

# Bangkok Chain Hospital

Bloomberg: BCH TB | Reuters: BCH.BK

Refer to important disclosures at the end of this report

DBS Group Research . Equity

24 Jan 2020

## BUY

(Initiating Coverage)

Last Traded Price ( 23 Jan 2020): Bt16.20 (SET : 1,573.70)

Price Target 12-mth: Bt19.00 (17% upside)

**Potential Catalyst:** Higher-than-expected EBITDA margin from new specialist centres, high number of Thai patients in WMC, and SSS reimbursement budget hike

### Analyst

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### Price Relative



### Forecasts and Valuation

FY Dec (Btm)	2018A	2019A	2020F	2021F
Revenue	8,073	8,947	10,168	11,138
EBITDA	2,229	2,439	2,790	2,950
Pre-tax Profit	1,533	1,644	1,945	2,056
Net Profit	1,089	1,166	1,380	1,452
Net Pft (Pre Ex.)	1,089	1,180	1,380	1,452
EPS (Bt)	0.44	0.47	0.55	0.58
EPS Pre Ex. (Bt)	0.44	0.47	0.55	0.58
EPS Gth (%)	19	7	18	5
EPS Gth Pre Ex (%)	19	8	17	5
Diluted EPS (Bt)	0.44	0.47	0.55	0.58
Net DPS (Bt)	0.23	0.25	0.29	0.31
BV Per Share (Bt)	2.29	2.52	2.83	3.12
PE (X)	37.1	34.7	29.3	27.8
PE Pre Ex. (X)	37.1	34.2	29.3	27.8
P/Cash Flow (X)	25.6	25.3	21.9	21.2
EV/EBITDA (X)	20.2	18.8	16.6	15.6
Net Div Yield (%)	1.4	1.5	1.8	1.9
P/Book Value (X)	7.1	6.4	5.7	5.2
Net Debt/Equity (X)	0.6	0.6	0.6	0.5
ROAE (%)	20.0	19.4	20.7	19.6

Consensus EPS (Bt): 0.48  
Other Broker Recs: B: 18 S: 2 H: 1

GIC Industry : Health Care

GIC Sector: Health Care Equipment & Services

**Principal Business:** BCH is the largest private healthcare providers under social security scheme in Thailand, focusing on domestic low to mid-end patients.

Source of all data on this page: Company, DBSVTH, Bloomberg Finance L.P.

## Leader in the SSS scene

- Biggest beneficiary of a hike in Social Security System (SSS) reimbursement rate by 7.3% and a clearer policy in 2020
- Strong earnings growth of 17% in FY20F from strong topline and margin expansion
- International patients and price intensity from COE are a growth driver in FY20F
- Initiating coverage with BUY rating and TP of Bt19.00, based on DCF method

**Leading player in SSS scheme.** BCH has the largest SSS patient bases with c.5.5% market share among private hospitals. The number of insured persons in Thailand grew leaps and bounds at a CAGR of 11.19% in the past ten years (2009-2018). We believe that BCH will be the biggest beneficiary of a 7.3% hike in the reimbursement budget in 2020 and the rapid increase in patients, both of which will drive strong SSS revenue growth.

**Sustainable outlook with 3-year earnings CAGR of 10%.** Despite BCH remaining in expansion phase, we expect its 3-years earnings (2018-2021) to grow by 10%. We anticipate growth to come from 1) benefits of a hike in the reimbursement rate by 7.3%, 2) operational ramp-up of existing capacity, (iii) successful penetration into the international segment that can lead to a larger bill per head, and (iv) margin improvement with the roll-out of new specialist centre. Thus, we expect BCH to post earnings growth 18%/5% in FY20F/FY21F.

**Initiating coverage: BUY with TP of Bt19.00.** Our Bt19.00 is based on discounted cash flow (DCF) and offers potential upside of 17%. We think that now is a good opportunity to start accumulating BCH share as the market has yet to fully price in its growth prospects arising from a hike in the SSS reimbursement rate and a SSS clearer policy in 2020.

### Valuation:

Our valuation is based on DCF (WACC 7.4%, terminal growth of 2%).

### Key Risks to Our View:

Slower-than-expected cash and SSS patient revenue growth, slowdown in Middle East patients that can erode WMC's topline, slower-than-expected ramp-up for KH Ramkamhaeng, and delayed payments from the Social Security Office (SSO).

### At A Glance

Issued Capital (m shrs)	2,494
Mkt. Cap (Btm/US\$m)	40,399 / 1,324
Major Shareholders (%)	
Harnphanich Family	50.0
Social Security Office	6.1
Thai NVDR	5.9
Free Float (%)	44.1
3m Avg. Daily Val (US\$m)	7.3



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## SWOT Analysis

Strengths	Weakness
<ul style="list-style-type: none"> <li>• Strong brand recognition under three brands including WMC*, KH* and KV* that have been operating over 33 years.</li> <li>• Operating 12 hospitals and one polyclinic with complete market coverage, from Social Security Scheme (SSS) patients, lower mid-tier to high-end and foreign patients.</li> <li>• Fixed payments from Social Security Office (SSO) as BCH has one of the largest SSS patient counts with c.5.5% market share in Thailand.</li> <li>• Large bill size, especially from international patients who tend to seek intensity care.</li> <li>• BCH has a total of 1,376 full-time physicians – most are reputable physicians.</li> <li>• Its CEO is the head of the Private Hospital Association, which gives BCH high bargaining power with the Social Security Office (SSO).</li> </ul>	<ul style="list-style-type: none"> <li>• In the medium term, BCH remains in expansion phase with three new hospitals to be rolled out in 2021-2022 involving a total investment cost of Bt3,245m that can weigh on margins.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Change in demographics towards an ageing society</li> <li>• Trend of health insurance is increasing in Thailand over the past five years, with health insurance premium growing at a CAGR of 8% (2013-2018). Note that insurance patients accounted for 28.2% of BCH's total revenue in 9M19.</li> <li>• Cross-border patients from countries such as Myanmar and Lao from Kasemrad Maesai, and Cambodia from Kasemrad Aranyaprathet.</li> <li>• The increase in SSS reimbursement budget every two years bodes well for BCH that has a large exposure to SSS patients.</li> </ul>	<ul style="list-style-type: none"> <li>• Any delay in payments from Social Security Office (SSO) due to insufficient budget can lead to the need to set up annual provision expenses.</li> <li>• Intense competition in the healthcare business, especially in Bangkok, as additional c.2,000 beds will come online by 2020.</li> <li>• Slowdown in medical tourism could erode World Medical Hospital's topline.</li> <li>• Shortage of medical professionals, as the demand for these professionals will increase on the back of capacity expansion; new supply will remain limited.</li> </ul>

Source: DBSVTH

\*WMC is World Medical Centre Hospital group, \*KH is Kasemrad Hospital Group, \*KV is Karunvej Hospital Group

## Risk Factors

**Downside risk from delay in payments due to limited budget from SSO.** Because the number of insured persons has increased faster than expected, in some years the SSO did not have sufficient budget to pay hospitals and this led to payment delays. Further, each hospital has to set up provisions for such expenses every year.

**Regulatory risk.** The Department of Internal Trade (DIT), which is part of the Commerce Ministry, has recently required all hospitals to have QR codes showing the prices of medicines. Also, there is the overhanging issue of price controls over medicine, medical supplies and services. If the government implements such price

controls, this will exert pressure on BCH's and all private hospitals' profit margins.

**Rising staff costs a key concern.** Going forward, the rising cost of physicians and nurses is a main concern, in our view. This is on the back of the rapid expansion of Thailand's medical industry that could exhaust the supply of physicians and nurses in the near term. If BCH cannot manage this cost, this should have a negative impact on its profitability in the long run

**Shortage of medical professionals.** The hospital business requires personnel with specific medical and technical expertise. As the demand for these professionals increases with the opening of new hospitals while new supply remains limited, we see rising risks of shortage of these medical professionals.

## Investment Summary

### Initiate with BUY and TP of Bt19.00 (17% upside potential).

We like BCH for i) being one of the largest healthcare providers with complete coverage in all segments, ii) being the biggest beneficiary of a hike in the reimbursement rate and a clearer policy from SSO, and iii) its solid earnings growth prospects in FY20F. Despite BCH being in the 2<sup>nd</sup> phase of expansion with three greenfield hospitals in the pipeline involving a total investment of Bt3.245m, we expect BCH's FY20F earnings growth to come in strong at 18%. This is mainly riding on a hike in the SSS reimbursement rate, operational ramp-up for existing hospitals, margin improvement with the opening of a new specialist centre, and prospects of rising demand in cross-border areas. We initiate coverage on BCH with a BUY rating and target price (TP) of Bt19.00, based on discounted cash flow (DCF) valuation (weighted average cost of capital (WACC) 7.4%, terminal growth (TG) 2%. BCH is trading at an FY20F price-to-earnings (PE) of 29x, which is cheaper relative to its peer average at 30x PE.

**Leading player in SSS.** The number of insured persons in Thailand over the past 10 years surged at a CAGR of 11.19% (2009-2018). In our coverage, BCH has one of the largest SSS patient counts among private hospitals (that boast a total number of insured people of 873,000), with a market share of c.5.5% in 3Q19. SSS plays an important role, as SSS contributes 33.2% of BCH's total revenue and of this, 45% enjoys fixed capitation contribution. In our view, SSS patients come with minimal revenue risk as SSS offers fixed payments based on the number of patients registered, plus extra payments for intensity and chronic cases.

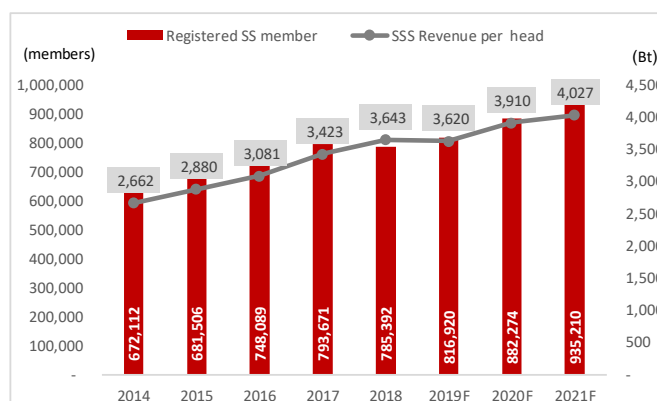
### BCH has one of the largest SSS patients counts

9M19	BCH	CHG	RJH
Maximum Quota	1,050,000	450,000	216,000
insured person	873,000	434,113	188,400
% contribution to total Thailand	5.5%	2.7%	1.2%
Revenue in SSO (MB)	2,219	1,217	574
SSS contribution to total revenue	33%	32%	45%
Revenue per head (baht)	3,620	3,737	3,069
Fixed Capitation payment per year (MB)	1,310	651	283
Fixed capitation contribution in 2018	45%	45%	40%

Source: BCH, CHG, RJH, DBSVTH

**Rising contribution from SSS.** We expect BCH to post strong SSS revenue growth of 13% in FY20F from a hike in the reimbursement budget by 7.3% y-o-y and the 8% y-o-y rise in registered persons. Note that management expects hospital branches whose quota is not fully utilised to garner more SSS registered persons at an average annual growth rate of 10%.

