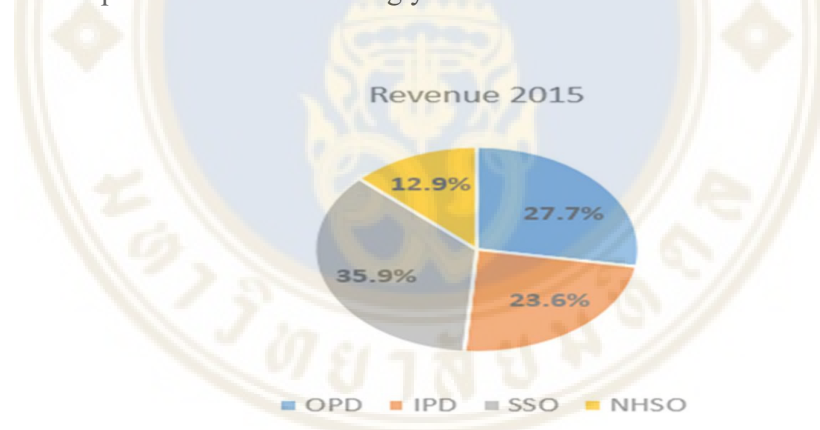
Our recommendation is HOLD.



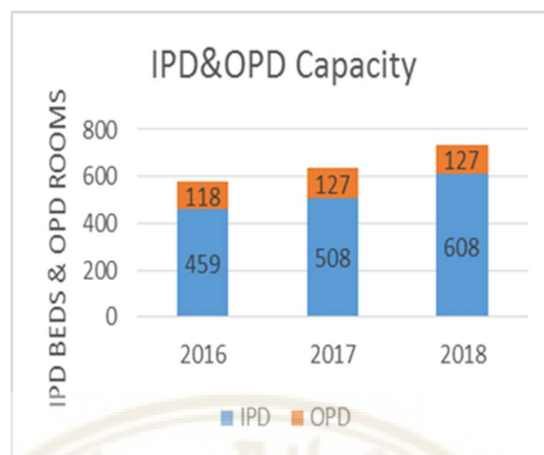
As a result of these positive factors, the company can go straight forward to the future goals with strong fundamental growth. Most importantly, the company enables diversification strategy of revenue from various groups of patients so that the drop in one group will not affect dramatically to the whole revenue of the company. It results to the average growth in the net income of 17% from 2013-2015.

### 1.6.2 Raising IPD and OPD beds will boost up revenue.

The company has long term plan to expand its capacity in both OPD and IPD- the most important group of patients as a cash patient. They will increase OPD beds from 101 beds in year 2015 to 127 beds in year 2017. In the meant time, the company also has been building new medical facilities to support potential patient's growth in the near future. IPD beds will almost doubly increase from 388 beds in year 2015 to 608 beds in year 2018 including Chularat3 expansion, new hospital located near Chularat9 hospital, new hospital 304 Prachinburi and Chonlavej hospital expansion. The revenue is expected to increase strongly overtime.



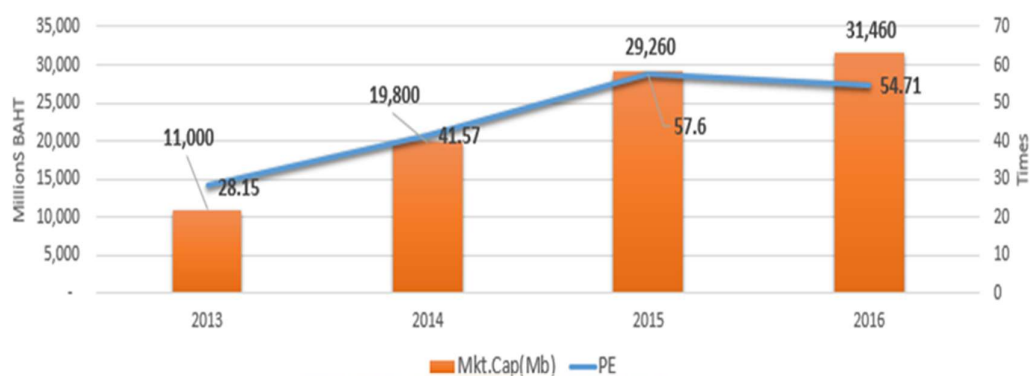
**Figure 1.10** Revenue portion Year 2015.



**Figure 1.11** Capacity Expansion

### **1.6.3 CHG has good corporate governance.**

The company focuses on shareholders' equitable treatment whether they are majority or minority in the list. There are many channels for minority of shareholders to put what they think that it is important in the annual ordinary shareholder's meeting. The company also realize in the importance of information disclosure so the company has set the policy of disclosing transparent, complete and reliable information to all shareholders. The company also makes segregation of duties for BOED and management clearly. The senior management will only be responsible for implementing business plan and company's policy while BOED is responsible for policy and oversight of the operations of the executive in policy, the independent directors possess one third of the BOED following the Securities and Exchange Act (No.4) B.E. 2551. In summary, the company follows rules and regulations of the Securities and Exchange Commission and Stock Exchange of Thailand.



**Figure 1.12** PE & Market Capitalization.

#### 1.6.4 Economic slowdown can't make a decline in the revenue.

From 2012 to 2015, the historical data said that even though Thailand faced the slowdown in GDP both from domestic or international factors, the revenue and net income of Chularat hospital never went down. It has been increasing up to present. This fact is resulted from smart vision and operation strategies supported by its strong hospital network.

### 1.7 Valuation: Multiple Valuation Model

We value CHG by using multiple valuation models refer to projection financial statement. The multiple valuation methods that would be described below are used to find the relative market value of the firm in order to value the indirect (or relative) price of the equity using key statistics that are assumed to relate to the value. For CHG, we choose 3 ratios; 1) Enterprise Value to Earnings before Interest, Taxes, Depreciation and Amortization (EV/EBITDA) ratio, 2) Price to Earnings (P/E) Ratio, and 3) Price to Book Value (PBV) with its peer.

#### 1.7.1 EV/EBITDA

##### 1.7.1.1 Trailing EV/EBITDA

To value CHG, we chose the multiple method as EV/EBITDA as priority. This method appropriates for the company with high investment cost, having huge amount of debt and low net profit (in case net losses as well). This valuation

method also considers earnings before deducting interest expenses, taxes, and depreciation. We used Bloomberg Peer EV/EBITDA Average at 22.90x as the multiple. Our assumption is CHG will grow in line with its peers. With CHG's THB 1,050 million EBITDA, we calculated the enterprise value at THB 24,035.35 million and the Target price for 2016F as THB 2.24 per share (Table 1.5).

**Table 1.5** Target Price, EV/EBITDA Trailing Method

Trailing EV/EBITDA	
<b>CHG - CHULARAT HOSPITAL PCL</b>	
EBITDA (2016F) (Units: million)	1,050
Bloomberg Peer EV/EBITDA Average	22.90
Enterprise Value (Units: million)	24,035.35
LT debt (Units: million)	91.30
Cash and cash equivalents (Units: million)	649.96
Market Cap (Units: million)	24,594
No. of Listed share (Units: million)	11,000.00
<b>2016 Target Price</b>	<b>2.24</b>

#### 1.7.1.1 Forward EV/EBITDA

To calculate we used Bloomberg Forward Peer EV/EBITDA Average at 22.00x as the multiple. Our assumption is CHG will grow in line with its peers. With CHG's THB 1,223 million EBITDA, we calculated the enterprise value at THB 26,906 million and the Target price for 2017F as THB 2.51 per share (Table 1.6).

**Table 1.6** Target Price, EV/EBITDA Forward Method

<b>Forward EV/EBITDA</b>	
<b>CHG - CHULARAT HOSPITAL PCL</b>	
EBITDA (2017F) (Units: million)	1,223
Bloomberg Peer EV/EBITDA Average	22.00
Enterprise Value (Units: million)	26,906.00
LT debt (Units: million)	73.03
Cash and cash equivalents (Units: million)	792.87
Market Cap (Units: million)	27,626
No. of Listed share (Units: million)	11,000.00
<b>2017 Target Price</b>	<b>2.51</b>

## 1.7.2 Price/Earning (PER)

### 1.7.2.1 Trailing PER

To calculate trailing PER of CHG, our group used the peer of hospital segment. From Bloomberg PER peer is at 35.89x We use that number as trailing PER Peer average. With 2016F net profit at THB 639.74 million and number of listed shares at 22,960.27 million shares, 2016F Target price is THB 2.09 per share (Table 1.7).

**Table 1.7** Target Price, PER Trailing Method

<b>Trailing PER</b>	
<b>CHG - CHULARAT HOSPITAL PCL</b>	
Net Profit (2016F) (Units: million)	639.74
Bloomberg PER Peers Average	35.89
Market Cap (2016F) (Units: million)	22,960.27
No. of Listed shares (Units: million)	11,000.00
<b>2016 Target Price</b>	<b>2.09</b>

1.7.2.2 Forward PER: for forward PER Peers average, our team used data from Bloomberg. With the net profit of THB 713.32 million, Bloomberg Forward PER Peers average at 36.50x and number of listed shares at 11,000.00 million shares, 2017F Target price is THB 2.37 per share (Table 1.8).

**Table 1.8** Target Price, PER Forward Method

Forward PER	
CHG - CHULARAT HOSPITAL PCL	
Net Profit (2017F) (Units: million)	713.32
Bloomberg Forward PER Peers Average	36.50
Market Cap (2017F) (Units: million)	26,036.18
No. of Listed shares (Units: million)	11,000.00
<b>2017 Target Price</b>	<b>2.37</b>

### 1.7.3 Price/Book (PBV)

#### 1.7.3.1 Trailing PBV

We used the data from Bloomberg, PBV peers average at 5.40x. Equity value in 2016F at THB 3,226.39 million and number of listed shares at 11,000.00 million shares, we got the 2016F target price of CHG at THB 1.58 per share (Table 1.9).

**Table 1.9** Target Price, Trailing PBV Method

Trailing PBV	
CHG - CHULARAT HOSPITAL PCL	
Bloomberg Trailing PBV Peers Average	5.40
Equity (2016F) (Units: million)	3,226.39
No. of Listed share (Units: million)	11,000.00
<b>2016 Target Price</b>	<b>1.58</b>

#### 1.7.3.2 Forward PBV

with Bloomberg Forward PBV peers average, equity value at THB 3,512 million and number of listed shares at 11,000.00 million shares, we got the 2017F TP at THB 1.85 per share (Table 1.10).

**Table 1.10** Target Price, Forward PBV Method

<b>Forward PBV</b>	
<b>CHG - CHULARAT HOSPITAL PCL</b>	
Bloomberg Forward PBV Peers Average	5.80
Equity (2017F) (Units: million)	3,512.00
No. of Listed share (Units: million)	11,000.00
2017 Target Price	<b>1.85</b>

In conclusion, we weighted 100% of Target Price on EV/EBITDA method, Target price of CHG is THB 2.24 per share, 20.00% downsize from the current price, and our recommendation on CHG is HOLD (Table 1.11).

**Table 1.11** Summary of CHG Target price

	Weight	Price
EV/EBITDA	100%	2.24
PER	0%	2.09
PBV	0%	1.58
2016 Target Price		<b>2.24</b>

## 1.8 Financial Analysis

### Key Highlights

#### Cost structure: Good management as key strength

CHG maintains its best efficiency in COGS to be stable around 66% of sales. The result is mainly based on 3 levels of medical treatment (Primary, Secondary and Tertiary) which helps the company to control its cost while SG&A has been maintained at 13% and tends to continue in this pattern. The bottom line can sustainably grow from year to year, showing the improvement of net profit.



**Table 1.12** Cost & Expense year 2013 – 2015.

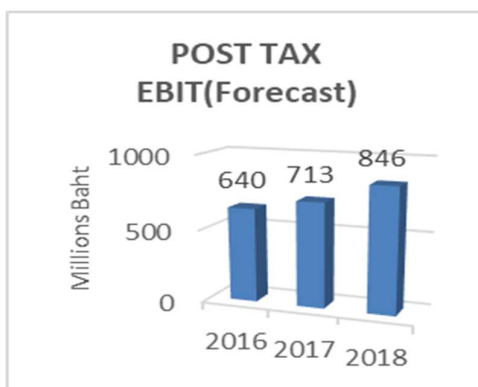
### Profitability and Efficiency Ratio tends to improve

With the continuing expansion of OPD rooms and IPD rooms, all margins are quite stable resulting from good management in cost control for both cost of services and SG&A. ROA and ROE have improved from year 2014 due to increase in total revenue and EBIT(1-T) from capacity expansion. In addition, ROE improves due to higher capital structure leverage in year 2015.

