

Lokman Hekim

Initiating of Coverage

Net profitable growth

We initiate our coverage for Lokman Hekim (LKMNH) with a BUY recommendation and a 12 month target price of 10.46TL/share, which offers 63% upside potential.

Lokman Hekim, present in the sector for the last 21 years, is a niche hospital operator in Ankara, Van and Arbil. The Group has a portfolio of five hospitals, a medical outpatient centre in Turkey and an imaging centre in Northern Iraq. The Group has a strategy to position itself in Central and Eastern Anatolia and grow in underpenetrated regions where they have a competitive edge.

Main investment positives are: i) promising outlook for its existing hospital portfolio, ii) favourable economic and demographic factors in Turkey supporting future revenue growth, such as rising private healthcare spending, and an increase in the number of senior citizens ii) organic and inorganic growth opportunities in the private hospital market, iii) potential contribution from Lokman Hekim University and the management of city hospitals such as the recently announced agreement for Elazığ Hospital (the latter is not included in our price target estimate) iv) strong balance sheet, low leverage providing room for future growth v) sustainable dividend policy.

LKMNH trades at 6.6x 2018E EV/EBITDA and 11.3x 18E P/E multiples, implying 52% and 64% discount vs its developing country peers. In terms of 2017 EV/EBITDA and P/E multiples, the stock trades at 50% and 34% discount, respectively. LKMNH trades at a discount with its 2017TTM EV/EBITDA of 8.2x compared to 2017TTM EV/EBITDA multiple 13.4x of Medical Park, calculated with 12-mo trailing EBITDA and Mcap based on the low-end of IPO price range at TL 19.0 TL.

28% top-line and 9% EBITDA growth estimate in 2017. With added contributions from Akay hospital and Demet medical centre, which entered the portfolio in 2016, together with higher patient volumes in existing hospitals, we estimate top-line to reach TL240mn and EBITDA to be at TL28.9mn at 2017YE. Moreover, we expect net income to be TL6.3mn in 2017. Our 2017 cap-ex estimate is TL14.1mn comprised of both maintenance and capacity investment at new and mature hospitals.

Potential to distribute higher dividends. Lokman Hekim has a healthy balance sheet with low debt level (Net debt/ annualized EBITDA 2.5x as of 9M17) We believe that the company has potential to distribute higher dividends going forward as it has strong free cash flow generation capability unless it makes further acquisitions.

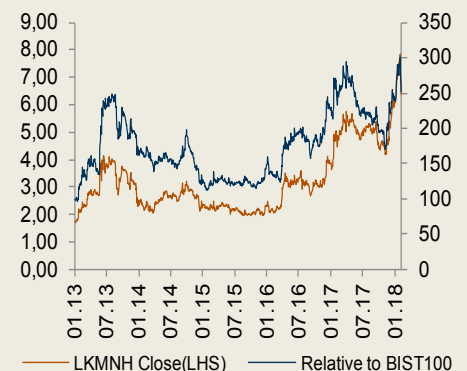
Main risks: Longer than expected digestion of Akay and capacity increase investments in other hospitals is a near-term risk. Current ramp-up time for newly acquired hospitals are two years, however it might take longer to reach desired occupancy and profitability levels. Moreover, change in competitive conditions and economic parameters in Turkey, might delay Lokman Hekim's growth and profitability targets. Other risks we see are the competition from city hospitals and potential decrease in health expenditures by the Social Security Institution, as the population gets older in the long term. Last but not the least, shareholders' preference for dividends over inorganic growth opportunities is another risk which may cap future growth potential.

BUY

Upside Potential 63%

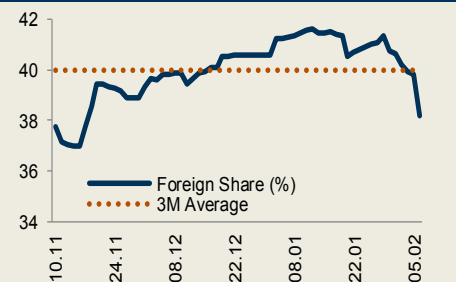
| Ticker | LKMNH | | |
|--------------------------------|--------------|--------------|--------------|
| Stock Data | TL | US\$ | |
| Price at 06 02 2018 | 6,40 | 1,69 | |
| Target Price | 10,46 | 2,50 | |
| Prev.TP | n.a | n.a | |
| Mcap (mn) | 154 | 41 | |
| Float Mcap (mn) | 109 | 29 | |
| Avg.Daily Volume (3M, mn) | 1,9 | 0,5 | |
| No. of Shares Outstanding (mn) | | 24 | |
| Free Float (%) | | 70,77 | |
| Multiples | 2017E | 2018E | |
| P/E | 24,4 | 11,3 | |
| P/BV | 2,3 | 2,0 | |
| EV/EBITDA | 8,2 | 6,6 | |
| Price Perf. (%) | 1 Mn | 3 Mn | 12 Mn |
| TL | -3 | 51 | 41 |
| US\$ | -3 | 54 | 37 |
| Relative to BIST-100 | -3 | 44 | 6 |

Price / Relative Price



52 Week Range (Close TL) 4,21 7,83

Foreign Share (%)