### Number of insured persons grew tremendously



Source: BCH, NESCB, DBSVTH

**International patients and price intensity are another growth driver.** We believe that BCH is a stock with sustainable growth prospects, with its annual EPS growth 5-17% being driven partly by international patients that contributed 10% of total revenue in 9M19 and rising price intensity from its centres of excellence (COEs).

BCH has successfully penetrated into high-end and international patients through World Medical Centre (WMC) and KH Ramkamhaeng whose international patients contributed 76% and 16% of its total revenue respectively in 9M19. WMC's revenue per bill increased 71.7% y-o-y in 9M19 while the opening of KH Ramkamhaeng in 4Q18 can lead to additional revenue of Bt63.2m in 9M19. We believe that international patients' revenue contribution will reach 15% for BCH in FY21F.

Another growth driver for BCH is its Center of e COE platform, which revolves around five COEs that boast specialist centres and reputable doctors. WMC has such specialist centres as diabetic wound and heart centres, while KH Ramkamhaeng has orthopaedic and check-up centres, and KH Rattanatibeth has haemodialysis, gastroenterology, liver, and cath-lab centres. We believe that BCH's EBITDA margin will continue to improve with the roll-out of COEs that focus on tertiary care.

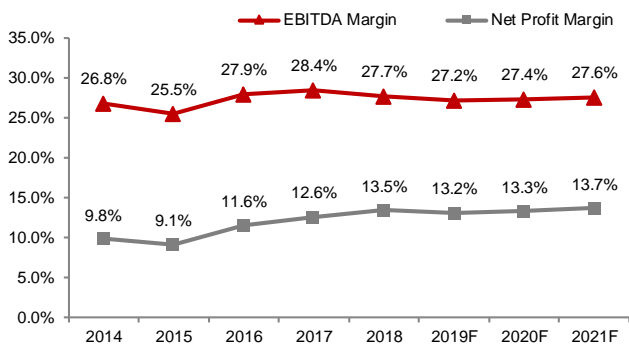
**Margins to improve in 2020.** BCH's EBITDA margin expanded to 30.9% in 3Q19 (vs. 29.9% in 3Q18 and 25.2% in 2Q19). Its EBITDA margin improved for the first time since 4Q18 when BCH opened the new KH Ramkamhaeng hospital with 139 beds and 39 examination rooms. Despite BCH remaining in the 2<sup>nd</sup> phase of expansion, we expect its EBITDA margin to stay at a high level of 27.4% in FY20F. The high level of EBITDA margin is mainly due to:

- Improving price intensity arising from new specialist centres in its existing hospital branches such as the IVF centre in WMC, diabetic wound centre in KH

- Ramkamhaeng and the international division in KH Rattanaatibet.
- ii) Rapid improvement in the operational performance of KH Ramkamhaeng, and management expects this hospital to break even at the bottomline level in FY20F.
- iii) Relatively mild expansion activities in 2020, with only Kasemrad Aranyaprathet being in the picture.

from the 2018 level (increasing WMC's revenue by Bt168m) with a net profit margin c.20% in FY20F vs. 13.2% of overall company. In the long run, if the IVF centre runs at its full capacity of 1000 IVF cases per year, BCH's revenue could rise by 36% from 2018.

**Maintain profit growth momentum**

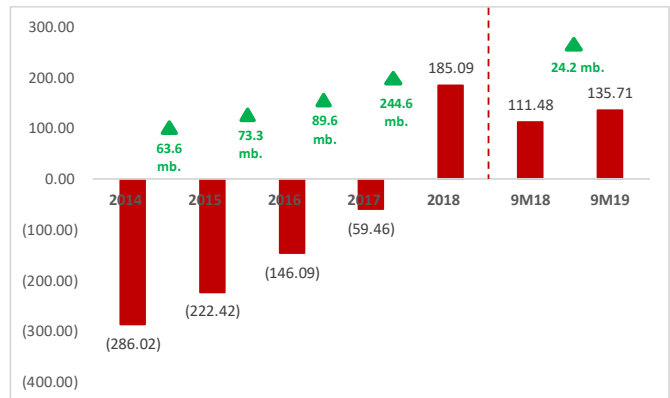


Source: BCH, DBSVTH

**Tapping into high-end and international segments via WMC.**

In 2014, BCH opened WMC with 150 IPD beds and 84 OPD rooms to tap into the premium segment. We believe that WMC is a growth driver for BCH as it contributed 19.9% of BHC's total revenue. On the fifth year of its opening, WMC turned profitable at the EBIT level to the tune of Bt185.1m in 2018 (vs. loss of -Bt59.5m in 2017), mainly thanks to international patients, especially from the Middle East, that were drawn to the diabetic wound and heart centre. BCH has hired a reputable doctor MD Borripatara Wongprachum who is diabetic wound specialist. This led to a larger bill size of Bt1.15m (+71.7% y-o-y) in 9M19 vs. Bt0.67m in 9M18.

**After five years, WMC has turned profitable (EBIT)**



Source: BCH, DBSVTH

**KH Ramkamhaeng becoming a driver in 2020.** Since 2013, BCH has expanded to twelve hospitals to complete its market coverage, that ranges from Social Security Scheme (SSS), lower mid-tier to high-end and foreign patients. All its hospitals have already reached breakeven at the bottomline, except for KH Ramkamhaeng hospital which opened in late October 2018. Normally, new greenfield hospitals take 3-4 years to break even at the bottomline; but we expect KH Ramkamhaeng to break even in 2020 as it has already reached breakeven at the EBITDA level to the tune of Bt16.8m in 3Q19. This was due to i) a large number of SSS patients being transferred from Karunvej 3 hospital to KH Ramkamhaeng, ii) patients being drawn to its renowned specialist centres such as orthopaedic and check-up, and iii) the opening of new centres in 2020 with higher margins, such as the new diabetic wound centre for Oman patients and the heart centre.

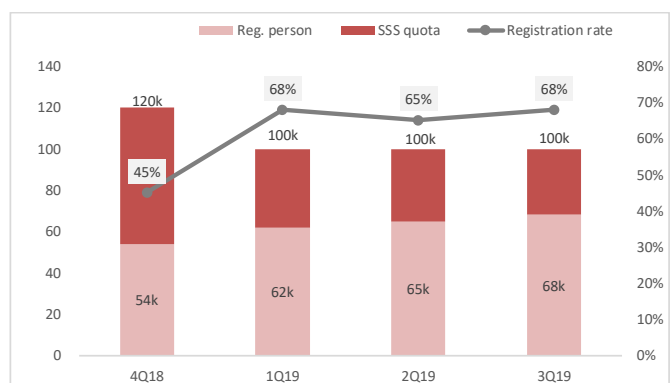
**Larger bill from international patients**

WMC's Operational Statistics	2015	2016	2017	2018	9M2018	9M2019
Revenue per bill for Thai OPD (THB)	2,635	2,720	2,950	2,900	2,780	2,840
Revenue per bill for foreign OPD (THB)	6,250	8,180	9,650	8,455	8,470	7,850
Revenue per bill for Thai IPD (THB)	43,190	45,955	61,185	56,350	68,060	52,500
Revenue per bill for Foreign (THB)	180,360	218,640	263,600	523,470	670,120	1,150,800
IPD Length of stay - Thai (days)	2.2	2.2	2.2	2.1	2.1	2.5
IPD Length of stay - Foreign (days)	3.5	4.6	5.9	15.8	13.1	22.5

Source: BCH, DBSVTH

Further, WMC just officially opened the IVF centre in Dec 2019 with mostly international patients being targeted and the aim of handling 420 IVF cases this year at fees of Bt0.4m-0.5m per cycle. We expect the IVF centre to lift WMC's revenue by 15%

**Large SSS patient base**



Source: BCH, DBSVTH

**Mild expansion in 2020.** Currently, BCH is in the 2<sup>nd</sup> phase of expansion with three greenfield projects in its pipeline. In 2Q20, BCH will open only one hospital i.e. the 90-bed KIH Aranyaprathet with a capex of Bt890m. In the first phase, BCH will roll out only 51 beds to serve middle-income patients. We are positive on this project in view of the i) small size of this hospital with only 51 beds compared with BCH's total IPD bed count of 2,245 as end of 9M19 (+2.3%), and ii) the lack of nearby private hospitals in both Thailand and Cambodia, which bodes well for its swift ramp-up.

In 2021, BCH is expected to open KIH Vientiane and KH Prachinburi with total CAPEX of Bt2,355m. However, we are not concerned about these two hospitals that are expected to break even within 2-3 years. For KIH Vientiane, there is no other tertiary care hospital in the nearby areas, coupled with the high demand from Laos patients. Meanwhile KH Prachinburi will have a high base for SSS patients who are transferred from KH Chacheongsao, and this can lead to a faster-than-expected breakeven at the EBITDA level.

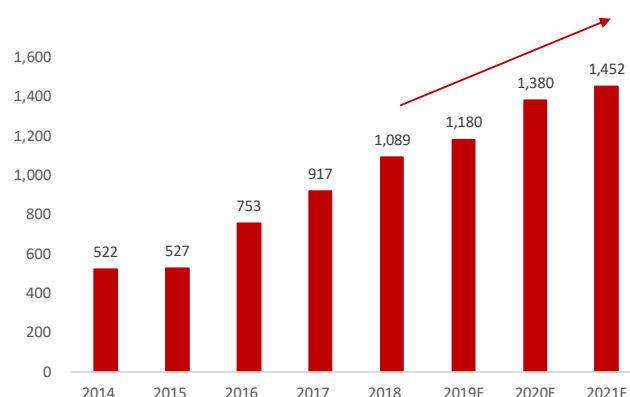
### Expansion plans

Location	Open	IPD (Beds)	Total Cost (Bt m)	Paid (Bt m)	2019 (Bt m)	2020 (Bt m)
KIH Aranyaprathet	2Q2020	90	890	352	333	205
KIH Vientiane	1Q2021	254	1,570	490	290	790
KH Prachinburi	1Q2021	115	785	259	111	415
<b>Total</b>		<b>30</b>	<b>3,245</b>	<b>1,101</b>	<b>734</b>	<b>1,410</b>

Source: BCH, DBSVTH

**Sustainable earnings growth in the next two years.** Despite BCH remaining in expansion phase with three new greenfield projects in the pipeline involving a total investment of Bt3,245m, we expect its 3-year earnings (2018-2021) to grow at a CAGR of 10%. The growth will be driven by (i) benefits from a hike in the reimbursement rate by 7.3%, (ii) operational ramp-up of existing capacity, (iii) successful penetration into the international segment that can lead to a larger bill per head, and (iv) higher margins on the back of the roll-out of specialist centres.