**Table 1.13** Margin Ratios year 2013 – 2015.

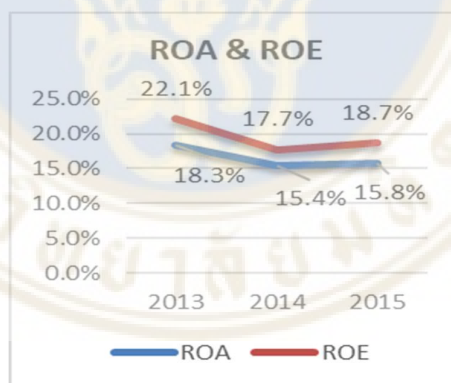
Margin	2013	2014	2015
Gross margin	35.8%	35.3%	34.5%
EBIT margin	23.1%	22.1%	21.1%
Profit margin	18.4%	17.7%	16.9%





**Figure 1.13** Forecast EBIT(1-T) on Year 2016 – 2018.

Total Asset Turnover shows improvement from 2014 to 2015 due to the fact that the company hold less amount of cash on hand for future construction purpose and lower accrued income from SSO project. AR turnover also improve a lot from year 2013 which helps CHG for more efficiency. However, we believe that Total Asset Turnover will approve in the next 3 years as expected higher performance of AR Turnover and Inventory Turnover in line with higher growth in total revenues.



**Figure 1.14** ROA & ROE Trailing

### Earnings

The company has planned for growth strategy by expanding more medical capacity to deal with target market. Its historical EPS was 0.41, 0.44 and 0.049 (Stock split). Due to successful strategic marketing plan and professional management, CHG has been performing well, and will continue this pattern in the next 3 years. Our

expected EPS would be 0.058, 0.065 and 0.077 from year 2016 to 2018. We believe in CHG strong operating performance.

### **Cash Cycle**

From 2013 to 2015, CHG has improved its operating cash cycle from 12.4 days to -25 days showing effective collection and credit policy to suppliers. They are showing the good working capital management. Moreover, CHG can manage its inventory to generate revenue with its effective turnover from 20.62x in 2013 to 21.96x in 2015.

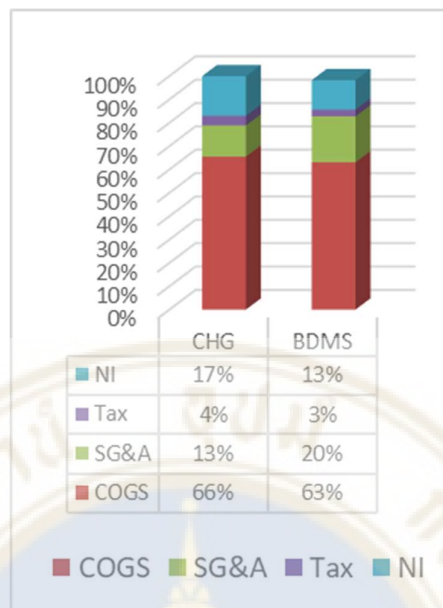
### **Balance Sheet**

From our point of view, the company has performed well in many aspects. First, CHG is able to manage account receivables more efficient leading to lower receivable collection period. Inventory is kept more but it is able to generate more revenue. Second, fixed assets and intangible assets tend to increase along with company's strategy. This is in line with high growth and profit company. Third, Account Payable increases as working capital and remain its turnover at stable point. Finally, the company has low interest bearing debt and higher retained earnings from net profit it generates each year despite stable dividend policy.

### **Common Size Analysis**

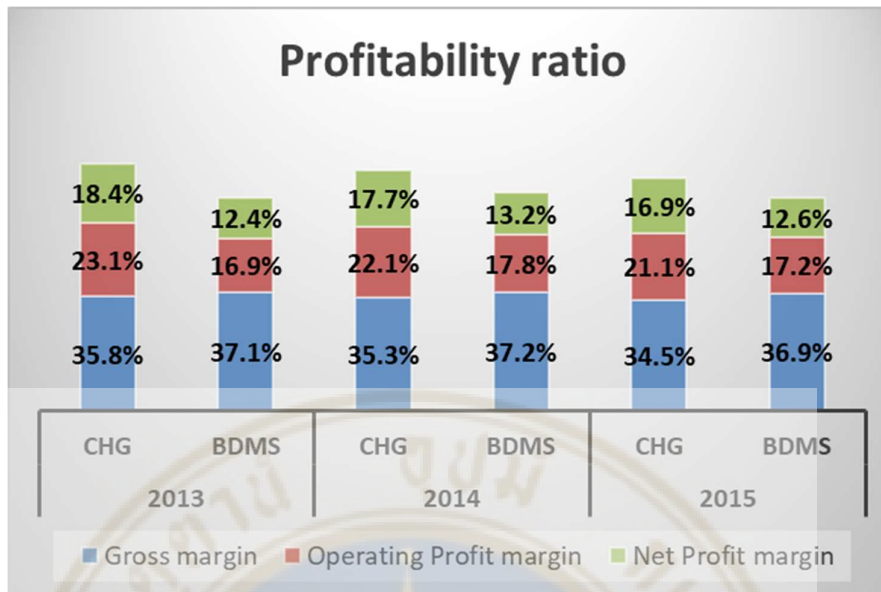
#### **1.8.1 Common Size Analysis of Income Statement**

The common size analysis to see which part is a major item in income statement, by scale each item as percentage base (100%). Cost of sales for CHG as at the end of 2015 accounted for 66 percent of sales which is higher than 63% of BDMS showing that BDMS has controlled cost management more effective. The lower percentage cost of sale means higher gross profit margin for BDMS. Selling and administrative expenses accounted for 13 percent as lower than BDMS. The bottom line of net income for CHG accounted for 17 percent which is higher than 13 percent of BDMS because CHG has lower SG&A and financial cost than BDMS which outpaces its peer in term of net profit margin



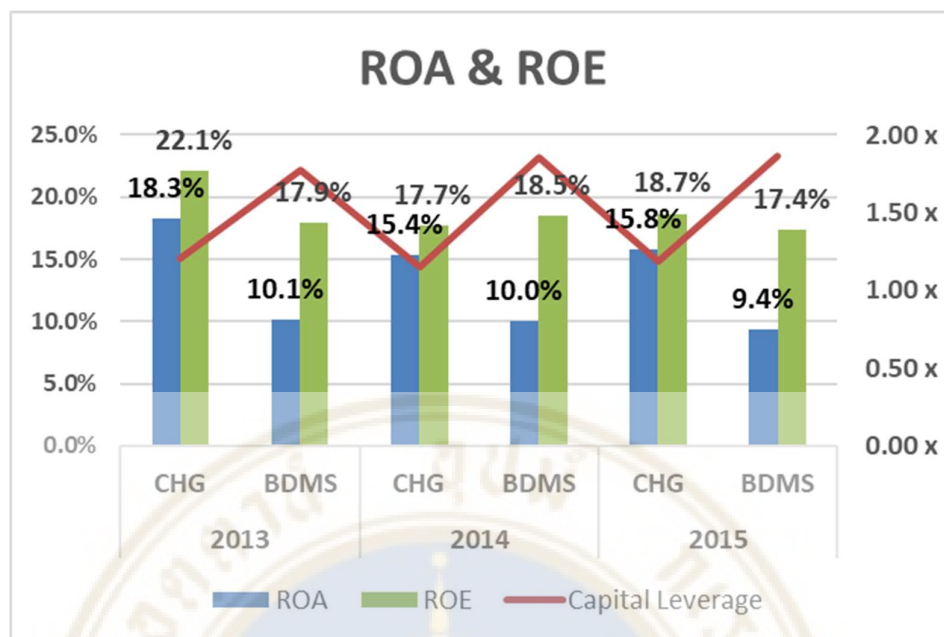
**Figure 1.15** CHG & BDMS Common Size Analysis in Income Statement

From 2013 to 2015, BDMS can show the better performance in term of cost control to generate total revenue, expressing the higher gross margin rate 37.1%, 37.2% and 36.9% than CHG. BDMS has larger size than CHG through M&A so they can achieve higher efficiency in term of resource management such as medical persons and equipment sharing. However, CHG can perform better operating profit margin and net profit margin due to lower SG&A expenses and financial cost.



**Figure 1.16** Profitability Ratio on Year 2013 – 2015

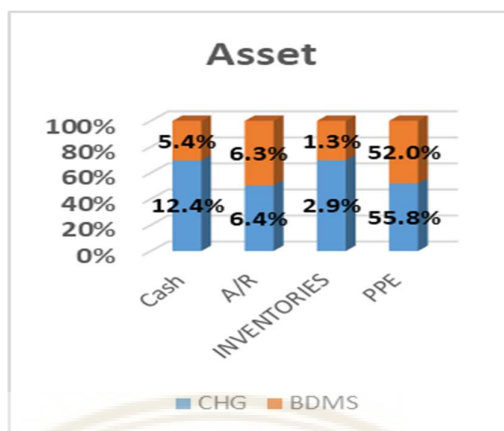
CHG has better ROA than BDMS in 3 Years comparison, meaning that they can generate return on asset with higher profitability. While BDMS has higher capital structure leverage, these two companies generate ROE in the sense that CHG can slightly perform better than BDMS. Even CHG is smaller than BDMS but the way they manage asset and generate profit is good.



**Figure 1.17** ROA & ROE comparison with competitor

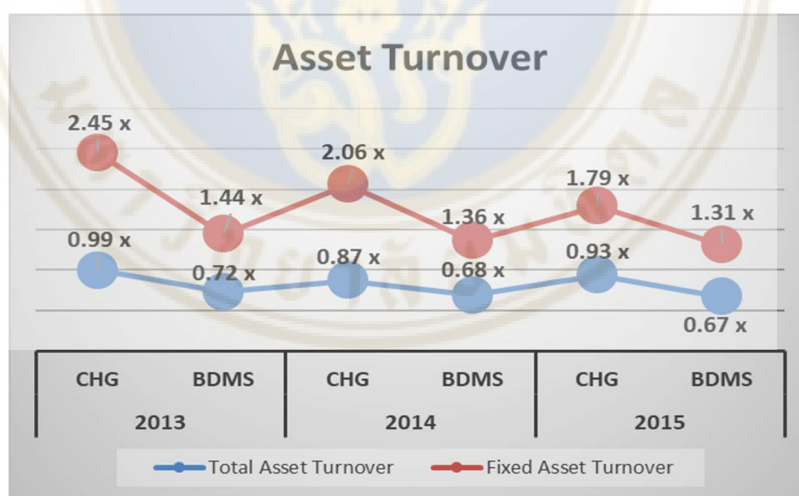
### 1.8.2 Common Size Analysis of Balance Sheet

In term of total asset base at end of 2015 position, Property, Plant and Equipment has accounted the major part in both CHG and BDMS 55.8 percent and 52 percent respectively. CHG investment in PPE takes the significant percentage of total asset as their aim to expand clinics and hospitals in the eastern part of Thailand. Cash and cash equivalent accounted only 12.4 percent of total asset while BDMS has lower cash holding at 5.4 percent. From the graph below we can imply that CHG loaded more on PPE, cash and inventories in which its current asset accounted for 38 percent more than 13.3% of BDMS.



**Figure 1.18** CHG & BDMS Common Size Analysis in Financial Statement of Position

Based on operating performance to use assets generating total revenue, CHG can better perform both fixed and total asset turnover than BDMS. One of the reason comes from the point that CHG has smaller size of assets which they can control the use of it more efficient.



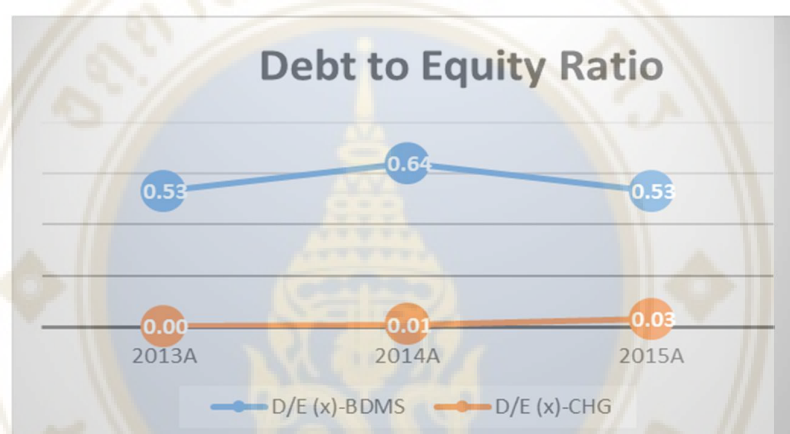
**Figure 1.19** Operating Performance Ratio – Asset Turnover

For Liabilities part, from Appendix 8, CHG's most portion is current liabilities at 91.4% while long term liabilities accounts only 8.6%. CHG is heavily financed by its working capital –AP. Compared to BDMS, its current liabilities is at

30.7% while long term liabilities accounts much higher at 69.3%. As a consequence of lower interest bearing debt, CHG has lower debt over BDMS.

For shareholder's equity, CHG has lower retained earning unappropriated than BDMS and CHG is heavily financed by equity part which accounted for 37 percent.

In addition, CHG illustrated the financial discipline in order to control capital structure to be not aggressive given debt-to-equity ratio at 0.03x in 2015. This was mainly due to CHG liked to have lower debt instruments to finance the overall operations and growth, in addition, its D/E ratio was extremely lower than peers which lied in the range of 0.53x to 0.64x for 2013 – 2015 (Figure 1.17).



**Figure 1.20** Compared D/E Ratio (Year 2013-2015)

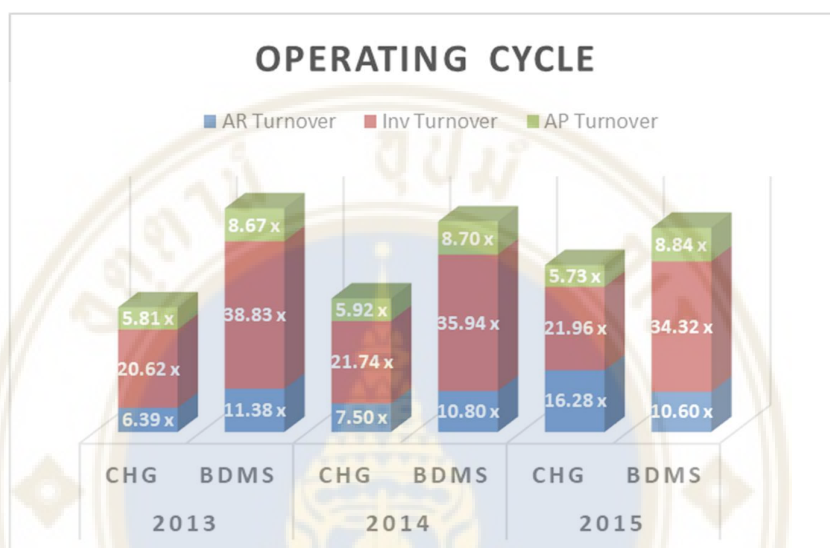
### 1.8.3 Cash flow and Debt Serviceability

According to historical cash flow statement, CHG is able to generate more cash from operation between 2013 to 2015, and continue to invest in medical capacity for future growth strategy. However, CHG also financed its activities by some debt borrowing. However, a negative cash flow from financing caused from dividend payment to shareholders showing its strong dividend policy.

CHG used both cash flow from operations and least L/T bank loans to finance the investment project as showing few in Debt to Equity ratio.

Looking down to working capital management –A/R, A/P and inventory: A/R – BDMS can collect money from patients quicker than CHG except year 2015 which CHG can do better. CHG handle a lot of national patient program which need to

wait for big lot turning receivable into cash. Inventory – BDMS can manage its inventory to generate total revenue more efficient than CHG. They have lower aging stock of drugs. A/P – BDMS as the market leader in health care business can negotiate payment to drugs, supplies and equipment suppliers to slow down payment while CHG can also perform well in negotiation to suppliers



**Figure 1.21** Operating Cycle (Year 2013-2015)

**Table 1.14** Cash Cycle (2013 – 2015)

Year	2013		2014		2015	
Company	CHG	BDMS	CHG	BDMS	CHG	BDMS
Cash Cycle (Days)	12	-1	4	2	-25	4

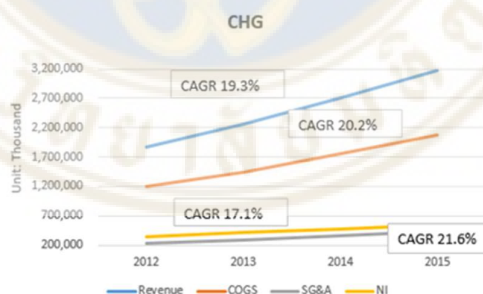
From the above table, CHG has been improving its cash cycle and beating BDMS in year 2015. However, BDMS at this point, is still showing good working capital management.



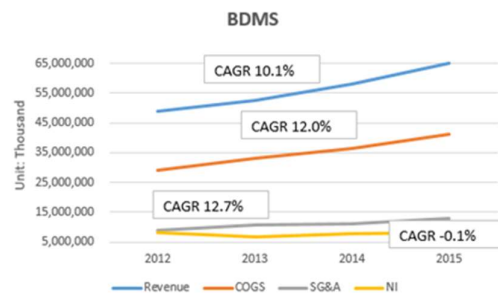
## Trend Analysis

### 1.8.4 Trend Analysis of Income Statement

Over the Four Year period since CY 2012 - 2015, CHG's revenue has grown with CAGR of 19.3 percent growth which considered higher than overall Thai healthcare industry growth compared with BDMS at CAGR 10.1%. The main contribution come from expansion in medical capacity which generated high growth for past 4 year. The growth in revenue trend from CY 2012 to 2015 was due to the marketing strategy and its competitive service price. Cost of services also had the similar trend with revenue at CAGR 20.2% which means CHG is able to control its cost of services and operation. SG&A similarity tends to move along with cost of services at CAGR 21.6% that we can understand regarding to high competition in healthcare industry. Compared with BDMS, its market leader which its revenue has been on the trend up in the past 4 years at CAGR 10.1%. BDMS has been growing by M&A primarily and after compared with CHG which was much smaller, CHG rapidly has grown at faster CAGR than BDMS mainly by the fact that CHG is targeting middle class patients which accounts for larger population than high end patient as BDMS. The demand for quality medical services with acceptable price has been increasing in the future.



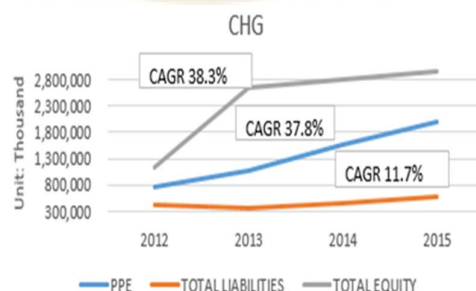
**Figure 1.22** CHG Income Statement Trend Analysis



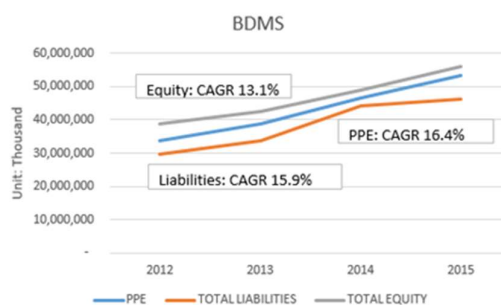
**Figure 1.23** BDMS Income Statement Trend Analysis

### 1.8.5 Trend Analysis of Balance Sheet

For the major trend changed in balance sheet, CHG's PPE has significant increased from around 759 mill THB to 1987 Mill THB in 4 years at CAGR rate of 37.8%. PPE is consisted of all buildings, OPD rooms, IPD beds and medical equipment which is in line with CHG's strategy to grow its business and be the leader in eastern part of Thailand. Liabilities has grown at CAGR rate of 11.7% mostly represented by Account Payable as their working capital. Last item is equity which has significantly increased in the past 4 years at CAGR rate of 38.3% mostly represented by its retained earnings and premium on share capital. The capital structure is heavily based on equity side which incurs high cost of equity and low interest cost and financial default risk. For BDMS, the asset trend has also increased at CAGR rate of 16.4% lower than CHG while total liabilities have grown at the higher rate of CAGR at 15.9% representing using more long term interest bearing debt (Figure 18). Please see more detail on common size analysis.



**Figure 1.24** CHG Balance Sheet Trend Analysis



**Figure 1.25** BDMS Balance Sheet Trend Analysis

## 1.9 Additional Upside Possibilities

All 3 hospitals in the company's own group are located in important industrial estates of Samut Prakan province and Chachoengsao province, and now the company has a plan to expand a service area into Chonburi province and Prachin Buri province. The mentioned areas have a lot of industrial employees, and from the past, there were continuously immigrants to these areas along with the growth of industry in the area, which benefits the company's business because there are more base patients, both in social security group and general patients. If the base patients are not increasing as expected, the company need to take times to get payback and recover investment.

## 1.10 Investment Risks

### 1.10.1 Macro-Economic risks

1.10.1.1 The outflow is directly related to the return of risk free Treasury Bills and US Government bonds. If the return of these assets is increasing, the price of debt securities is decreasing due to convexity and the capital is moving out from emerging market such as Thailand and influence Thai stock index. This is concerned about FED policy towards interest rate issue

### 1.10.2 Operation Risks

1.10.2.1 The risk of shortage of medical personnel Medical services have to rely on qualified healthcare personal in various fields. Currently the number of personnel is limited and the expansion of the medical business required qualified personnel with experience to join the company. The process will take time to develop their knowledge and skills, resulting in the Company might face the shortage of medical personnel in various fields in the future while the company has been expanding its business. However, the Company will offer appropriate compensation and benefits policies along with the atmosphere in the workplace to keep retaining people. In addition, the company also has training unit that provide training nursing assistants under the operation of the Chularat Inter Health to meet the needs of the company in the meanwhile.

1.10.2.2 The risk of competition in medical services business Currently medical services business tends to have intense competition as the major operators in the market do mergers and acquisition continuously with the synergy of costs advantages, and their service channels are various. New competitors have limit capacity to enter into the market caused from market share from existing operators and the lack of strong networks. Hence, this issue will create awareness of service competition and using pricing policies to attract customers. The impact of the terms of the AEC may result new competitors from the ASEAN countries to expand the scope of services to Thailand. These competitive factors may adversely affect the Company's operation and strategy.

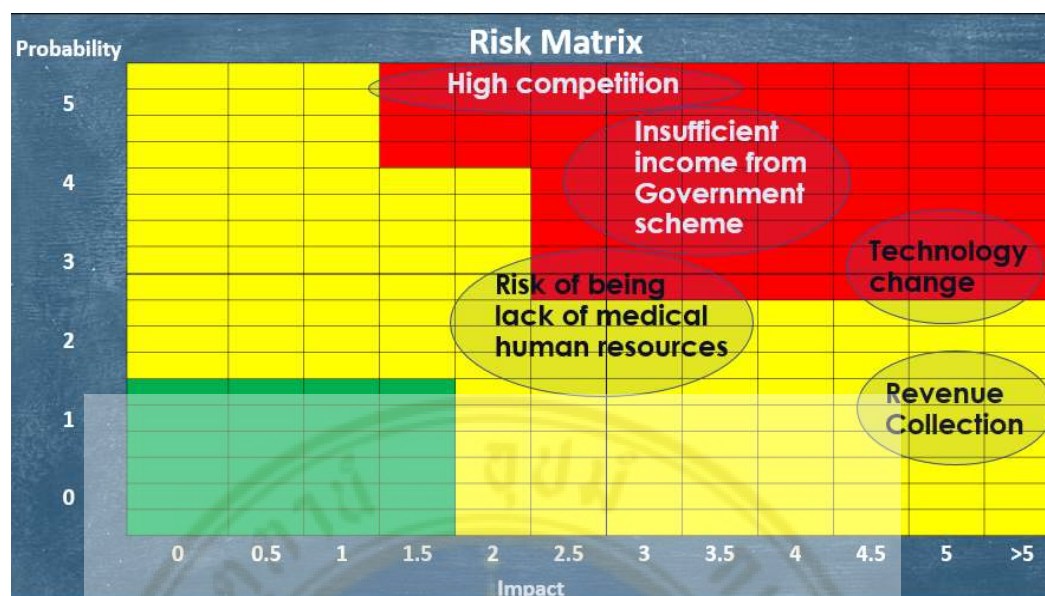
1.10.2.3 Moreover, the Company will face competition with other private hospitals located in a radius of about 10 kilometers from the Group. The area covers Bangkok in Prawet and Lat Krabang, Samutprakarn and Chachoengsao which many hospitals and healthcare services in the area would be the competitors. Consequently, the competition level is high. The company find the strategy to improve quality of services by being accredited by JCI and HA (Hospital accreditation) to differentiate itself from other competitors.

1.10.2.4 The risk of insufficient income to pay for the cost of actual medical treatment. In 2012, 2013, 2014 and 2015, the earning from Social Security accounted for approximately 44.0 %, 41.8%, 40.6% and 36.0% of revenue from

hospital operations, respectively. However, the participation in the Social Security program incurs risk due to the higher actual costs of medical care than the medical revenue from the Social Security program in which it is determined by government policy and the number of people registered with the company that can vary from the relocation of the people and the industrial plants. The income will also depend on statistics of providing services to risk patients and severe disease and high treatment costs patients. However, the company has a plan to counter the issue. The solution is to provide knowledge about hygiene, health and illness in the initial practice to these customers in Social Security program continuously. The Company also expand service clinics and affiliated hospitals to cure patients before severe symptoms occur. Consequently, the Company can reduce the risk of severe symptom that patients in the group will face which directly relate to the company's cost of medical services. This way helps a lot to control cost of medical services from such risky patients.