### 3-years earnings (2018-2021) to grow by 10% CAGR



Source: BCH, DBSVTH

**Opportunities at cross-border areas.** BCH can benefit from efforts to penetrate into cross-border areas in Cambodia, Laos, and Myanmar. To serve the abovementioned areas, BCH currently has the KH Maesai hospital which is located near Myanmar, and it will open two more hospitals – KH Aranyaprathet near the Thailand-Cambodia border and KH Vientiane in Laos. We believe that in the long term the demand for healthcare in Myanmar, Cambodia, and Laos will be robust as these countries currently still do not have access to quality basic healthcare. According to the World Bank, healthcare expenditure as a % of GDP in 2017 in Myanmar is only 1.8% and that for Laos is 3.7%, compared to Thailand and Singapore's 4.6%. Despite the high rate of 6.1% in Cambodia, this percentage appears to be decreasing every year. Furthermore, Cambodia does not even have a universal healthcare programme.



## Company Background

**Corporate history.** Bangkok Chain Hospital (BCH) was founded in 1984. It became one of the leading healthcare service operators in Thailand with the largest SSS patient base among private healthcare operators and is ranked fourth in terms of market capitalisation in sector. BCH operates 12 hospitals and one policlinic within its network of 2,245 beds with a comprehensive market coverage that encompasses SSS, lower mid-tier, high-end and foreign patients. BCH operates under four hospital groups, namely World Medical Hospital (WMC), Kasemrad International Hospital, Kasemrad Hospital and Karunvej Hospital. BCH has been gaining market share from both public and private hospitals in Thailand by employing highly reputable medical staff and providing high-standard medical services.

In its 1<sup>st</sup> expansion plan in 2013-2015, BCH has expanded its business in Bangkok and outside as follows:

- In 2013, BCH opened Karunvej Pathum Thani and Karunvej Ayuthaya targeting SSS and low-income patients.
- In 2014, BCH opened WMC to complete its market coverage. Later on, BCH opened a policlinic – Sriburin Clinic, Chiangsan branch.
- In 2015, BCH opened Kasemrad International Ratanatibeth and Kasemrad Chacheongsao hospitals.

In its 2<sup>nd</sup> expansion plan in 2018-2021, BCH will open a total of four hospitals including KH Ramkamhaeng that was rolled out in 4Q18, KIH Aranyaprathet in 2Q20, KIH Vientiane in 1Q21, and KH Prachinburi in 1Q21.

Currently, six of its hospitals have already clinched Hospital Accreditation Level 3 with three more hospitals in the process of getting this accreditation.

Meanwhile, WMC received the JCI Accreditation in 2014.

**Major shareholder.** The major shareholders of BCH are the Harnphanich family with a 49.99% stake. The company's free-float shares stand at c.44.05% of total shares outstanding.

**IPO in 2004.** BCH was listed on the Stock Exchange of Thailand (SET) index via an initial public offering (IPO) on 10 November 2004 at an IPO price of Bt3.80. BCH currently has a paid-up capital of Bt2,493.75m (2,493.75m shares at par value of Bt1.00) and market capitalisation of c. Bt39,650.59m. The company provides primary, secondary and tertiary hospital services under four hospital groups. The company's coverage areas include Bangkok, Chacheongsao, Saraburi, Pathum Thani, Ayutthaya, Chiang Rai, nearby provinces as well as the neighbouring nations of Laos, Cambodia and Myanmar.

**Dividend payment policy.** The company has a dividend payout policy of not less than 40% of net profit after tax.

### Market capitalisation of healthcare sector

Healthcare provider	Mkt Capitalisation (M)	PE ratio (x)
BDMS TB Equity	397,300	27.0
BH TB Equity	102,402	26.7
SVH TB Equity	44,800	22.9
BCH TB Equity	39,401	33.8
RAM TB Equity	36,240	18.9
CHG TB Equity	27,060	39.6
VIBHA TB Equity	22,285	29.4
THG TB Equity	22,576	61.6
PRINC TB Equity	15,442	N/A
SKR TB Equity	10,297	39.7

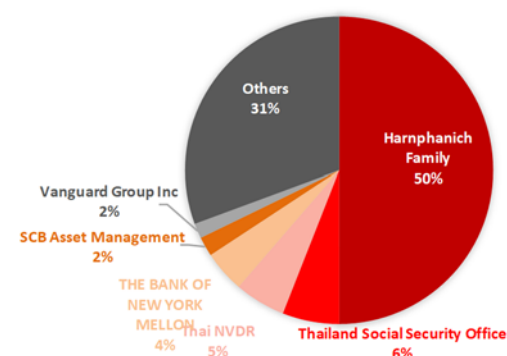
Source: Bloomberg Finance L.P., \ DBSVTH

### Business characteristics

Bangkok Chain Hospital at 3Q19	
Licensed hospital beds	2,245 beds
OPD units	440 rooms
Number of the insured persons	873,000
Full-time physicians	1,376
Nurse	1,923

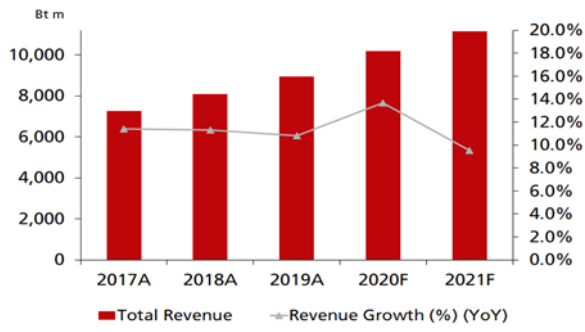
Source: BCH, DBSVTH

### Current major shareholders as of 27 Aug 2019

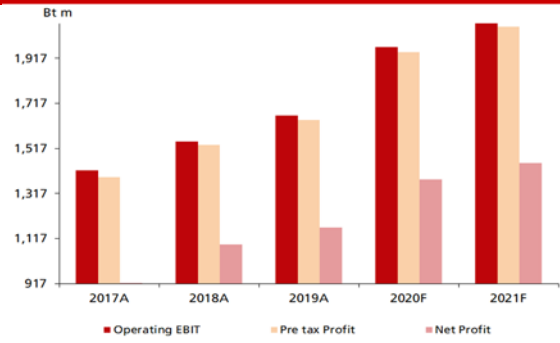


Source: Stock Exchange Thailand, BCH, DBSVTH

**Sales Trend**



**Profitability Trend**



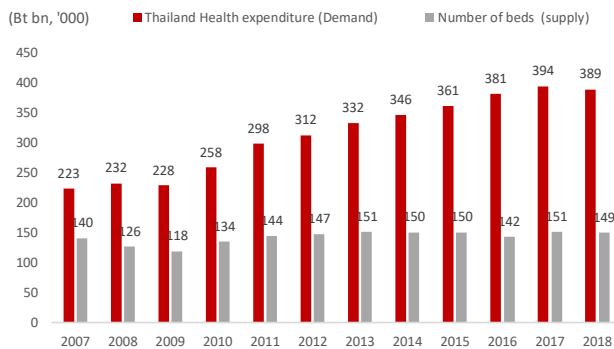
Source: Company, DBSVTH



## Industry Outlook

**Healthcare demand growing faster than supply.** The healthcare sector is now in an upcycle, driven by i) change in demographics towards an ageing population, ii) rising income, especially for the middle class, and iii) increase in health insurance coverage. All these factors contribute to greater demand for healthcare services. According to the Thailand Development Research Institute (TDRI), healthcare expenditure is expected to quadruple from Bt389bn in 2018 to Bt1.407-1.825tr in 2030.

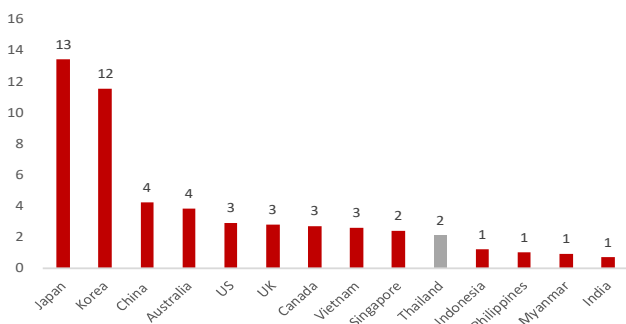
### Healthcare demand growing faster than supply



Source: NESDC, DBSVTH

While there are 1,305 hospitals in Thailand, the majority of hospital beds are located at public hospitals with 123,135 beds (82%) while with private hospitals having only 26,506 beds (18%) in 2018. However, according to the World Health Organization (WHO), the number of beds per 1k population in Thailand is only two compared to the world average of 4. This means that the number of beds is insufficient in Thailand. The data also show that healthcare expenditure grew by 6.1% CAGR in 2009-2018, while the number of beds (supply) expanded by only 2.6% CAGR. Even though public hospitals' bed contribution amounted to 82% in 2018, this was still insufficient to serve the needs of the Thai people – thus, giving rise to business opportunities for private hospitals.

### Number of beds per 1,000 population in 2018



Source: NESDC, DBSVTH

**Overcrowded public hospitals.** Even though public hospitals are much more affordable and outnumber private hospitals, we expect the demand for private hospitals to rise rapidly in view of i) the waiting time for treatments in public hospitals is long, and ii) the bed occupancy of public hospitals has reached almost 100% for IPD beds, which means there are not enough beds to serve the high demand, which is further exacerbated by the shortage of specialist doctors.

**Rising demand for private hospitals.** Private hospitals have grown seven-fold over the past ten years, with their market capitalisation rising from Bt119bn (13 listed hospitals) in 2009 to Bt800bn (23 listed hospitals) in 2019, This was mainly driven by rising medical tourism activities, increase in middle-income households and surge in health insurance premiums.