1.10.2.5 The risk of rapid change in technology for medical facilities. As the company focuses on more quality of services regarding the complexity of diseases, medical technology on equipment need to be upgraded, and technology itself goes fast. Risks might involve high maintenance cost and possibility of buying new modern equipment which initiates high cost of investment with short useful life

1.10.2.6 The risk of revenue collections. Apart from SSO and NHSO, patient will be medically treated before being issued an invoice as medical tradition. This tradition can cause the risk of being unable to collect revenue from patient. The company will inform updated cost of medical services to the patient's owner case from time to time. The company also has business unit to cover this specific area and try to find the solution with patient if there is any default case



**Figure 1.26** Risk Rating Matrix

The most important risk that the company needs to be concern;

1. High competition
2. Insufficient income from patients of government scheme
3. Being lack of medical human resources
4. Technology change in medical facilities
5. Revenue collection

## 1.11 Corporate governance

The company follows The Code of Best Practice for transparency to secure the confidence of shareholders, investors and all parties concerned. The principles cover 4 categories as follows:

### 1.11.1 The Rights of Shareholder

1.11.1.1 Shareholders have the right to propose important issues as an agenda in the annual general meeting of shareholders and also can nominate candidates with good knowledge, abilities and qualification in the position of the company's directors.



1.11.1.2 The Company sends invitation letters to shareholders in advance to inform them of the meeting agendas which include opinion of the Board of Directors on each agenda item, together with supporting documents and information sufficient to facilitate shareholders in making their decisions.

1.11.1.3 For shareholders unable to attend the meeting, they have the rights to authorize a person as their proxy for meeting and vote on their behalf.

1.11.1.4 The Company implements the barcode system for registration and the voting process, including the use of voting cards. This helps accelerate and ensure the accuracy of the registration and vote counting process.

1.11.1.5 Before going into each agenda, the Chairman of the Board of Directors, who acts as chairman of the meeting, assigns the Company Secretary to inform the meeting of the voting process for each agenda. During the meeting, the chairman of the meeting gives all shareholders the opportunity to comment, ask question or give opinions and suggestions on any agenda item. The Chairman and management see the importance of every question and give precise and clear answers.

1.11.1.6 The Secretary records minutes of the shareholders' meetings with details on voting results of each agenda. In addition, the minutes are sent to the Stock Exchange of Thailand and posted on the Company's website within 14 days after the meeting date.

### **1.11.2 The Equitable Treatment of Shareholders.**

1.11.2.1 The Company provides a channel for minority shareholders to propose issues deemed important and appropriate to include in the annual general meeting of shareholders and to nominate candidates with good knowledge, abilities and qualifications for the position of the Company's director.

1.11.2.2 For shareholders unable to attend the meeting, they have the rights to authorize a person as their proxy for meeting and allow shareholders to specify their vote on each agenda. The proxy forms provided are followed the ministry of Commerce, are sent with the invitation letter.

1.11.2.3 In the shareholders' meetings proceed, there are no adding new and uninformed agenda, in order to give the opportunity to shareholders to study the information on the given agenda before making decision.

1.11.2.4 The Company provides oversight and control to prevent improper use of inside information. In addition, directors and management of the Company must report the purchase or sale of the Company's securities to the Securities and Exchange Commission and the Company within three business days

### **1.11.3 The Role of Stakeholders**

The Company recognizes its responsibilities towards each stakeholder to sustain mutual benefits to stabilize business operations.

1.11.3.1 Shareholders: They have rights to check number of shares, rights to receive share certificates, right to attend and vote in shareholders' meetings, rights to express opinions independently at shareholders' meetings, and rights to receive fair returns. The Company provides equal and timely information to all shareholders, and the right to suggest and express their opinions independently on the Company's business and operations in shareholders' meetings.

1.11.3.2 Customers/Patients: The Company provides patient care in an ethical manner, and at the best possible quality. Safety, satisfaction and services' efficiency are highly concerned. The Company also has a department to take customer complaints, monitor and improve the quality of the services.

1.11.3.3 Employees: The Company gives all employees equal opportunity in their employment. The Company has the policy to provide employees with appropriate compensation and appoints a welfare committee to oversee the well-being and safety of its employees.

1.11.3.4 Suppliers/Contractors: The Company has a fair purchasing policy to all parties and ensure timely payment to all suppliers and contractors.

1.11.3.4 Creditors: The Company is committed to giving information with accuracy and transparency to creditors, for example, loan agreements and loan covenants with timely payments.

1.11.3.5 Competitors: The Company follows the rules and regulations, and treats competitors fairly with integrity. The Company focuses on competition based on the best benefit of customers and patients

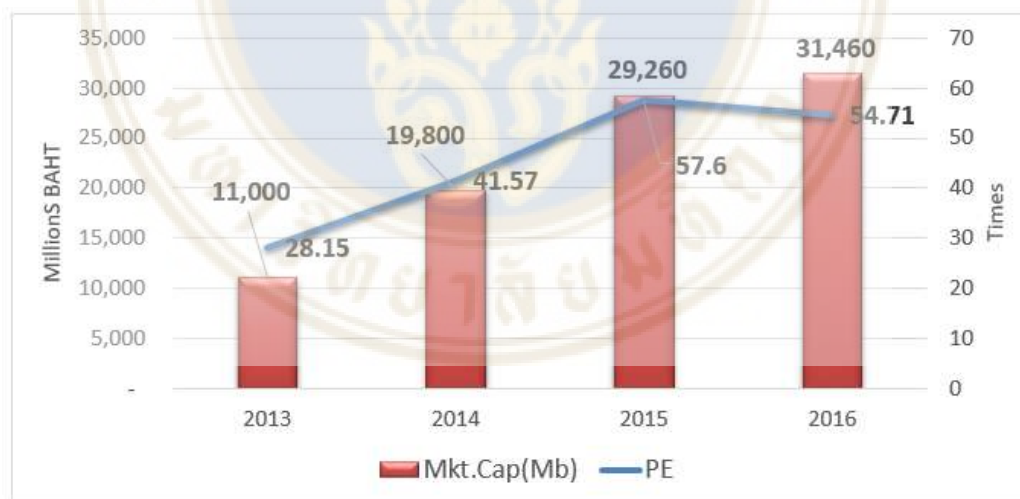


1.11.3.6 Community: The Company has agencies responsible for the Corporate Social Responsibility to oversee and guide the project to the society.

## 1.12 Disclosure and transparency

The Company realizes the importance of disclosing information which is significant for shareholders and investors in making their decisions. The Company has a policy to disclose transparent, complete, reliable and timely information through various channels which are easily accessible for shareholders and investors to obtain the information disclosures. The Company also ensures it abides by the rules and regulations of the Securities and Exchange Commission and the Stock Exchange of Thailand.

The information provided are such as financial statements, management discussions and analysis, the report of the accountability of the Board of Directors to the Company's financial reports, the report of the Audit Committee, connected transactions, structure, duties and responsibilities of the Board of Directors and committees.



**Figure 1.27** CHG Market Capitalisation and PE Year 2013 -2016

### 1.12.1 Right of shareholders.

1.12.1.1 Allow minority shareholders to propose issue deemed important and appropriated in the annual general meeting of shareholders

1.12.1.2 Be able to nominate an appropriated person for the position of company's director.

### 1.12.2 The equitable treatment.

1.12.2.1 Chairman of the meeting allows every shareholder to ask questions, give comments or suggestions in each agenda while Directors and management of the Company must report the purchase or sale of the Company's securities to the Securities and Exchange Commission and the Company within three business days.

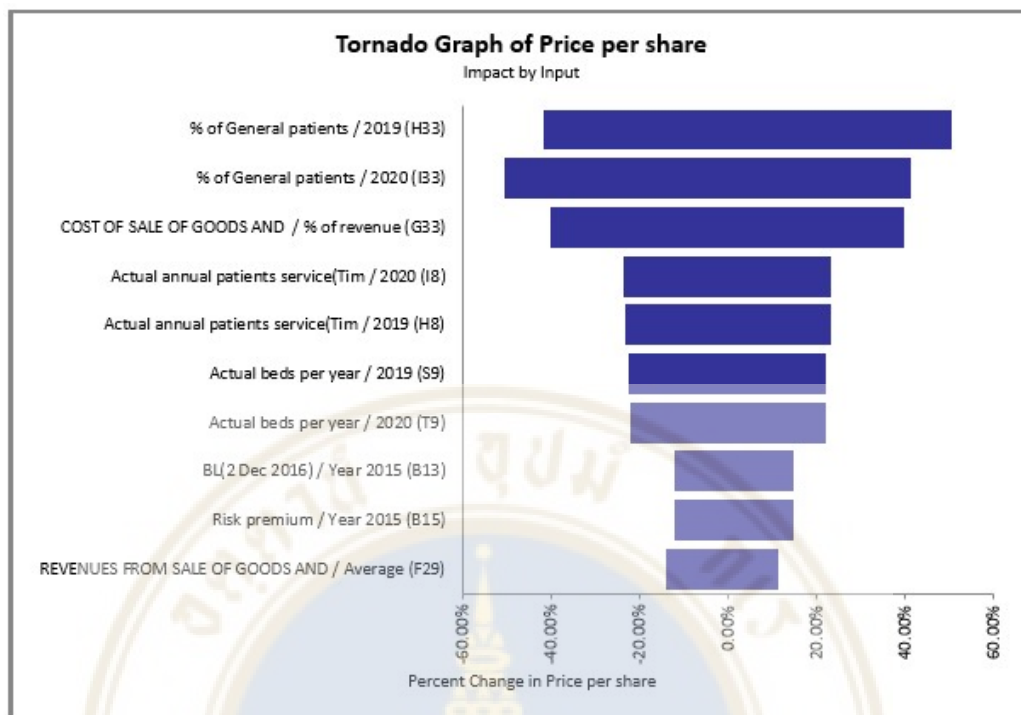
## 1.13 Sensitivity Analysis

We estimate the probability of best and worst case of 25% each. After the calculation, we reach our calculation of 2.74 baht per share. This method shows how sensitive the stock price is when the actual IPD beds change by 2018. Because IPD revenue will change a lot from the assumed sensitivity.

As by year 2018, the new hospital 304 Prachinburi province will start operation with 100 IPD beds. Our team apply scenario analysis of total IPD beds with the historical actual IPD beds. If the actual IPD increase and decrease 10%, what would be the change in stock price? The reason why we choose year 2018 because of the year with highest IPD beds as previously announced.

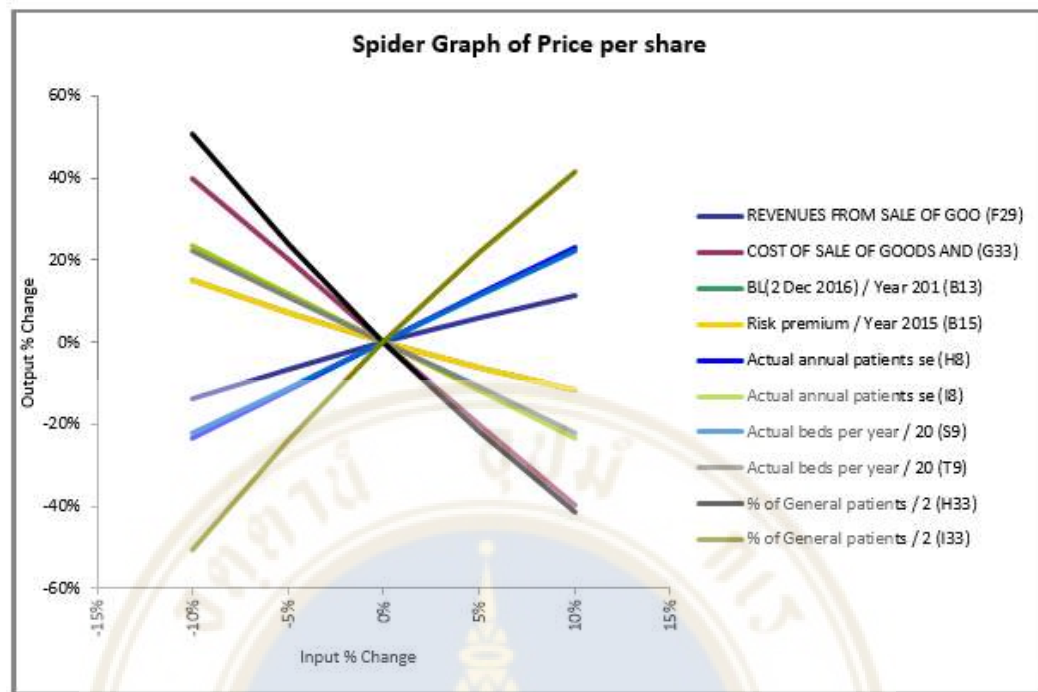
Scenario Summary				
	Base Case	Best Case	Worse Case	W*TP
<b>Weight Allocation</b>	50%	25%	25%	
<b>Sensitivity:</b>		+10%	-10%	
<b>Number of 2018 beds</b>	63205	69525	56884	
<b>Result:</b>				
<b>Stock Price</b>	2.74	2.82	2.64	2.74

Figure 1.28 Sensitivity Analysis (Change in IPD beds)



**Figure 1.29** Sensitivity Analysis (Tornado Graph)

The Tornado Graph will show the most influenced factors in the financial model down to the standard influenced factors. The most important factors would be % of general patients that CHG focuses the most as the revenue driver, and also the cost of services which the company can control with highest efficiency due to strong hospital network. Next, it will show actual OPD and IPD per year which can directly boost up or decline revenue. All of above factors can affect stock price due to change in operating profit.



**Figure 1.30** Sensitivity Analysis (Spider Graph)

The most influenced factors on stock price are defined in the above spider graph. Definitely, the factors would be the profit drivers for hospital business. For example, %of OPD and IPD patients, Cost control, actual annual OPD/ IPD and Beta leverage in WACC.

## CHAPTER II

### DATA

#### 2.1 Company's Information

##### 2.1.1 History of the Chularat Hospital Public Company Limited

The Chularat Hospital Public Company Limited (the “Company”) was founded in 1986 to operate private hospital until now with registered capital 1,100 million Baht, consist of 8 subsidiaries operate large hospitals, small hospitals and clinics totally 14 branches. Chularat Hospital Group coverage service area around Suvarnabhumi Airport (Eastern Bangkok area) along Bangna-Trad Road extend to Chachoengsao province, along 304 highway to Prachinburi province, downtown in Chonburi province, Aranyaprathet Sa-Kaeo province and amphoe Muang, Rayong province with total registered 495 beds.



Expansion projects such as expansion project of Chularat 11 Hospital (finished in 2016), expansion project of Chularat 3 Hospital (finished in 2016), expansion project of Chularat 9 Hospital (finished in January 2017), expansion project of Chularat Cholvaej Hospital (finished in 2017), New hospital in Prachinburi province (is expected to be finished in 2018), all of these expansion projects will increase the total capacity to 705 beds at the end of the year 2018. During 2016, the Company resolved

to expand new 100-registered bed-hospital in Chachoengsao (is expected to be finished in 2018). Nowadays the hospital group can support OPD (outpatient) more than 6,000 cases per day which will support our position to be the best private hospital in the eastern region along with the industrial growth in this area.



The Company focuses on the quality of services provided by medical professionals in all medical fields with modern equipment to create efficiency, safety and satisfaction of our customers. The Company has medical units which are excellent and has been certified by various institutions such as Hand Microsurgery Center, Newborn ICU Center, Stroke Center, Heart Center, and Cancer Center. CHG always focuses on quality of treatment and specialist team, which bring the hospital to receive international accreditation from JCI (for Chularat 3 Hospital) and Hospital Accreditation from The Healthcare Accreditation Institute (for Chularat 9 and Chularat 11 Hospital).



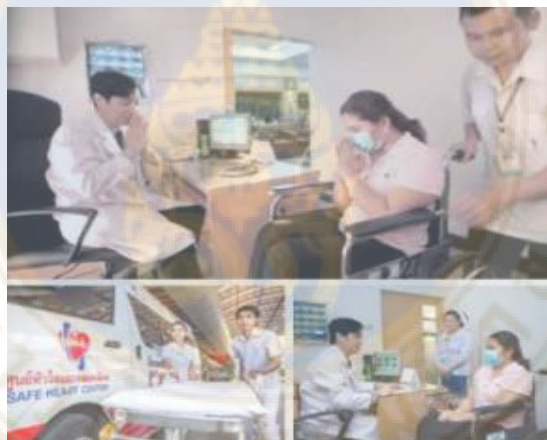


The Company provides services to 2 main types of customers, General patients and Social welfare patients both of Security patients and patients under the National Health Security Office (NHSO) who have hemodialysis and heart disease in Samutprakarn and nearby provinces in the East, etc. The hospitals and clinics in our groups have 14 branches spreading in areas where customers can access easily. In 2017, the Company had 495 beds for patients in a lot of room type such as special VIP rooms, Deluxe rooms, Single Deluxe room, Double Deluxe rooms, special 4-bed room, special 8-bed room, intensive care unit (ICU), Critical Care Unit (CCU), Neonatal intensive care unit (NICU) and a baby unit, etc. The Company has outstanding services as follows:

Hand surgery and orthopedic clinic: Provides Micro Surgery by the team of doctors who have experience and expertise and have been trusted and reputable medical profession nationally and internationally. It is also a Referral Center for Microsurgery in Bangkok and in Eastern region. It is also a center of education specialists from medical school in the country and abroad.



Neonatal Intensive-care unit (NICU): provide treatment to premature infants with unusual weight by a team of doctors and nurses with expertise and experience in the care of premature infants with unusual weight, so it can grow and live normally. The unit received the trust to be referral center of the NHSO, District 6, Rayong.



Stroke Center (Available at CH3 and CH9)\*: provides diagnosis of stroke. The center has been certified by the Institute of Neurology. Chularat 3 Hospital has been certified of the establishment stroke care unit under Commemorative Stroke Center. In 2015 open surgical center brain through a microscope by a specialist doctors to treat brain tumors.





Skin Center and Cosmetics surgery (Available at CH3): provides diagnosis of skin diseases and counselling aesthetic plastic surgery surgical slimming with VASER and laser treatment of skin types including injection treatment with Botox and fillers are quality certified by FDA including high quality skin care products for skin types.



Integrated heart center (Available at CH3 and CH11)\*: The Company has high potential to treat patients with coronary artery disease and heart disease. In 2010, Chularat 3 Hospital began Open Heart Surgery and in Quarter 1 of 2013 it opened a comprehensive heart center. The scope of services includes EKG Ultrasound, Percutaneous Transluminal Coronary Angiography (PTCA) including cardiac surgery with high complexity. The Unit received trust referral center of the NHSO and Social Security Office. In 2015, open Heart Center arrhythmias with Cardiac Electrophysiology Lab first regional and have Enhanced External Counter Pulsation (EECP) Innovation in the treatment of heart patients who have not surgery, Cardiac MRI scan in case of a complex disorder and evaluated before surgery.



Cancer Center with HIFU (High Intensity Ultrasound) (Available at CH9): provides services for abdominal cancer types that cannot be removed by surgery, such as Cholangiocarcinoma, Pancreatic cancer, and uterine fibroid, etc. The services started from late 2013.



Prostate Cancer Center using brachytherapy (Available at CH3): provides treatment of prostate cancer using iodine 125 brachytherapy without surgery, which is an alternative way of treating prostate cancer. Provide better treatment and complications like surgery. By tinnitus treatments, renowned and highly experienced from the United States. The services started in 2014.



The New Baby Fertility Center (Available at CH11)\* : Fertility Center established and provide service in 2017 to assist those subfertility couples to solve every single problem and give a thorough counselling with several investigations including endoscopic surgeries, blood test, hormonal assay, etc. The goal of treatment is pregnancy. Our medical doctors specialize in reproductive medicine and endoscopic surgery. Certified of training from Thailand and abroad and long experience. To provide complete subfertility services. Our scientists all are certified to give the sophisticated egg, sperm and In vitro fertilization (IVF), Intracytoplasmic Sperm Injection (ICSI), Embryo culture, freezing gametes and embryos. With the new technology to check chromosome of embryo, such as next generation sequencing (NGS) Our nurse counsellor & coordinator will give you the whole information and communication of the complete medical services under good standard of care.

Suvarnabhum Eye Center (Available at CH1): Suvarnabhum Eye center specializes in all areas of eye care which provide the complete range of examination, treatment and surgical options for all conditions and in patients of all ages. Our team of experienced ophthalmologist and optometrists are trained, certified within the field of medicine to diagnose and manage all eye diseases. With the new medical technology and equipment. The services started in 2017.

Other business: Import and distribution of medical devices: The subsidiary of the Company is Thai Amdon Company Limited (“Thai Amdon”), imports and supplies surgical and medical equipment such as electric surgery beds, heart rate counter and oxygen saturation equipment, etc. in the present most products and medical devices imported by Thai Amdon are distributed to hospitals and clinics in the Group, however, the procurement of such medical instruments such is strictly follow normal market conditions

Thai traditional medicine and Beauty services: The Company provides complete spa services under the name “Chularat Thai Traditional Medicine” provider

of services which are Traditional Thai Massage by expert staff. In addition, the Company also provides beauty and v under the name “Chularat – Renoir Beauty and Laser Center.



Nurse Assistant Training Center: The Company also operates Practical Nurse training center under “Chularat Inter Health” to produce supporting personnel for the expansion of Chularat hospital Group.

### 2.1.2 Business structure

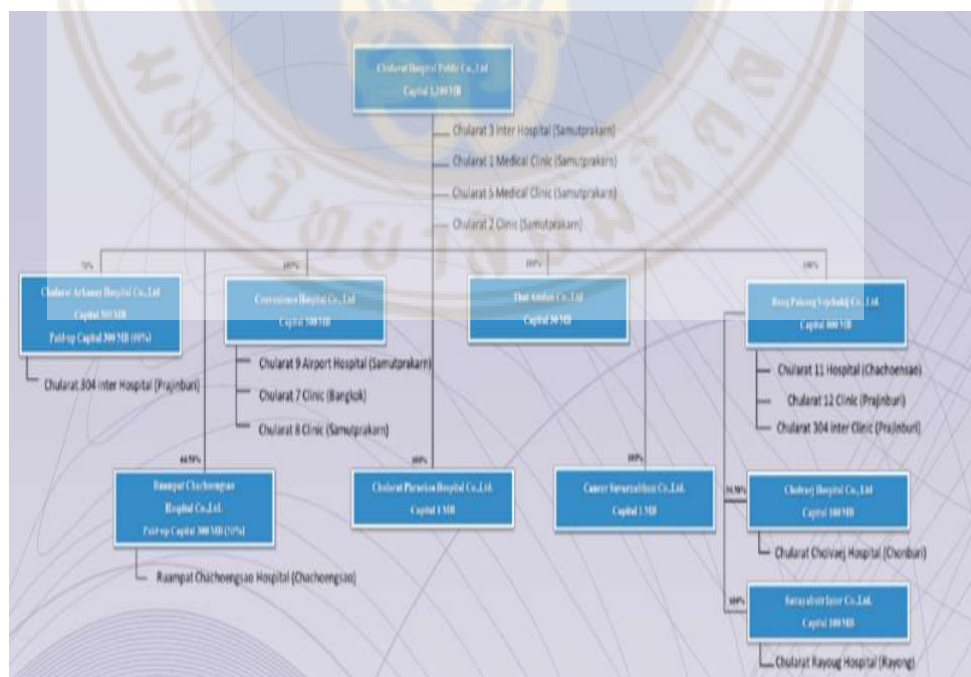


Figure 2.1 CHG Shareholder Structure

### 2.1.3 Major Shareholders and Free float

As of 31 December 2015, the company's paid up capital is Baht 1,100 million divided into 11,000,000,000 ordinary shares at par value 0.10 Baht per share. Top ten shareholders holding the highest number of shares and Detail Groups of Major Shareholders are as follows:

**Table 2.1** Top 10 shareholders holding the highest number of CHG shares

Shareholders		Chularat Hospital PCL (CHG - STOCK EXCHANGE OF THAILAND) ▼	
	Name	Equities	%
	Kannika Phlatsin	1,994,750,400	18.1%
	<a href="#">Apirom Panyapol</a>	1,127,189,050	10.2%
	<a href="#">Kobkul Panyaphol</a>	932,656,600	8.48%
	Naran Ratiphanitwong	775,493,100	7.05%
	<a href="#">Khunying Patama Leeswadtrakul, MBA</a>	399,655,300	3.63%
	<a href="#">Kriengsak Plussind, MBA</a>	368,587,850	3.35%
	Suwimon Athikit	285,725,300	2.60%
	Kamphon Phlatsin	253,720,200	2.31%
	Tajchai Ratipanichvong	187,816,550	1.71%
	The Vanguard Group, Inc.	185,079,000	1.68%