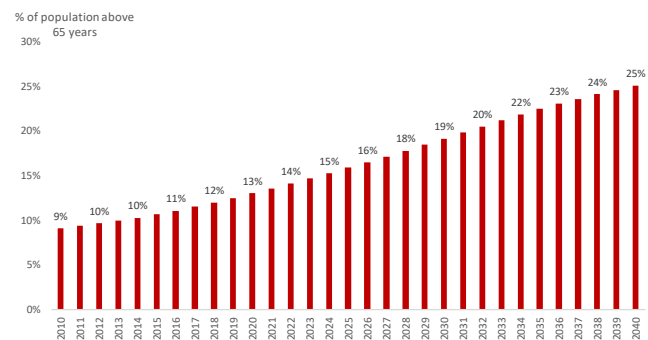
### Healthcare supply in Thailand in 2018

Healthcare Supply in Thailand (2018)	no. of hospitals	no. of beds	% ch y-o-y	CAGR 2014-2018
Public	1,055	123,135	3%	0.5%
Private	250	26,506	-16%	-2.5%
<b>Total</b>	<b>1,305</b>	<b>149,641</b>		

Source: Ministry of public health, DBSVTH

**Change in demographics towards ageing society.** It is inevitable for Thailand's demographics to shift towards an ageing society. The number of people aged 65 and above in 2018 in Thailand stood at 10.7m, accounting for 16.1% of the total population, and this is expected to increase to 16m or 25% of the total population in 2040, based on National Economic and social Development Council (NESDC). The shift in demographics towards an ageing society will lead to a steady rise in healthcare expenditure over the longer term, with non-communicable diseases (NCDs) such as heart diseases, cancer, diabetes and obesity becoming major health threats for senior citizens. NCDs require better healthcare services and higher treatment costs.

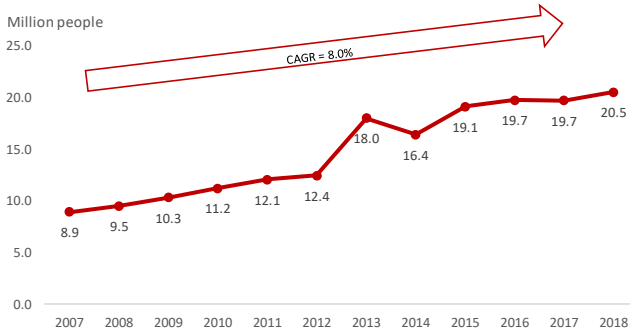
### Ageing population in Thailand



Source: NESDC, DBSVTH

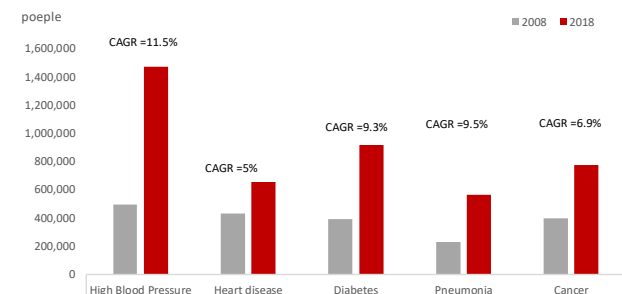
**Uptrend in NCDs.** During the past 10 years, the number of NCD patients grew by 8.0% CAGR from 9.5m in 2008 to 20.5m in 2018. The number of NCD cases has grown rapidly over 2008-2018, especially for mental disorders (CAGR of 14.8%), stroke (CAGR of 10.3%), high-blood pressure (CAGR of 11.5%) and diabetes (CAGR of 9.3%). This is mainly due to dietary changes as more Thai people tend to over-consume sugar and salt. This, coupled with the lack of sufficient physical exercise, has a negative impact on their overall health.

**Number of mortality cases grew by 8.0% CAGR (2008-2018)**



Source: NESDC, DBSVTH

**Number of mortality disease cases in 2008 vs. 2018**



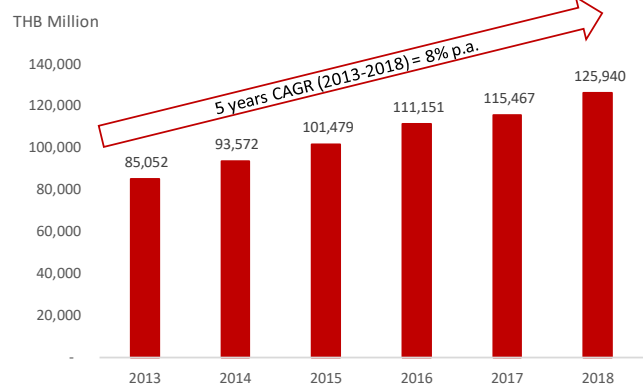
Source: NESDC, DBSVTH

**The rising number of middle-income households.** As the monthly income per household in Thailand increased by 51% during 2007-2017, the number of middle-class consumers with higher spending power also rose in tandem. This would bode well for demand for healthcare.

**Health insurance on the rise.** Thailand health insurance premiums grew by 8% CAGR over 2013-2018. This is mainly due to i) the government's efforts to encourage Thai people to purchase personal health insurance policies by giving personal tax deductions of up to Bt15,000 per year, and ii) insurance companies ramping up their collaborative efforts with local hospitals to increase health insurance penetration. BCH's insurance patients stood at c.28.2% in 9M19 and this group of patients should be on the rise, with more Thai people

becoming more conscious about the need to address healthcare issues as they age.

**Health & personal accident insurance premiums**

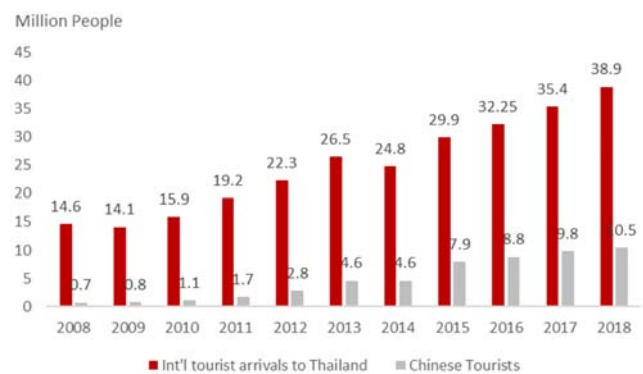


Source: OIC DBSVTH

**Chinese tourists for IVF drive strong growth for international patients.** International patients grew at a CAGR of 10.3% over 2008-2018, with China tourist CAGR of 31.1% offsetting the 6.3% y-o-y decline in Middle East patients due to economic changes and shift in medical policies. Kuwait opened its largest hospital at end-2016 and it is also the sixth largest hospital in the world, and the United Arab Emirates also changed its health support policy from 90% to 50%.

Thai hospitals tried to get a slice of the Chinese IVF market as IVF procedures in China have attracted close to 90m couples. After the Chinese government implemented the second child policy, more Chinese women are now seeking IVF treatment in other countries such as Thailand, Singapore and Malaysia. The lack of fertility clinics in China, has led to Thailand becoming one of the more attractive destinations for Chinese women as the prices in Thailand is US\$4,100k per cycle. This is 72% cheaper than Singapore and 72% in the US. Further, Thailand's success rate is quite high at 40-50% (vs. China's 20%).

**Chinese tourists behind strong growth of international patients**



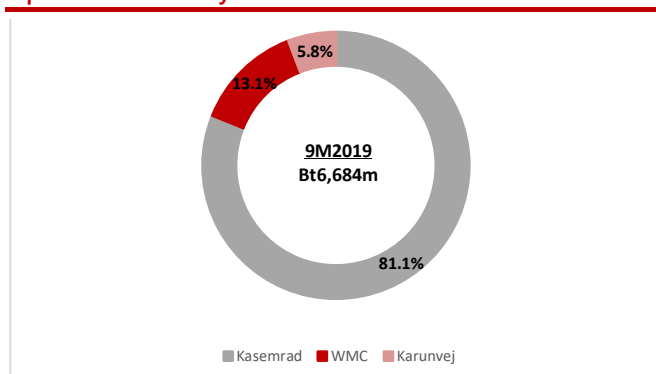
Source: BOT, DBSVTH

## Business overview

### Private healthcare operator with largest SSS patient base.

Bangkok Chain Hospital (BCH) was established in 1993 and it is a leading healthcare services operator with the largest base of SSS patients and 5.5% market share of private hospitals, and it is ranked fourth in healthcare market capitalisation. Currently, BCH operates 12 hospitals and one policlinic providing primary to tertiary care with a comprehensive market coverage that encompasses SSS, lower mid-tier, high-end and foreign patients. BCH operates under four hospital groups, namely World Medical Hospital (WMC), Kasemrad International Hospital, Kasemrad Hospital and Karunvej Hospital.

### Operation revenue by brand



Source: BCH, DBSVTH

In its 2<sup>nd</sup> expansion plan in 2018-2021, BCH will open a total of four hospitals including KH Ramkamhaeng that was rolled out in 4Q18, KIH Aranyaprathet in 2Q20, KIH Vientiane in 1Q21, and KH Prachinburi in 1Q21.

### BCH has complete market coverage in all segments

Hospital	Established year	Hospital Accreditation Level	OPD rooms	IPD beds	Tertiary care
<b>Upper/international segment</b>					
1. World Medical Centre (WMC)	2014	JCI, DNV GL	84	150	Yes
<b>Upper segment</b>					
1. Kasemrad International Rattanatibeth	1993	HA III	41	400	Yes
<b>Middle/Social Security Scheme segment</b>					
1. Kasemrad Bangkai	1984	HA III	60	311	Yes
2. Kasemrad Sriburin	1993	HA III	40	120	Yes
3. Kasemrad Maesai	2004		14	30	
4. Sriburin Clinic, Chiangsan Branch	2014	n.a.	13	n.a.	
5. Kasemrad Saraburi	1996	HA III	16	200	
6. Kasemrad Prachachuen	1997	HA III	55	371	Yes
7. Kasemrad Chacheongsao	2015	HA II	32	100	
8. Kasemrad Rattanatibeth	2015	HA II	18	119	
9. Kasemrad Ramkamhaeng	2018		39	139	
<b>Middle/lower segment</b>					
10. Karunvej Pathum Thani	2013	HA III	22	200	
11. Karunvej Ayudhaya	2013	HA II	6	105	
Total			<b>440</b>	<b>2,245</b>	

Source: BCH, DBSVTH

### Successfully penetrated into high-end and international segments.

To tap into the premium segment, BCH opened WMC in 2014 and this hospital targets international and high-income patients. WMC is a tertiary care hospital with a full range of specialist centres, including famous diabetic wound centre and reputable doctor – MD Dr Borripatara Wongprachum who focuses on Kuwait patients. Furthermore, in Dec 2019, BCH opened a new IVF centre and hired the reputable Dr Tongtis Tongyai who specialises in gynaecology. Currently, WMC has already reached breakeven with an EBIT of Bt135.71m (+24.2% y-o-y) in 9M19. We believe that international patients are a growth driver for WMC and it has plans to increase such contribution in the long term. Note that its 9M19 revenue can be broken down into Thailand (24%), Kuwait (50%), Oman (6%), Qatar (5%), Saudi Arabia (2%) and Myanmar (2%).