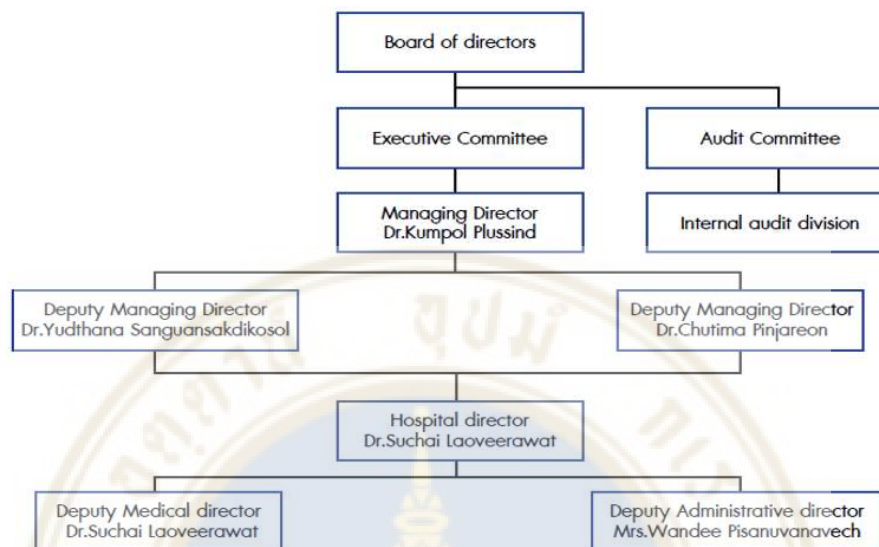
Free Float As of 9 March 2016

Minor Shareholders (Free float –million shares) 4,169

% Shares in Minor Shareholders (% Free float) 37.09



## 2.1.4 Management and Organizational Chart



**Figure 2.2** Organizational Chart

**Table 2.2** Management Chart

Managers				
Name	Age	Since	Title	
<a href="#">Kumphol Plussind, MD</a>	67	2004	CEO, Managing Director & Executive Director	
<a href="#">Kriengsak Plussind, MBA</a>	70	2004	Chairman	
<a href="#">Wandee Pisanuvanavech</a>	49	2010	CFO, Secretary & Administrative Director	
<a href="#">Wichit Siritattamong, MD</a>	60	2004	Non-Executive Director	
<a href="#">Suchai Laoverawat, MD</a>	65	2004	Executive Director	
<a href="#">Kobkul Panyaphol</a>	69	2004	Non-Executive Director	
<a href="#">Yanyong Amompitakkul</a>	62	2004	Non-Executive Director	
<a href="#">Kannikar Plussind</a>	65	2004	Non-Executive Director	
<a href="#">Manit Jeeradit</a>	71	2011	Independent Non-Executive Director	
<a href="#">Somyos Yan-Ubol, MBA</a>	64	2016	Independent Non-Executive Director	

## 2.2 Corporate Governance

### 2.2.1 Basis of the Corporate Governance principle

The Company's policy is to follow the Code of Best Practice to reinforce transparency and be beneficial to the business operations of the Company, resulting in causing confidence of shareholders, investors and all parties concerned. The Board of Directors therefore has established a policy and principles of corporate governance. The Board of Directors initiated, participated in the preparation and approval of policies which are the guidelines of good corporate governance as set by the Securities and Exchange of Thailand. The principles of corporate governance of the Company as follows.

2.2.1.1 The rights of shareholders, the Company acknowledges the importance of all shareholders' rights, including major and minority shareholders. Shareholders' rights include basic as investors and as owners of the Company, such as rights to buy, sell, transfer their shares; right to receive dividends from the Company; rights in shareholders' meetings. It can be expressed through the following seven forms.

- The Company gives shareholders the right to propose important and appropriate issues for incorporation as an agenda in the Company's annual general meeting of shareholders and to nominate candidates with appropriate knowledge, abilities and qualifications.

- Invitation letter: The invitation letter package includes details of required documents in order to protect shareholders' rights to attend the shareholders' meeting, together with their rights to vote.

- Remuneration Fee: The company offers all forms of remuneration paid to directors are paid an attendance fee. The rate paid attendance fee per meeting and the number of times a year by the Board of Directors to the Board, shareholders have seen the value of the premiums paid. The criteria determining the bonus/reward annual turnover of the total amount not exceeding the amount offered per year during the office. In order to the shareholders to approve the agenda and remuneration annually.

- Proxy Letter: For those shareholders unable to attend the meeting, these shareholders have the right to authorize a person or an

independent director as their proxy to attend the meeting and vote on their behalf, using one of the proxy forms sent with the invitation letter.

- **Electric Registration:** The Company implements the barcode system for registration and the voting process, including the use of voting cards. This helps accelerate and ensure the accuracy of the registration and vote counting process.

- **Precise and clear:** The Company Secretary to inform the meeting of the voting process for each agenda. During the meeting, the chairman of the meeting gives all shareholders the opportunity to comment, ask question or give opinions and suggestions on any agenda item. The Chairman and management see the importance of every question and give precise and clear answers.

- **Correct and complete report:** The Company Secretary records minutes of the shareholders' meetings which are correct and complete, with details on voting results of each agenda. In addition, the minutes are sent to the Stock Exchange of Thailand and posted on the Company's website within 14 days after the meeting date, so that shareholders are promptly informed and are able to verify.

2.2.1.2 The role to stakeholders, The Company recognizes its responsibilities towards each stakeholder, for sustainable mutual benefits which will lead to stability of the business operations. The Company intends to interact with each party fairly. The important stakeholders of the Company are as follows;

- **Shareholder:** In addition to the basic rights, rights in accordance with the laws and the Company's articles of association, such as rights to check number of shares, rights to receive share certificates, right to attend and vote in shareholders' meetings, rights to express opinions independently at shareholders' meetings, and rights to receive fair returns, the Company also provides equal and timely information to all shareholders, and gives all shareholders the right to suggest and express their opinions independently on the Company's business and operations in shareholders' meetings, as the Company's owners.

- **Customers/patients:** The Company provides patient care in an ethical manner, and at the best passible quality, taking into consideration patient safety, patients' satisfaction and efficiency in providing its services. The hospital's Medical Ethics Committee protects patients' rights. In addition, the Company



has a department to take customer complaints and to monitor and continuously improve the quality of the care provided to all patients, taking into consideration patients' needs and suggestions. In addition, the Company has measured the level of satisfaction of the client / patient. To the hospital The objective is to develop and improve the system and quality of service.

- **Employees:** The Company believes that its employees are valuable resources and therefore gives all employees equal opportunity in their employment. The Company has the policy to provide employees with appropriate compensation in short term and long term plans also payroll system by Human Resource Department and appoints a welfare committee to oversee the well-being and safety of its employees. The Company also provides an individual development plan (IDP) for each employee for more motivation, as well as continuous education and regular training programs to develop and reinforce employees' knowledge, abilities and skills in all areas including operations, management and technical expertise.

- **Suppliers/Contractors:** The Company has a purchasing policy that is fair to all parties concerned. In addition, the Company abides by the terms and conditions of agreements and contracts with all suppliers and contractors and ensures timely payment to all suppliers and contractors.

- **Creditors:** The Company is committed to giving information with accuracy and transparency to creditors, abides by loan agreements and loan covenants, and ensures timely payments. The Company believes that good relationships with creditors, including building credibility and trust, are a responsibility of the Company towards its creditors.

- **Competitors:** The Company competes with competitors within the rules and regulations, and treat competitors fairly and with integrity. The Company focuses on competition in the area of quality and efficiency of service for the best benefit of customers and patients.

- **Community:** The Company has delegated to the agencies responsible for the CSR (Corporate Social Responsibility) to oversee and guide the project to the society. Both at the corporate level and the staff to be very effective. Description CSR activities. Can learn more on the topic of social responsibility.

2.2.1.3 Corporate Governance Policy, The Company is managed on the principle of good corporate governance. Good Corporate Governance can be divided into eight areas as follows:

- Code of Conduct: based on our motto of “Success with Integrity”. The updated Code of Conduct has been distributed to executive officers and staff for implementation to ensure their success with integrity and also to promote our corporate culture and ethical performances.

- Qualifications, Structure, Duties and Responsibilities of the Board and the Management: The Board consists of Chairman of the Board, who is an independent Director and different person from the President where their roles, authority and responsibilities are clearly separated to maintain balance between managing and supervising the company. In addition, there are five other independent directors, six non-executive directors and two executive directors. The total number is 13. The Board also has a policy to promote rotation among directors to sit at different committees for appropriate timeframe and on appropriate occasions. Chairman of a committee has a duty to submit a clear-cut policy of his committee to the Board.

- Qualification of Directors: The Board of Directors, as a result, shall consist of the following: Independent Directors, Non-Executive Directors and Executive Directors where the number of independent directors shall be no less than one-third of the entire board members. Chairman of the Board and all members of the Audit Committee shall be independent directors where at least one director shall be knowledgeable in accounting and finance.

- Rules and Responsibility of the Board of Directors and the Management: The Board of Directors determines policies and practices for the management, which include important tasks of an executive. In addition, the Board also allows the management to formulate a management policy based on the Company’s objectives and missions, which will be subject to the Board’s approval. The Board of Directors also sets to have its Independent Directors meeting every year so that all directors meet the management.

- Board of Directors’ Meeting: The meeting dates during an entire year would be communicated to directors and other relevant parties in advance. In 2015, CHG organized 5 the Board of Directors’ meetings, 4 the Audit

Committee's meetings, 5 the Strategic and Investment Committee's meetings, 3 the Nominating and Corporate Governance Committee's meetings and 3 the Management Development and Compensation Committee's meetings.

- **Evaluation of the Board's Performances:** To be in compliance with the principle of good corporate governance by listed companies, the Board of Directors and sub-committees are having a self-evaluation at least once a year so that they could review and improve their own conduct. The evaluation is based on the latest forms developed by the Corporate Governance for Capital Market Department of the Stock Exchange of Thailand (SET) released in February 2015, How to read scores: Scores from 1 to 5 are given for statistical analysis. For each score, here is its meaning:

1 = Not agreeing. Need urgent improvement.  
Please provide recommendations.

2 = There is room for improvement. Please provide recommendations.

3 = Appropriate

4 = Very appropriate

5 = extremely appropriate

- **Nomination of Directors and Executives:** This refers to a process to initially check a nominee's qualifications to ensure that are in compliance with director's qualifications; a selection and courting process of a nominee to be director; a nomination process to the Board or shareholders and a reviewing process of director being re-nominated. Furthermore, the selection was independently conducted without being subject to anyone's influence. The Board designated the Management Development and Compensation Committee to recruit and formulate a succession plan of management's highest executives, to ensure continued performances and to avoid business disruption.

- **Corporate Social Responsibility (CSR):** The company is aware of the roles, duties and responsibilities of good corporate governance. We set a policy of conducting business alongside the principles of social responsibility that covers all aspects, based on the guidelines of the Stock Exchange of Thailand. There are 8 elements which is encouraged to be a compass, leading to sustainability and guide

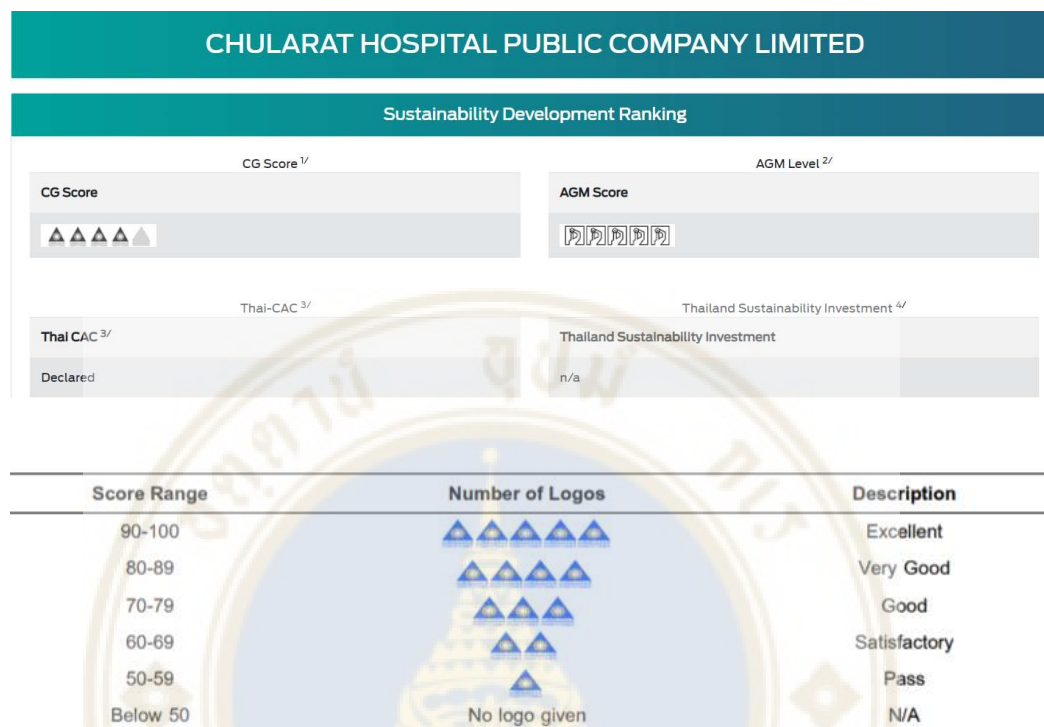
everyone in the company to realize through the company's core value with the word "iCare" which consists of the meaning in each letter as follows:

I	International Patient Safety Integrity Innovation
C	Care Change
A	Accountability
R	Respect
E	Engagement Education Environment

**Figure 2.3** Corporate Social Responsibility (CSR)



## 2.2.2 Corporate Governance Score



**Figure 2.4** CG Score

Chularat Hospital PLC is the one of companies with “Very Good” CG Scoring which is ranked by Corporate Governance Report of Thai Listed Companies, the Thai Institute of Directors (IOD) in collaboration with the Stock Exchange of Thailand and Exchange Commission (SEC, Thailand).