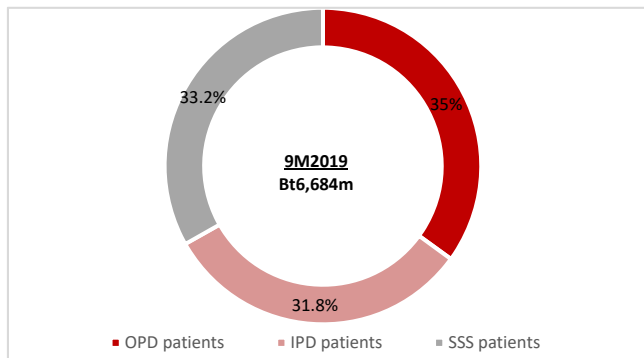
KH International Rattanatibeth has gained decent recognition after opening its specialist centres, including the haemodialysis, gastroenterology, liver, and cath-lab centres in 2018. Due to the success of these centres, BCH plans to launch an international division here to address the needs of medical tourists by offering more specialised services such as orthopaedic centre.

### Faster-than-expected breakeven in KH Ramkamhaeng.

In 4Q18, BCH opened KH Ramkamhaeng to replace the previous hospital Karunvej Sukhapibak 3 hospital. KH Ramkamhaeng generated revenue of Bt385m (+96.4% y-o-y) but remains in the red at the bottomline level to the tune of Bt50m in 9M19. However, we expect KH Ramkamhaeng to break even at the bottom line in 2020, especially as more international patients seek high-intensity care such as orthopaedic treatment and check-ups. Note that BCH's revenue contribution can be broadly broken down into Thai (84%) and international patients (16%) in 9M19.

**BCH's revenue breakdown in 9M19.** The following chart shows BCH's revenue breakdown in 9M19. The company recorded total revenue of Bt6,773 (+12.1% y-o-y) in 9M19 and a net profit of Bt894m (+8.9% y-o-y), thanks to (i) the 12.5% growth in revenue from IPD patients, especially from international patients for WMC who tend to seek high intensity care and the expansion of KH Ramkamhaeng by 139 IPD beds, (ii) 10.4% growth in revenue from OPD patients arising from the expansion of KH Ramkamhaeng by 39 OPD rooms, and (iii) the 13.2% growth in revenue from additional quota for SSS patients.

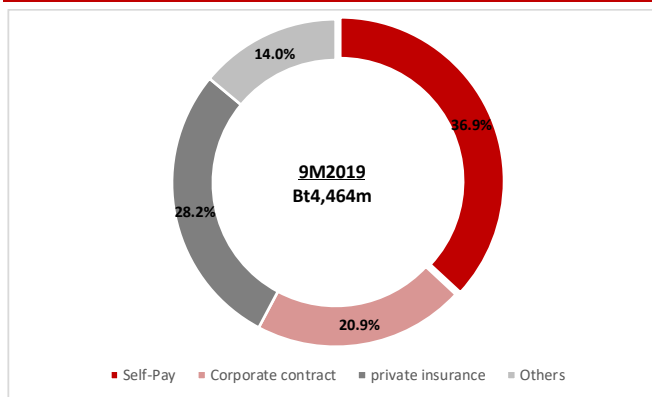
**BCH's revenue breakdown (9M19 revenue of Bt6,684m)**



Source: BCH, DBSVTH

Of the total revenue of Bt4,464m from cash patients in 9M19, 37% came from self-pay, 28% from private insurance, 21% from corporate contracts and 14% from others.

**Revenue breakdown by payment type of cash patients**



Source: BCH, DBSVTH

**Comprehensive market coverage.** The company's coverage areas include Bangkok, Chacheongsao, Saraburi, Pathum Thani, Ayutthaya, Chiang Rai, nearby provinces as well as the neighbouring countries of Laos, Cambodia and Myanmar. Out of the 12 hospitals, five hospitals are tertiary care centres complete with specialist centres and referral programmes. BCH has rich expertise in the following areas:

- i) Heart surgery and cath-lab
- ii) World diabetic foot
- iii) Advanced rhino-otolaryngology, including Lasik and eye treatments
- iv) Advanced diagnostic imaging centre
- v) Cancer centre

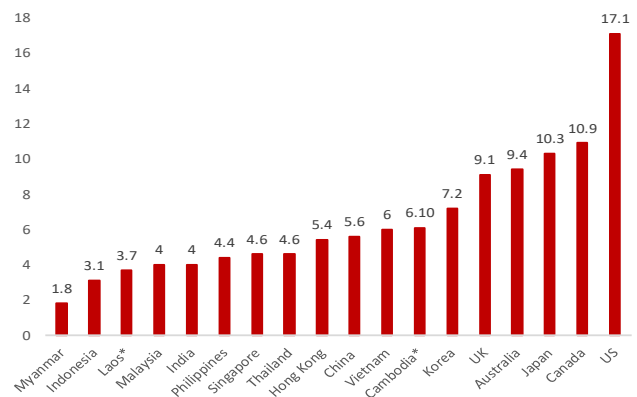
BCH has 1,376 physicians and most of them are reputable physicians that hail from various clinics and medical centres.

**Opportunity for hospitals to expand cross border.**

We believe that in the long term the demand for healthcare in Myanmar, Cambodia, and Laos will be robust as these

countries currently still do not have access to quality basic healthcare. According to the World Bank, healthcare expenditure as a % of GDP in 2017 in Myanmar is only 1.8% and that for Laos is 3.7%, compared to Thailand and Singapore's 4.6%. Despite the high rate of 6.1% in Cambodia, this percentage appears to be decreasing every year. Furthermore, Cambodia does not even have a universal healthcare programme.

**Health expenditure as a % of GDP in 2017**

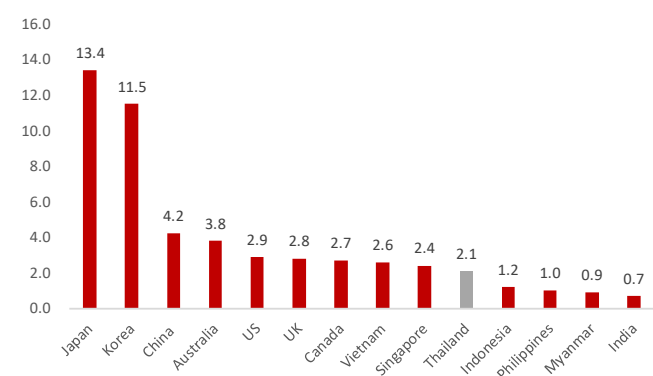


Source: World Bank DBSVTH

\*Laos and Cambodia are information in 2016

Furthermore, when one looks at beds per 1k population, it is only 0.9 in Myanmar in 2017, and only 0.85 in Cambodia and 1.50 in Laos in 2012 (the most updated data available) compared to Thailand's 2.1 and Singapore's 2.4. This implies that the supply in Myanmar, Laos and Cambodia is not sufficient to meet the high demand.

**Hospital beds per 1k population in 2017**



Source: World Bank DBSVTH

BCH is the biggest beneficiary of the high demand from cross-border areas, as BCH currently has one hospital in KH Maesai, which is close to Myanmar, and two new greenfield hospitals – KH Aranyaprathet located at Sakeao province near the Thailand-Cambodia boarder and KH Vientiane in Laos.

## Financials

**Recap of 9M19 results.** BCH's 9M19 net profit came in at Bt894m, growing 8.9% y-o-y mainly on the back of topline growth of 12% y-o-y while GPM inched down to 32.4% (-124 bps). 9M19 revenue came in at Bt6,684m (+12% y-o-y), mainly thanks to revenue from SSS patients (+13.2% y-o-y), IPD patients (+12.5%), and OPD patients (+10.4% y-o-y). The revenue from WMC increased from Bt769.7m to Bt887.1m (+15% y-o-y) in 9M19, mainly from a larger bill – especially from international patients who tend to seek high intensity cases. On the other hand, KH Ramkamhaeng generated revenue of Bt385m (+95.4% y-o-y) in 9M19 and has already reached breakeven at the EBITDA level to the tune of Bt15.5m in 9M19 (1Q19 loss of Bt2.5m, 2Q19 loss of Bt0.6m, and 3Q19 profit of Bt18.6m at the EBITADA level), mainly due to the high base of SSS patients and high price intensity arising from upgrading its facilities with specialist centres. Meanwhile, its GPM margin inched down from 33.7% in 9M18 to 32.4% in 9M19, mainly arising from losses for its new KH Ramkamhaeng hospital that just opened in 4Q18.

### BCH: Earnings in 2019

BCH's performance	9M19	9M18	%
Revenue (MB)	6,684	5,968	12.0%
Gross profit margin (%)	32.43	33.67	(1.24)
Operating margin (%)	18.79	19.54	(0.75)
Net profit (MB)	894	821	8.9%

Source: BCH, DBSVTH

**Preview: 4Q19F pressured by temporary reduction in reimbursement rate for high cost-care.** We expect flat earnings of Bt272m (1% y-o-y, -32% q-o-q) in 4Q19F. The weak q-o-q earnings was mainly due to seasonality; but the flat y-o-y performance was no thanks to the temporary reduction in the reimbursement rate for high cost-care in 4Q19F, which caused BCH to reverse its revenue of c.Bt30m. Note that BCH has already reversed revenue of Bt20m in 2Q19 due to insufficient budget for high cost-care in 4Q18.