Chularat Hospital PLC is managed on the principle of good corporate governance. The business is run in compliance with the laws and on the basis of the Business Code of Conduct where information is disclosed in a transparent and straightforward manner. There have also put in place efficient auditing mechanisms. Chularat Hospital PLC operates the business by taking into consideration responsibility in every aspect to shareholders and stakeholders, the structure of the Board of Directors, supervision mechanisms and efficient management responsibility. Aside from complying with the OCED’s best practices and ASEAN CG Scorecard, the company also implement other best practices normally practiced overseas; for example, the company Group have set up four sub-committees to help supervising each task or the

fact that The Company educates directors and executives about the duty to report their security holding and also the holding of their spouse and minor children to the Securities and Exchange Commission regarding Section 59 and penalty under Section 275 of the Securities Exchange Act of 1992.

The Company assigns directors and executives to have a duty to report any changes in their security holding to the Securities and Exchange Commission under Section 59 of the Securities and Exchange Act 1992 within next 3 working days from the date of the transaction, and send copies of this report to the Company in the same day that report is sent to the Securities and Exchange Commission.

The Company determines that directors, executives and related practitioners who get important inside information which affects the stock price shall suspend the trading of the Company's stock for a period of at least one month before the financial statements or internal information is disclosed to the public and at least 24 hours after disclosure to the public. This also includes prohibiting the disclosure of the information to others.

The Company imposes disciplinary action if there is a violation of inside information used for their own benefits, starting from written warning, pay cut, temporary suspension without paid or termination, however, the punishment shall be determined by the intent of the action and the seriousness of the offense.

## **2.3 SWOT analysis**

### **2.3.1 Internal Factors: Strengths**

2.3.1.1 Target Area: Chularat hospital is one of the leading private hospital in the eastern zone of Thailand with 13 medical stations in the target area. The location is well consistent with the company's strategy. It allows for easy access to medical stations because all places are located near residential zones including industrial zones with higher population such as Rojana, Hi-tech, Gateway and 304. In the near future, there would be more people moving into these zones following economic growth.

2.3.1.2 High quality: 3 medical stations are accredited by Thai Hospital Accreditation – HA and Chularat 3 hospital has been accredited by JCI from USA

2.3.1.3 Competitive Price & Cost Controlling: Chularat has competitive price for low to middle income people who is seeking for qualified medical services which are the major population of the country. Cost control is very effective resulting to constant cost of services over time.

2.3.1.4 Technology Advancement: Chularat has high technology to cover a wide area of medical services with clinical expertise such as hand microsurgery, stroke center, Skin center and cosmetics surgery with VASER technology, Open Heart Surgery advanced in technology with Cardiac Electrophysiology Lab and Enhanced External Counter Pulsation (EECP).

### **2.3.2 Internal Factors: Weaknesses**

2.3.2.1 High wages cost exposure: High expenses on doctors' salary and being lack of doctors in the industry.

2.3.2.2 High services cost exposure: SSO patients in some cases contains high cost of services but the revenue to hospital is fixed by Social Security Organization.

### **2.3.3 External Factors: Opportunities**

2.3.3.1 Healthcare Trend & Population aging: in 2016, Currently, health awareness has been increasing among adult people. Thailand's aging population has been in uptrend. Within 2017, Thailand will have older people up to 15% of total population, and 19% in 2022. The trend in medical expenses per head would be increasing in the near future.

2.3.3.2 Strong support from government: As Thailand's government policy as medical hub, medical tourists and AEC population will seek to find qualified medical services with acceptable price. Since we are in the center of ASEAN with geographic advantage, there are high possibilities that Thailand would be one of the destination for healthy foreign people.



2.3.3.3 Healthcare expense cheaper compared to SEA: Thai healthcare expenses per GDP is still low compared to other countries. In addition, Medical price in Thailand is still cheaper compared to other developed countries.

2.3.3.4 Technology Advancement: Although the company focuses on domestic patients, the company has been improving their special expertise with high technology equipment. Foreign people can access the hospital within 10 km from Suvarnabhumi airport.

### 2.3.4 External Factors: Threats

2.3.4.1 High rivalry competitors: Many competitors with strong network are targeting the same group as the company does.

2.3.4.2 World economy slowing down: World economy including Thai economy has not been growing as expected. It can reduce purchasing power of people to buy medicine from pharmaceutical shops themselves rather than going to medical clinics or hospitals.

2.3.4.3 Medical service cost risk: Risk of SSO program patients with actual high cost of medical services could decrease profit margin.

## 2.4 Porter's five forces analysis

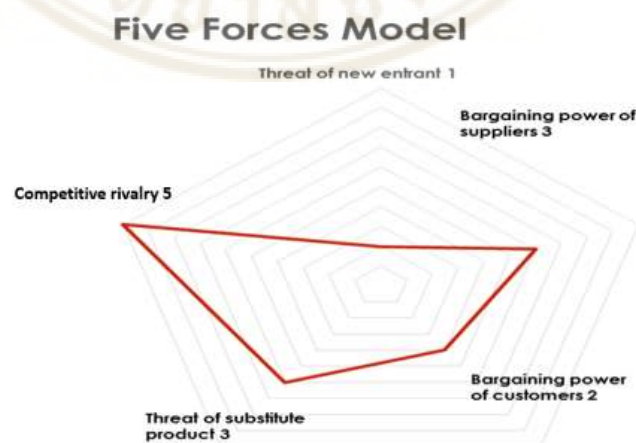


Figure 2.5 Porter's five forces analysis



#### **2.4.1 Bargaining Power of Buyers (Low) – Most Favorable to CHG**

The hospital is in social security campaign to penetrate low to middle income people including those who work in the industrial estate. With the high technology of qualified medical services, people tends to approach this kind of services with acceptable price. They choose from SSO health scheme with a hope for qualified services as well as general patients who are willing to receive qualified services with convenient location near their residential zones.

#### **2.4.2 Bargaining Power of Suppliers (Moderate) – Favorable to CHG**

Nowadays, the hospital with network can have negotiation power on customers and suppliers such as drugs. The company can use this point as advantages from their network. However, doctors as suppliers are limited resources. The company need to pay attractive packages to retain human resources and together need to pay high cost if they want to attract more doctors from other places.

#### **2.4.3 Threat of New Entrants (Low) – Most Favorable to CHG**

Naturally, the industry requires high investment in modern facilities and medical equipment through huge capital expenditures as well as specialized team to operate the business including specialized doctors. In addition, the company focuses on low to middle income people. The threat of new entrants can be limited for this target and industry.

#### **2.4.4 Threat of Substitute Products or Services (Moderate) – Favorable to CHG**

Since the company focuses on low to middle income patients, if the symptoms is not that much for patients to admit as IPD, they are likely to buy drugs from pharmacist by their own. However, for workers and employees who work for the company in the industrial estate zone the company has been focusing, they can use SSO scheme so that Chularat hospital can still get patients for both OPD and IPD.

#### **2.4.5 Rivalry among Existing Competitors (High) – Least favorable to CHG**

Since the company focuses on low to middle income patients, Chularat hospital is now facing intense competition from other hospital with close range of service's price such as Paolo, Thonburi, Kasemrad and Bangkok Chain Hospital. The trend in competition today is becoming the chain hospitals with the purpose of convenience, fast, economies of scale, power of negotiation and attractiveness, Merger and Acquisition is now increasing the intensity of rivalry. BDMS is the market mover and leader. However, Chularat hospital has 3 hospitals and clinics to operate as a chain hospital also. The company can have benefits mentioned above. The standalone hospital will be disadvantageous in the intense and fast growing business.

Overall from Porter's five forces analysis, we conclude that CHG is the competitive healthcare investment and operating company in Thailand. There has the bargaining power over its patients and by the business nature that is quite hard for new entrants. About the bargaining power over suppliers and threat of substitute products or services, CHG are moderate and finally, the only weakness for ERW is rivalry among existing competitors.

## 2.5 Financial Statement Projection

### 2.5.1 Income Statement

**Table 2.3** Income Statement Projection

<b>Statement of Comprehensive Income Consolidated</b>	<b>2012A</b>	<b>2013A</b>	<b>2014A</b>	<b>2015A</b>	<b>2016 A</b>	<b>2017 F</b>	<b>2018 F</b>	<b>2019 F</b>	<b>2020 F</b>
<b>(Unit: Baht-KB)</b>									
REVENUES FROM SALE OF GOODS AND RENDERING OF SERVICES	1,863,152	2,221,489	2,671,696	3,154,918	3,528,026	3,933,829	4,663,275	4,806,224	4,901,747
INTEREST INCOME	-	20,484	19,842	7,445	22,673	25,281	29,969	30,887	31,501
OTHER INCOMES - OTHERS	11,245	12,674	23,241	16,466	22,648	25,253	29,936	30,854	31,467
<b>TOTAL REVENUES</b>	<b>1,874,396</b>	<b>2,254,647</b>	<b>2,714,779</b>	<b>3,178,828</b>	<b>3,573,348</b>	<b>3,984,363</b>	<b>4,723,180</b>	<b>4,867,965</b>	<b>4,964,715</b>
COST OF SALE OF GOODS AND RENDERING OF SERVICES	1,197,827	1,446,437	1,756,019	2,082,175	2,307,506	2,572,921	3,050,016	3,143,512	3,205,989
SELLING AND ADMINISTRATIVE EXPENSES	237,136	287,247	359,326	425,894	466,168	519,788	616,172	635,060	647,682
SHARES OF LOSSES FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD	153	29	-	-	-	-	-	-	-
<b>PROFIT (LOSS) BEFORE FINANCE COSTS AND INCOME TAX EXPENSES</b>	<b>439,280</b>	<b>520,934</b>	<b>599,435</b>	<b>670,760</b>	<b>799,673</b>	<b>891,653</b>	<b>1,056,992</b>	<b>1,089,393</b>	<b>1,111,045</b>
FINANCE COSTS	1,515	1,902	1,170	810	1,757	27,010	32,157	30,650	30,728
INCOME TAX EXPENSES	102,753	104,652	117,570	131,621	159,935	178,331	211,398	217,879	222,209
<b>NET PROFIT (LOSS)</b>	<b>335,012</b>	<b>414,380</b>	<b>480,694</b>	<b>538,329</b>	<b>639,738</b>	<b>713,323</b>	<b>845,593</b>	<b>871,514</b>	<b>888,836</b>
PROFIT (LOSS) ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT	335,012	414,380	480,620	538,377	639,738	713,323	845,593	871,514	888,836
PROFIT (LOSS) ATTRIBUTABLE TO NON-CONTROLLING INTERESTS	-	-	75	-48	0	0	0	0	0
<b>BASIC EARNINGS PER SHARE (UNIT : BAHT)</b>	<b>0.34</b>	<b>0.41</b>	<b>0.44</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>