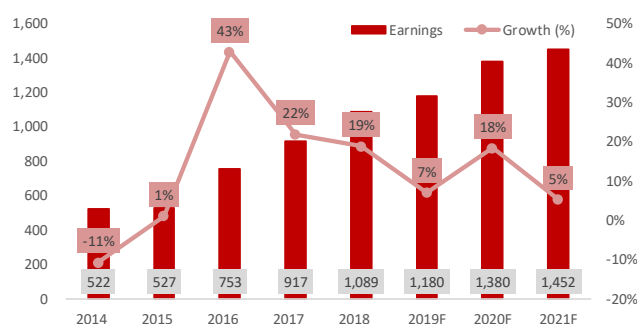
Thus, we expect core profit of Bt1,166m (+7% y-o-y) in FY19, mainly from decent topline growth (+11% y-o-y) that can be attributed to: i) rising revenue per head, following the ramp-up of existing hospitals' operation, ii) rapid volume growth for KH Ramkamhaeng, and iii) a larger bill from international patients who are seeking high intensity care. Nonetheless, its EBITDA margin is expected to inch down to 26.9% in FY19 vs. 27.3% in FY18 from losses in KH Ramkamhaeng.

**Bright outlook in 2020.** We expect its FY20 outlook to improve on the back of earnings of Bt1,380m (+17% y-o-y) mainly thanks to: i) clearer policy from SSO and the reimbursement

budget hike of 7.3%, ii) margin improvement to 27.1% (vs. 26.9% in FY19F) from the opening of new specialist centres in KH Ramkamhaeng (heart centre), a new IVF centre at WMC, and new paediatrics, obstetrics and gynaecology centres at KH Rattanatibet, and iii) relatively mild expansion in 2020 with only one investment involved, i.e. KIH Aranyaprathet with only 51 IPD beds in phase 1.

However, we expect earnings growth to decelerate to 5% y-o-y in FY21F, no thanks to two new greenfield projects that are expected to lower its EBITDA margin to 26.2% on the back of higher expenses related to the new hospitals.

### BCH: Bright earnings outlook in 2019

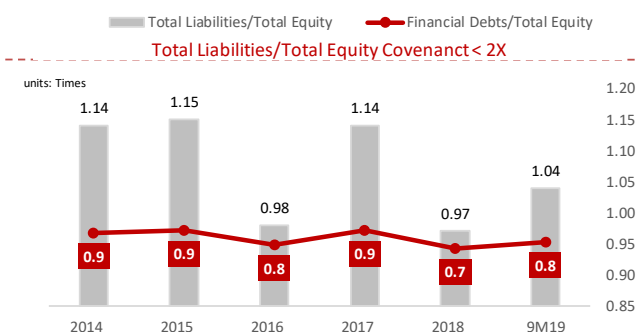


Source: BCH DBSVTH

### Balance sheet

**Net gearing on the rise but remains manageable.** At end-3Q19, BCH's interest-bearing debt (IBD) stood at Bt5,369m, representing a gearing ratio of 0.80x, interest coverage of 13.27x, and debt-to-EBITDA of 2.24x in 9M19. While BCH's gearing surged from 0.70x in 2018 to 0.80x in 9M19, we think that this is fine as BCH remains in expansion phase with three more greenfield hospitals in the pipeline. Its gearing is still well below the company's debt covenant at 2.0x gearing.

### Gearing ratios



Source: BCH DBSVTH

## Valuation & Peers Comparison

**Valuation of Bt19.00 per share.** We have opted for the discounted cash flow (DCF) method to value BCH in view of its long-term growth prospects and the nature of its revenue stream – of which recurring revenue accounts for a substantial portion. Our DCF valuation gives a TP of Bt19.00. We have taken into account the value of its core healthcare operations of 12 hospitals and one polyclinic that cover all segments, including social security, low-end to high-end and international patients. Our DCF-based TP of Bt19.00 assumes a WACC of 7.4% and terminal growth of 2.0%.

**Expect 1.7 % dividend yield in FY20F.** BCH has a policy to distribute at least 40% of its net profit as dividend. In our estimation, we expect c.1.7% dividend yield for FY20F.

**BUY call on BCH with TP of Bt19.00.** We like BCH for i) being one of the leading healthcare operators with complete coverage in all segments, ii) being the biggest beneficiary of a hike in the reimbursement rate in view of its largest SSS patient base among private hospitals with 5.5% market share, and iii) its solid earnings growth of 17% in FY20F on the back of margin improvement – mainly arising from the roll-out of more profitable centres of excellence (COEs) and the faster-than-expected ramp-up of existing hospitals' operations. As BCH is currently trading at Bt19.00 per share or 29x FY20F PE, which is cheaper relative to its peer average at 30x PE. There is 17% potential upside to our TP. We believe that now is a good time to accumulate BCH shares. As such, we initiate our coverage of BCH with a BUY rating and DCF-based TP of Bt19.00.

### Peers: Valuation comparison

Bloomberg Code	Mkt	Price	Target	%	PE		PBV		Div Yield		ROE	Rcmd
	Cap (US\$m)	22 Jan (Bt)	Price (Bt)	Upside	(x) 20F	(x) 21F	(x) 20F	(x) 21F	(%) 20F	(%) 21F	(x) 20F	
BH TB	3,443	143.50	136.00	-5%	33.4	31.3	5.2	4.7	1.8	1.9	19.3	HOLD
BDMS TB	13,078	25.00	28.00	12%	25.6	35.9	5.0	4.8	2.2	1.7	20.9	BUY
CHG TB	956	2.64	3.00	14%	40.2	34.5	7.6	6.8	1.5	1.5	19.5	BUY
RJH TB	240	24.30	32.00	32%	18.8	20.0	5.2	5.0	4.3	4.1	28.8	BUY
RPH TB	118	6.55	8.60	31%	35.4	28.6	2.7	2.6	1.8	1.8	7.8	BUY
BCH TB	1,288	15.70	19.00	21%	28.4	27.0	5.6	5.0	1.9	2.0	20.7	BUY
EKH TB	806	6.4	NR	NR	23.4	21.7	4.2	3.9	3.3	3.0	17.5	NR
THG TB	730	27.5	NR	NR	70.5	45.3	2.8	2.7	1.1	0.0	4.2	NR
VIBHA TB	126	1.7	NR	NR	21.0	28.0	2.4	2.4	2.4	2.8	9.1	NR
<b>Simple average</b>					<b>33.0</b>	<b>30.3</b>	<b>4.5</b>	<b>4.2</b>	<b>2.3</b>	<b>2.1</b>	<b>16.4</b>	

Source of all data: Company, DBSVTH



**CRITICAL DATA POINTS TO WATCH**

**Critical Factors**

**Leading SSS player among private hospitals.** BCH is the biggest beneficiary of the reimbursement rate hike and a clearer policy from SSO in 2020, in view of its high base for SSS patients. Currently, revenue from SSS patients make up more than one-third of BCH's total revenue, of which 45% of its SSS revenue is of fixed capitation nature. In our view, revenue from SSS has minimal risk as SSS offers fixed payments based on the number of patients registered, coupled with extra payments for high intensity and chronic cases. In FY20F, we expect BCH to enjoy strong SSS revenue growth from a hike in the reimbursement budget by 7.3% in 2020.

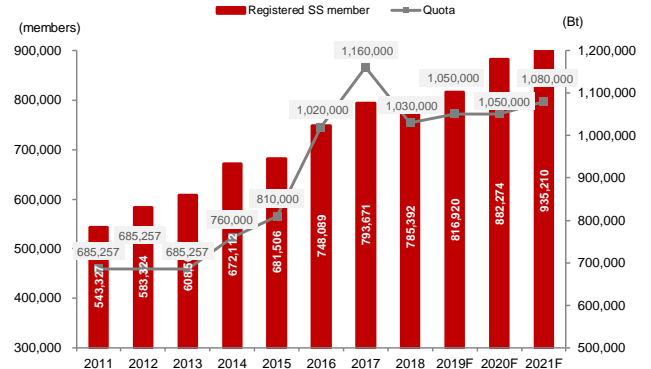
**High price intensity from specialist centres to help boost revenue and profitability.** BCH has successfully penetrated into the premium segment; with five out of its 12 hospitals offering tertiary care via specialist centres. WMC is famous for its diabetic wound and heart centres, KH Ramkamhaeng for its orthopaedic centre and KH Rattantibet for its paediatrics, obstetrics and gynaecology centres. The premium segment offers a higher revenue per bill. We expect its revenue per head to grow at 3% CAGR over 2019-2021.

**Margins to improve going forward.** BCH's EBITDA margin rose to 30.9% in 3Q19. Its EBITDA margin improved for the first time since 4Q18 as BCH opened the new KH Ramkamhaeng hospital with 139 beds and 39 examination rooms. Despite BCH remaining in the 2<sup>nd</sup> phase of expansion, we expect its EBITDA margin to stay at a high level of 26.8% in FY19F and 27.1% in FY20F. The high level of EBITDA margin is mainly due to: i) improving price intensity arising from new specialist centres in its existing hospital branches, ii) rapid improvement in the operational performance of KH Ramkamhaeng, iii) rising revenue per head following the operational ramp-up of its existing hospitals, and iv) mild expansion activities in 2020, with only Kasemrad Aranyaprathet being in the picture.

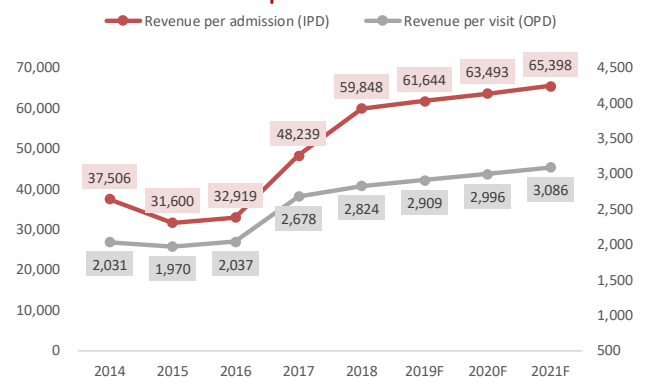
**KH Ramkamhaeng to turn around in FY20F.** Normally, new greenfield hospitals take 3-4 years to break even at the bottomline; but we expect KH Ramkamhaeng to break even in 2020 as it has already reached breakeven at the EBITDA level to the tune of Bt16.8m in 3Q19. This was due to i) KH Ramkamhaeng's large SSS patient base as it represents an upgrade from Karunvej 3 hospital, ii) patients being drawn to its renowned specialist centres such as orthopaedic and check-up, and iii) the opening of new centres in 2020 with higher margins, such as the new diabetic wound centre for Oman patients and the heart centre.

**Mild expansion in 2020.** It has three new greenfield hospitals in its expansion pipeline for 2020-2021 involving a total investment of Bt3,245m. However, we are not too concerned about its investment in KIH Aranyaprathet that will open in 2Q20 as i) it is a quite small hospital with only 51 IPD beds in phase 1, ii) there are no nearby competitors in the areas between Thailand and Cambodia, and iii) there is high demand in Cambodia.

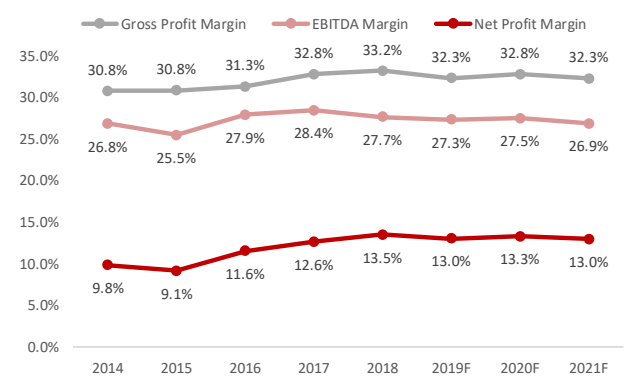
**Insured persons grow by 4.6% CAGR over 2019-2021**



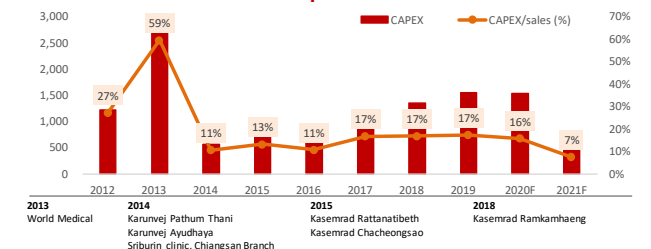
**Revenue per head for IPD and OPD**



**Profitability**



**Mild expansion in 2020**



Source: Company, DBSVTH



**Balance Sheet:**

At end-3Q19, BCH's interest-bearing debt (IBD) stood at Bt5,369m, representing a gearing ratio of 0.80x. Of the total debts 94% of which carried fixed rates while 6% carried floating rates.

**Share Price Drivers:**

**Growing patient volume.** BCH's patient volume will grow at a decent pace in view of i) the increase in SSS patient base, ii) the higher number of international patients from neighbouring countries such as Myanmar, Laos and Cambodia, and iii) Thailand's ageing society.

**Improving gross margin.** BCH's margin will expand on the back of i) improving profitability for its centres of excellence (COE), ii) rapid operational improvement for KH Ramkamhaeng, iii) rising revenue per head following the operational ramp-up for its existing hospitals, and iv) its relatively mild expansion in 2020.

**Key Risks:**

**SSO policy and payment terms.** In the past three years, the Social Security Office suffered from an insufficient national pool budget to pay each private hospital for high cost-care (RW>2) and 26 chronic disease categories. This led to each private hospital having to reverse their revenue and set up provision expenses.

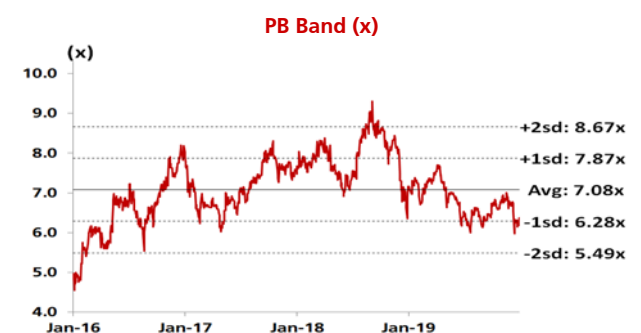
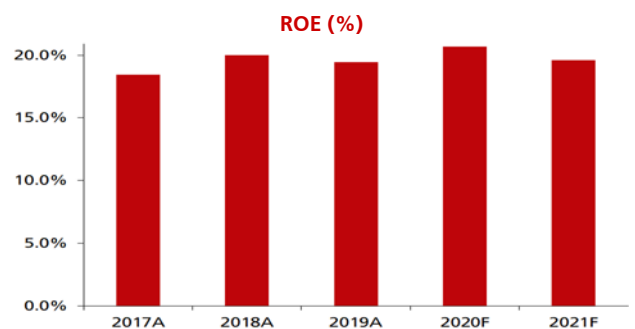
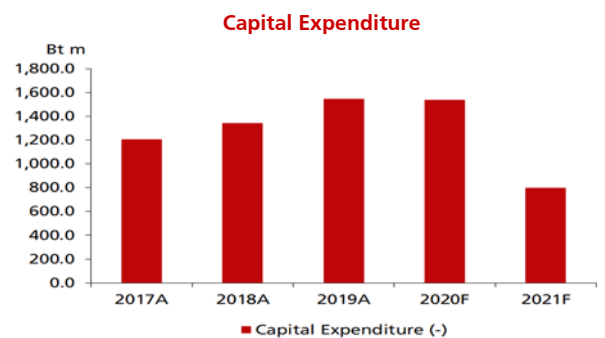
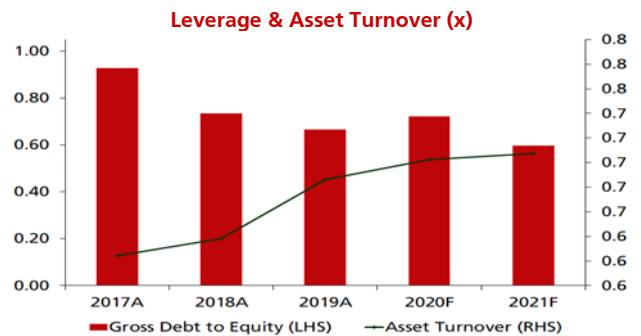
**Rising staff costs a key concern.** The rising cost of physicians and nurses is a main concern, in our view. This is on the back of the rapid expansion of Thailand's medical industry that could exhaust the supply of physicians and nurses in the near term. If BCH is unable to manage its costs, this would have a negative impact on its profitability in the long run.

**Company Background**

Bangkok Chain Hospital (BCH) was established in 1993 to provide healthcare services in Bangkok, Chacheongsao, Saraburi, Pathum Thani, Ayutthaya, Chiang Rai province. The major shareholders of BCH include the Harnphanich family with a 49.99% stake. It was listed on the Stock Exchange of Thailand (SET) on 10 Nov 2004 under the ticker "BCH".

BCH is a leading private healthcare provider in Thailand with c.5.5% share of the SSS healthcare market and is ranked fourth in terms of market capitalisation. In 9M19, BCH operates 12 hospitals and one polyclinic with 2,245 IPD beds and 440 OPD rooms. It plans to open three new hospitals in 2020-2021 with 459 IPD beds (+20% y-o-y). BCH has been gaining market share from both public and private hospitals in the cash and SSS patient markets by providing specialist centres and high-standard medical services, as well as hiring reputable medical staff.

Currently, six of its hospitals have already clinched Hospital Accreditation Level 3 with three more hospitals in the process of getting this accreditation. Meanwhile, WMC received the JCI Accreditation in 2014.



Source: Company, DBSVTH

**Key Assumptions**

FY Dec	2017A	2018A	2019F	2020F	2021F
<b>Total revenue from hospital operation (THBm)</b>	7,255	8,073	8,947	10,168	11,138
<b>%Chg yoy</b>	11%	11%	11%	13%	10%
<b>Revenue from OPD</b>	2,578	2,842	3,161	3,484	3,840
<b>%Chg yoy</b>	11%	10%	11%	10%	10%
<b>Revenue from IPD</b>	1,899	2,546	2,937	3,147	3,435
<b>%Chg yoy</b>	4%	34%	15%	7%	9%
CAPEX	1,205	1,341	1,548	1,539	800
Capex/rev	17%	17%	17%	15%	7%
Gross Profit Margin	32.8%	33.2%	32.3%	33.0%	32.2%
EBITDA Margin	28.0%	27.3%	26.9%	27.1%	26.2%

Source: Company, DBSVTH

**Segmental Breakdown**

FY Dec	2017A	2018A	2019F	2020F	2021F
<b>Revenues (Btm)</b>	7,255	8,073	8,947	10,168	11,138
Revenue from OPD	2,578	2,842	3,161	3,484	3,840
Revenue from IPD	1,899	2,546	2,937	3,147	3,435
Revenue from SSS	2,717	2,685	2,848	3,538	3,863
<b>Revenue Breakdown</b>					
Revenue from OPD	36%	35%	35%	34%	34%
Revenue from IPD	26%	32%	33%	31%	31%
Revenue from SSS	37%	33%	32%	35%	35%
Revenue from UC	1%	0%	0%	0%	0%

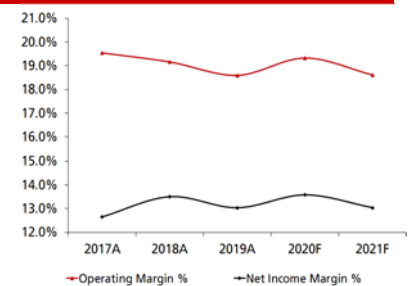
Source: Company, DBSVTH

## Income Statement (Btm)

FY Dec	2016A	2017A	2018A	2019A	2020F	2021F
Revenue	6,511	7,255	8,073	8,947	10,168	11,138
Cost of Goods Sold	(4,472)	(4,877)	(5,394)	(6,056)	(6,808)	(7,549)
<b>Gross Profit</b>	<b>2,039</b>	<b>2,378</b>	<b>2,679</b>	<b>2,891</b>	<b>3,361</b>	<b>3,589</b>
Other Opng (Exp)/Inc	(835)	(960)	(1,132)	(1,228)	(1,395)	(1,517)
<b>Operating Profit</b>	<b>1,204</b>	<b>1,418</b>	<b>1,547</b>	<b>1,663</b>	<b>1,965</b>	<b>2,072</b>
Other Non Opg (Exp)/Inc	87.0	98.9	104	119	124	131
Associates & JV Inc	1.27	0.89	2.54	3.00	2.00	2.00
Net Interest (Exp)/Inc	(151)	(128)	(120)	(126)	(147)	(148)
Exceptional Gain/(Loss)	0.0	0.0	0.0	(14.3)	0.0	0.0
<b>Pre-tax Profit</b>	<b>1,141</b>	<b>1,390</b>	<b>1,533</b>	<b>1,644</b>	<b>1,945</b>	<b>2,056</b>
Tax	(208)	(271)	(285)	(318)	(389)	(411)
Minority Interest	(180)	(202)	(159)	(160)	(176)	(194)
Preference Dividend	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Profit</b>	<b>753</b>	<b>917</b>	<b>1,089</b>	<b>1,166</b>	<b>1,380</b>	<b>1,452</b>
Net Profit before Except.	753	917	1,089	1,180	1,380	1,452
EBITDA	1,807	2,056	2,229	2,439	2,790	2,950
<b>Growth</b>						
Revenue Gth (%)	12.9	11.4	11.3	10.8	13.6	9.5
EBITDA Gth (%)	23.6	13.8	8.4	9.4	14.4	5.7
Opg Profit Gth (%)	30.6	17.8	9.1	7.5	18.2	5.4
Net Profit Gth (Pre-ex)	42.8	21.8	18.8	8.3	17.0	5.2
<b>Margins &amp; Ratio</b>						
Gross Margins (%)	31.3	32.8	33.2	32.3	33.0	32.2
Opg Profit Margin (%)	18.5	19.5	19.2	18.6	19.3	18.6
Net Profit Margin (%)	11.6	12.6	13.5	13.0	13.6	13.0
ROAE (%)	16.5	18.4	20.0	19.4	20.7	19.6
ROA (%)	7.1	7.9	8.6	8.9	9.5	9.2
ROCE (%)	10.3	10.8	11.1	11.6	12.3	11.9
Div Payout Ratio (%)	56.3	54.4	52.6	53.7	53.0	53.0
Net Interest Cover (x)	8.0	11.0	12.9	13.1	13.4	14.0