## 2.5.2 Balance Sheet

**Table 2.4** Balance Sheet Projection

Statement of Financial Position	2012A	2013A	2014A	2015A	2016A	2017F	2018F	2019F	2020F
<b>Consolidated</b>									
(Unit: Baht-KB)									
CASH AND CASH EQUIVALENTS	233,429	495,639	678,461	439,785	657,573	733,208	699,491	576,747	588,210
<b>SHORT-TERM INVESTMENTS</b>	-	630,000	-	-	-	-	-	-	-
TRADE ACCOUNTS AND OTHER RECEIVABLE	143,096	562,551	161,719	228,880	195,300	212,090	203,695	207,892	205,794
INVENTORIES	65,321	74,979	86,564	103,087	94,826	98,957	96,891	97,924	97,408
ACCRUED INCOME - OTHER	-	-	-	-	-	-	-	-	-
CURRENT ASSETS	186,384	-	587,244	571,619	638,475	711,914	843,924	869,794	887,081
OTHER CURRENT ASSETS - OTHERS	16,752	3,784	8,140	9,956	11,650.93	7,529	8,424	12,898	14,172.67
<b>TOTAL CURRENT ASSETS</b>	<b>644,982</b>	<b>1,766,953</b>	<b>1,522,128</b>	<b>1,353,328</b>	<b>1,597,824</b>	<b>1,763,699</b>	<b>1,852,425</b>	<b>1,765,255</b>	<b>1,792,664</b>
CASH RESTRICTED OR PLEDGED	2,010	-	-	-	0	0	0	0	0
INVESTMENT IN ASSOCIATES	-	-	-	-	-	-	-	-	-
JOINT VENTURES	3,537	-	-	-	-	-	-	-	-
INVESTMENT PROPERTIES - NET	114,369	114,369	114,369	114,369	114,369	114,369	114,369	114,369	114,369
PROPERTY, PLANT AND EQUIPMENTS - NET	759,202	1,081,547	1,557,333	1,987,140	2,637,235	2,905,572	3,140,163	3,452,162	3,475,456
GOODWILL - NET	-	-	19,525	19,525	19,525	19,525	19,525	19,525	19,525
LEASEHOLD RIGHT - NET	-	-	-	8,769	8,769	8,769	8,769	8,769	8,769
INTANGIBLE ASSETS - NET	8,567	10,785	13,446	19,084	24,458	26,823	28,892	31,635	25,685
DEFERRED TAX ASSETS	-	2,440	3,541	3,420	4,391	4,896	5,803	5,981	6,100
OTHER NON-CURRENT ASSETS	13,404	18,385	35,331	53,974	56,690	62,606	67,435	73,836	59,950
<b>TOTAL NON-CURRENT ASSETS</b>	<b>901,089</b>	<b>1,227,526</b>	<b>1,743,544</b>	<b>2,206,281</b>	<b>2,865,436</b>	<b>3,142,559</b>	<b>3,384,956</b>	<b>3,706,276</b>	<b>3,709,853</b>
<b>TOTAL ASSETS</b>	<b>1,546,071</b>	<b>2,994,479</b>	<b>3,265,672</b>	<b>3,559,609</b>	<b>4,463,260</b>	<b>4,906,257</b>	<b>5,237,381</b>	<b>5,471,531</b>	<b>5,502,517</b>
<b>Statement of Financial Position</b>									
BANK OVERDRAFTS AND SHORT-TERM BORROWINGS	82,103	-	30,000	52,000	649,958	792,873	763,454	775,224	557,138
TRADE ACCOUNTS AND OTHER PAYABLE	232,675	268,899	327,962	404,003	365,982	384,992	375,487	380,240	377,864
ADVANCES AND SHORT-TERM LOANS	10,700	-	-	-	-	-	-	-	-
CURRENT PORTION OF FINANCIAL LEASE LIABILITIES	-	1,124	2,270	2,407	1,450	1,450	1,450	1,450	1,450
CORPORATE INCOME TAX PAYABLE	60,110	44,234	42,721	37,497	64,648	72,084	85,450	88,069	89,820
OTHER CURRENT LIABILITIES - OTHERS	19,624	26,281	31,013	44,098	32,707	34,709	65,279	35,559	35,512
<b>TOTAL CURRENT LIABILITIES</b>	<b>405,212</b>	<b>340,538</b>	<b>433,966</b>	<b>540,004</b>	<b>1,114,745</b>	<b>1,286,108</b>	<b>1,291,121</b>	<b>1,280,542</b>	<b>1,061,783</b>
<b>LONG-TERM BORROWINGS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26,347</b>	<b>91,299</b>	<b>73,039</b>	<b>54,779</b>	<b>36,520</b>	<b>18,260</b>
FINANCE LEASE LIABILITIES	-	3,903	7,153	4,748	3,951	4,939	4,939	4,939	5,111
NET OF CURRENT PORTION OF POST EMPLOYEE BENEFIT	18,057	11,400	16,907	16,219	22,277	24,840	29,445	30,348	30,951
DEFERRED TAX LIABILITIES	-	-	3,315	3,244	4,595	5,123	6,073	6,259	6,384
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>18,057</b>	<b>15,303</b>	<b>27,375</b>	<b>50,558</b>	<b>122,122</b>	<b>107,940</b>	<b>95,237</b>	<b>78,066</b>	<b>60,706</b>
<b>TOTAL LIABILITIES</b>	<b>423,269</b>	<b>355,841</b>	<b>461,340</b>	<b>590,562</b>	<b>1,236,866</b>	<b>1,394,048</b>	<b>1,386,358</b>	<b>1,358,608</b>	<b>1,122,489</b>
AUTHORIZED SHARE CAPITAL	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
ISSUED AND FULLY PAID-UP SHARE CAPITAL	880,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
PREMIUM (DISCOUNT) ON SHARE CAPITAL	13,200	1,146,085	1,146,085	1,146,085	1,146,085	1,146,085	1,146,085	1,146,085	1,146,085
RETAINED EARNINGS - APPROPRIATED	78,250	98,350	110,000	110,000	110,000	110,000	110,000	110,000	110,000
RETAINED EARNINGS (DEFICIT) - UNAPPROPRIATED	151,352	294,203	444,173	608,922	864,818	1,150,147	1,488,384	1,749,838	2,016,489
EQUITY ATTRIBUTABLE TO EQUITY HOLDERS OF PARENT	1,122,802	2,638,638	2,800,257	2,965,007	3,220,902	3,506,231	3,844,469	4,105,923	4,372,574
NON-CONTROLLING INTERESTS	-	-	4,074	4,040	5,491	5,978	6,554	7,000	7,455
<b>TOTAL EQUITY</b>	<b>1,122,802</b>	<b>2,638,638</b>	<b>2,804,332</b>	<b>2,969,047</b>	<b>3,226,394</b>	<b>3,512,209</b>	<b>3,851,023</b>	<b>4,112,923</b>	<b>4,380,028</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>1,546,071</b>	<b>2,994,479</b>	<b>3,265,672</b>	<b>3,559,609</b>	<b>4,463,260</b>	<b>4,906,257</b>	<b>5,237,381</b>	<b>5,471,531</b>	<b>5,502,517</b>

### 2.5.3 Cash Flow statement

**Table 2.5** Cash Flow statement Projection

Items	2016A	2017F	2018F	2019F	2020F
	'000 Baht	'000 Baht	'000 Baht	'000 Baht	'000 Baht
<b>PROFIT (LOSS) BEFORE FINANCIAL COSTS AND/OR INCOME TAX EXPENSES</b>	799,673	891,653	1,056,992	1,089,393	1,111,045
DEPRECIATION AND AMORTISATION	249,906	331,662	365,409	394,911	434,149
INCOME TAX PAID	-148,609	-170,972	-198,171	-215,287	-220,477
FINANCE COSTS	-1,757	-27,010	-32,157	-30,650	-30,728
OTHER RECONCILIATION ITEMS	-25,703	-7,816	-10,210	-10,031	10,646
CASH FLOWS FROM (USED IN) OPERATIONS BEFORE CHANGES IN OPERATING ASSETS AND LIABILITIES	873,510	1,017,518	1,181,862	1,228,337	1,304,635
<b>(INCREASE) DECREASE IN OPERATING ASSETS</b>	-29,424	-96,154	-127,964	-39,089	-2,374
(INCREASE) DECREASE IN TRADE ACCOUNT AND OTHER RECEIVABLES - OTHER PARTIES	33,581	-16,790	8,395	-4,198	2,099
(INCREASE) DECREASE IN INVENTORIES	8,262	-4,131	2,065	-1,033	516
(INCREASE) DECREASE IN OTHER CURRENT ASSETS	-68,551	-69,317	-133,596	-27,457	-18,875
(INCREASE) DECREASE IN OTHER NON-CURRENT ASSETS	-2,716	-5,915	-4,829	-6,401	13,886
<b>INCREASE (DECREASE) IN OPERATING LIABILITIES</b>	-21,867	28,976	35,382	-22,162	-549
INCREASE (DECREASE) IN TRADE ACCOUNT AND OTHER PAYABLES - OTHER PARTIES	-38,020	19,010	-9,505	4,753	-2,376
INCREASE (DECREASE) IN OTHER CURRENT LIABILITIES	-11,391	2,002	30,571	-29,720	-47
INCREASE (DECREASE) IN INCOME TAX PAYABLE	27,151	7,436	13,366	2,619	1,750
INCREASE (DECREASE) IN CURRENT FINANCIAL LEASE LIABILITY	-957	0	0	0	0
INCREASE (DECREASE) IN DEFERRED TAX LIABILITY	1,351	528	950	186	124
CASH GENERATED FROM OPERATIONS	822,219	950,340	1,089,280	1,167,086	1,301,712
INTEREST RECEIVED	22,673	25,281	29,969	30,887	31,501
<b>NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES</b>	844,892	975,621	1,119,248	1,197,973	1,333,213
(INCREASE) DECREASE IN SHORT-TERM INVESTMENTS	0	0	0	0	0
(INCREASE) DECREASE IN PROPERTY, PLANT AND EQUIPMENTS	-900,000	-600,000	-600,000	-706,910	-457,443
PROCEEDS FROM DISPOSAL OF PROPERTY, PLANT AND EQUIPMENTS	-	-	-	-	-
PURCHASES OF PROPERTY, PLANT AND EQUIPMENTS	-900,000	-600,000	-600,000	-706,910	-457,443
(INCREASE) DECREASE IN INTANGIBLE ASSETS	-5,374	2,365	2,069	2,743	-5,949
<b>NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES</b>	-905,374	-597,635	-597,931	-704,167	-463,392
INCREASE (DECREASE) IN SHORT-TERM BORROWINGS FROM FINANCIAL INSTITUTIONS	597,958	142,915	-29,419	11,770	-218,086
INCREASE (DECREASE) IN LONG-TERM BORROWINGS FROM OTHER PARTIES	64,952	-18,260	-18,260	-18,260	-18,260
(DECREASE) IN FINANCE LEASE CONTRACT LIABILITIES	-797	988	0	0	173
DIVIDEND PAID	-383,843	-427,994	-507,356	-610,060	-622,185
<b>NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES</b>	278,270	-302,351	-555,035	-616,550	-858,358
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENT</b>	217,788	75,636	-33,718	-122,744	11,463
CASH AND CASH EQUIVALENTS, BEGINNING BALANCE	439,785	657,573	733,209	699,491	576,747
CASH AND CASH EQUIVALENTS, ENDING BALANCE	657,573	733,209	699,491	576,747	588,210

## 2.6 Financial Ratios

**Table 2.6** Financial Ratios with its peer.

Historical Performance	CHG			Historical Performance	BDMS		
	2013A	2014A	2015A		2013A	2014A	2015A
<b>Liquidity ratio</b>				<b>Liquidity ratio</b>			
Current ratio	5.2	3.5	2.5	Current ratio	0.9	1.0	1.0
Quick ratio	5.0	1.9	1.2	Quick ratio	0.8	0.9	0.8
Cash conversion cycle	12	4	-25	Cash conversion cycle	-1	2	4
<b>Profitability ratio</b>				<b>Profitability ratio</b>			
Gross margin	35.8%	35.3%	34.5%	Gross margin	37.1%	37.2%	36.9%
Operating Profit margin	23.1%	22.1%	21.1%	Operating Profit margin	16.9%	17.8%	17.2%
Net Profit margin	18.4%	17.7%	16.9%	Net Profit margin	12.4%	13.2%	12.6%
ROA	18.3%	15.4%	15.8%	ROA	10.1%	10.0%	9.4%
ROE	22.1%	17.7%	18.7%	ROE	17.9%	18.5%	17.4%
<b>Operating performance ratio</b>				<b>Operating performance ratio</b>			
Total Asset Turnover	0.99 x	0.87 x	0.93 x	Total Asset Turnover	0.72 x	0.68 x	0.67 x
Fixed Asset Turnover	2.45 x	2.06 x	1.79 x	Fixed Asset Turnover	1.44 x	1.36 x	1.31 x
AR Turnover	6.39 x	7.50 x	16.28 x	AR Turnover	11.38 x	10.80 x	10.60 x
Inv Turnover	20.62 x	21.74 x	21.96 x	Inv Turnover	38.83 x	35.94 x	34.32 x
AP Turnover	5.81 x	5.92 x	5.73 x	AP Turnover	8.67 x	8.70 x	8.84 x
RCP	57	49	22	RCP	32	34	34
ICP	18	17	17	ICP	9	10	11
PDP	63	62	64	PDP	42	42	41
<b>Debt ratio</b>				<b>Debt ratio</b>			
D/E	0.002 x	0.01 x	0.03 x	D/E	0.53 x	0.64 x	0.53 x
Debt to capital	0.002 x	0.012 x	0.024 x	Debt to capital	0.30 x	0.34 x	0.29 x
Capital Leverage	1.21 x	1.15 x	1.18 x	Capital Leverage	1.78 x	1.85 x	1.86 x



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