Source: Company, DBSVTH

## Margins Trend



## Quarterly / Interim Income Statement (Btm)

FY Dec	3Q2018	4Q2018	1Q2019	2Q2019	3Q2019	4Q2019
Revenue	2,228	2,105	2,078	2,137	2,469	2,263
Cost of Goods Sold	(1,432)	(1,435)	(1,444)	(1,483)	(1,590)	(1,540)
<b>Gross Profit</b>	<b>796</b>	<b>670</b>	<b>635</b>	<b>654</b>	<b>879</b>	<b>723</b>
Other Oper. (Exp)/Inc	(300)	(289)	(288)	(306)	(317)	(323)
<b>Operating Profit</b>	<b>496</b>	<b>381</b>	<b>346</b>	<b>348</b>	<b>562</b>	<b>400</b>
Other Non Opg (Exp)/Inc	26.3	34.1	27.7	30.0	31.3	29.7
Associates & JV Inc	1.04	0.51	0.67	0.81	0.69	1.00
Net Interest (Exp)/Inc	(30.7)	(31.7)	(32.2)	(34.4)	(34.7)	(32.6)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0	0.0
<b>Pre-tax Profit</b>	<b>492</b>	<b>384</b>	<b>342</b>	<b>344</b>	<b>559</b>	<b>398</b>
Tax	(88.1)	(81.8)	(59.0)	(64.6)	(101)	(93.4)
Minority Interest	(47.5)	(33.9)	(35.1)	(35.8)	(56.3)	(33.1)
<b>Net Profit</b>	<b>357</b>	<b>268</b>	<b>248</b>	<b>244</b>	<b>402</b>	<b>272</b>
Net profit bef Except.	357	268	248	244	402	272
EBITDA	666	568	536	540	763	592

## Growth

Revenue Gth (%)	16.2	(5.5)	(1.3)	2.8	15.5	(8.4)
EBITDA Gth (%)	27.8	(14.7)	(5.7)	0.7	41.4	(22.5)
Opg Profit Gth (%)	40.6	(23.1)	(9.1)	0.5	61.5	(28.8)
Net Profit Gth (Pre-ex)	42.6	(24.8)	(7.5)	(1.7)	64.9	(32.4)

## Margins

Gross Margins (%)	35.7	31.8	30.5	30.6	35.6	32.0
Opg Profit Margins (%)	22.2	18.1	16.7	16.3	22.8	17.7
Net Profit Margins (%)	16.0	12.7	11.9	11.4	16.3	12.0

## Revenue Trend

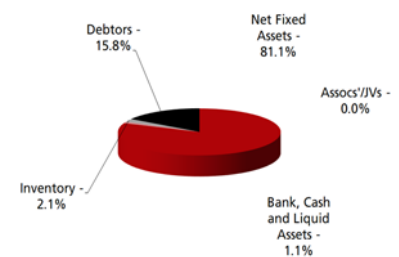


Source: Company, DBSVTH

**Balance Sheet (Btm)**

FY Dec	2016A	2017A	2018A	2019A	2020F	2021F
Net Fixed Assets	8,039	8,718	9,497	10,391	11,232	11,286
Invt in Associates & JVs	0.0	0.0	0.0	0.0	0.0	0.0
Other LT Assets	593	593	582	582	582	582
Cash & ST Invt	680	2,066	745	136	721	489
Inventory	195	204	238	267	302	336
Debtors	997	1,054	1,511	2,019	2,595	3,227
Other Current Assets	64.7	40.0	54.2	60.0	68.2	74.7
<b>Total Assets</b>	<b>10,569</b>	<b>12,674</b>	<b>12,628</b>	<b>13,454</b>	<b>15,499</b>	<b>15,995</b>
ST Debt	1,596	1,150	346	346	346	346
Creditor	456	556	698	782	885	985
Other Current Liab	569	571	696	772	877	961
LT Debt	2,498	4,344	4,354	4,354	5,354	4,854
Other LT Liabilities	113	142	136	136	136	136
Shareholder's Equity	4,761	5,195	5,701	6,294	7,048	7,768
Minority Interests	576	717	696	771	854	945
<b>Total Cap. &amp; Liab.</b>	<b>10,569</b>	<b>12,674</b>	<b>12,628</b>	<b>13,454</b>	<b>15,499</b>	<b>15,995</b>
Non-Cash Wkg. Capital	231	172	409	791	1,203	1,691
Net Cash/(Debt)	(3,414)	(3,429)	(3,955)	(4,564)	(4,979)	(4,710)
Debtors Turn (avg days)	58.1	51.6	58.0	72.0	82.8	95.4
Creditors Turn (avg days)	39.9	42.6	47.5	50.0	49.8	50.2
Inventory Turn (avg days)	17.7	16.8	16.8	17.1	17.0	17.1
Asset Turnover (x)	0.6	0.6	0.6	0.7	0.7	0.7
Current Ratio (x)	0.7	1.5	1.5	1.3	1.7	1.8
Quick Ratio (x)	0.6	1.4	1.3	1.1	1.6	1.6
Net Debt/Equity (X)	0.6	0.6	0.6	0.6	0.6	0.5
Net Debt/Equity ex MI (X)	0.7	0.7	0.7	0.7	0.7	0.6
Capex to Debt (%)	16.9	21.9	28.5	32.9	27.0	15.4

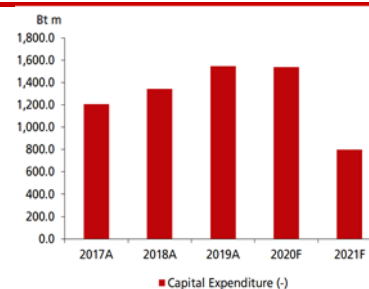
Source: Company, DBSVTH

**Asset Breakdown**

## Cash Flow Statement (Btm)

FY Dec	2016A	2017A	2018A	2019A	2020F	2021F
Pre-Tax Profit	1,141	1,390	1,533	1,644	1,945	2,056
Dep. & Amort.	514	538	576	654	698	746
Tax Paid	(255)	(311)	(322)	(357)	(433)	(456)
Assoc. & JV Inc/(loss)	(1.3)	(0.9)	(2.5)	(3.0)	(2.0)	(2.0)
Chg in Wkg.Cap.	85.6	58.7	(237)	(382)	(412)	(488)
Other Operating CF	56.0	41.3	28.2	42.1	46.3	47.5
<b>Net Operating CF</b>	<b>1,541</b>	<b>1,716</b>	<b>1,576</b>	<b>1,598</b>	<b>1,843</b>	<b>1,903</b>
Capital Exp.(net)	(692)	(1,205)	(1,341)	(1,548)	(1,539)	(800)
Other Invts.(net)	0.0	0.0	0.0	0.0	0.0	0.0
Invts in Assoc. & JV	0.0	0.0	0.0	0.0	0.0	0.0
Div from Assoc & JV	0.0	0.0	0.0	0.0	0.0	0.0
Other Investing CF	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Investing CF</b>	<b>(692)</b>	<b>(1,205)</b>	<b>(1,341)</b>	<b>(1,548)</b>	<b>(1,539)</b>	<b>(800)</b>
Div Paid	(349)	(449)	(574)	(574)	(625)	(731)
Chg in Gross Debt	460	(1,400)	795	0.0	(1,000)	500
Capital Issues	0.0	0.0	0.0	0.0	0.0	0.0
Other Financing CF	(1,086)	2,724	(1,776)	(86.0)	1,907	(1,103)
<b>Net Financing CF</b>	<b>(975)</b>	<b>875</b>	<b>(1,555)</b>	<b>(660)</b>	<b>281</b>	<b>(1,334)</b>
Currency Adjustments	0.0	0.0	0.0	0.0	0.0	0.0
Chg in Cash	(126)	1,385	(1,321)	(610)	585	(231)
Opg CFPS (Bt)	0.58	0.66	0.73	0.79	0.90	0.96
Free CFPS (Bt)	0.34	0.20	0.09	0.02	0.12	0.44

## Capital Expenditure



Source: Company, DBSVTH

THAI-CAC (as of Nov 2018)

Corporate Governance CG Rating (as of Oct 2018)






Certified



**THAI-CAC** is Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of May 2018) are categorised into:

Score	Description
Declared	Companies that have declared their intention to join CAC
Certified	Companies certified by CAC.

**Corporate Governance CG Rating** is based on Thai Institute of Directors (IOD)'s annual assessment of corporate governance practices of listed companies. The assessment covers 235 criteria in five categories including board responsibilities (35% weighting), disclosure and transparency (20%), role of stakeholders (20%), equitable treatment of shareholders (10%) and rights of shareholders (15%). The IOD then assigns numbers of logos to each company based on their scoring as follows:

Score	Range Number of Logo	Description
90-100		Excellent
80-89		Very Good
70-79		Good
60-69		Satisfactory
50-59		Pass
<50	No logo given	N/A

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**BUY** (>15% total return over the next 12 months for small caps, >10% for large caps)

**HOLD** (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

**FULLY VALUED** (negative total return i.e. > -10% over the next 12 months)

**SELL** (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

*Share price appreciation + dividends*

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