Ugurser Onder Hardy

uonder@isyatirim.com.tr
+90 212 350 25 26

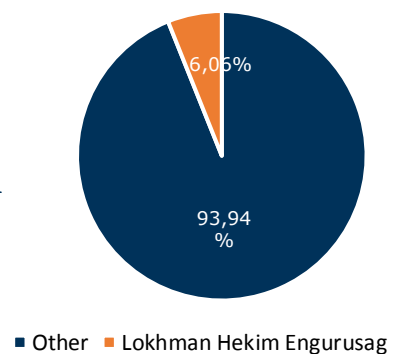
Lokman Hekim Engurusag
Summary of Key Financials (TL mn)

| Income Statement (TL mn) | 2016A* | 2017E | 2018E | 2019E | 2020E |
|------------------------------------|--------|-------|-------|-------|-------|
| Revenues | 195 | 240 | 285 | 337 | 399 |
| EBITDA | 29 | 29 | 36 | 48 | 66 |
| Depreciation & Amortisation | 7 | 8 | 9 | 11 | 13 |
| EBIT | 22 | 20 | 25 | 35 | 50 |
| Other income (expense), net | (2) | (1) | (2) | (2) | 2 |
| Financial expenses, net | (4) | (9) | (9) | (10) | (11) |
| Minority Interests | 9 | 7 | 5 | 5 | 5 |
| Income before tax | 15 | 11 | 17 | 25 | 40 |
| Taxation on Income | 1 | 1 | 2 | 3 | 5 |
| Net income | 7 | 6 | 14 | 23 | 40 |
| Cash Flow Statement (TL mn) | | | | | |
| Net Income | 7 | 6 | 14 | 23 | 40 |
| Depreciation & Amortisation | 7 | 8 | 9 | 11 | 13 |
| Change in Working Capital | 10 | (14) | (5) | (3) | (6) |
| Cash Flow from Operations | 25 | 1 | 20 | 33 | 47 |
| Capital Expenditure | 36 | 14 | 18 | 19 | 12 |
| Free Cash Flow | (10) | (13) | 2 | 15 | 35 |
| Balance Sheet (TL mn) | | | | | |
| Tangible Fixed Assets | 81 | 80 | 88 | 95 | 94 |
| Other Long Term Assets | 17 | 0 | 0 | 0 | 0 |
| Intangibles | 28 | 28 | 28 | 28 | 28 |
| Goodwill | 2 | 2 | 2 | 2 | 2 |
| Long-term financial assets | 0 | 0 | 0 | 0 | 0 |
| Inventories | 6 | 9 | 10 | 12 | 14 |
| Trade receivables | 40 | 50 | 59 | 66 | 78 |
| Cash & equivalents | 1 | 9 | 5 | 9 | 7 |
| Other current assets | 25 | 60 | 66 | 75 | 85 |
| Total assets | 199 | 236 | 258 | 287 | 307 |
| Long-term debt | 27 | 35 | 35 | 35 | 35 |
| Other long-term liabilities | 27 | 29 | 27 | 22 | 17 |
| Short-term debt | 19 | 30 | 25 | 45 | 30 |
| Trade payables | 33 | 31 | 37 | 43 | 51 |
| Total Debt | 46 | 65 | 60 | 80 | 65 |
| Other short-term liabilities | 17 | 22 | 25 | 27 | 33 |
| Total liabilities | 123 | 148 | 149 | 172 | 160 |
| Minority Interest | 13 | 20 | 30 | 20 | 25 |
| Total equity | 63 | 87 | 109 | 115 | 146 |
| Paid-in capital | 24 | 24 | 24 | 24 | 24 |
| Total liabilities & equity | 199 | 235 | 258 | 287 | 307 |
| Ratios | | | | | |
| Net debt/EBITDA (x) | 1,5 | 2,5 | 1,5 | 1,5 | 0,9 |
| EBITDA Margin | 15,1 | 12,0 | 12,7 | 14,3 | 16,5 |
| Net Margin | 3,6 | 2,6 | 4,8 | 6,8 | 10,0 |
| Valuation Metrics | | | | | |
| EV/Sales (x) | 0,5x | 0,9x | 0,8x | 0,7x | 0,6x |
| EV/EBITDA (x) | 3,0x | 8,2x | 6,6x | 5,0x | 4,0x |
| EV/IC (x) | 0,6x | 1,6x | 1,5x | 1,4x | 1,4x |
| P/E (x) | 8,0x | 24,4x | 11,3x | 6,7x | 3,9x |
| FCF yield (%) | -18% | -8% | 1% | 9% | 23% |
| Dividend yield (%) | 3,5% | 3,2% | 2,7% | 5,83% | 9,86% |

*based on average Mcap during the year

Company Overview

Lokman Hekim, established in 1996 in Ankara, is a listed Turkish hospital operator. The Group owns six hospitals in Turkey and one imaging center in Northern Iraq.

FIGURE 1: Shareholder Structure


Valuation

Valuation Summary

We value Lokman Hekim using a discounted cash flow method (DCF) since we believe that it is the most appropriate method that reflects the long-term growth potential of the company.

We calculate a 12 month target Mcap of TL251mn, corresponding to TL10.46/share target price, implying a large 63% upside potential. Accordingly, we initiate our coverage for Lokman Hekim with a BUY recommendation.

We calculate a target value of TL251mn based on DCF analysis. With an average TL cost of equity of 15,8% (15% at terminal) throughout the 5yr forecast horizon, an average cost of debt of 15.2%, a beta of 0.8 and average 48% debt-equity ratio, we reach an average 14.6% WACC for our DCF analysis (14.9% at terminal). Our terminal growth rate is 4%. DCF valuation implies 2018E EBITDA multiple of 11.0x.

DCF Assumptions

Here are the basic assumptions that we used in our valuation model.

- Our forecast period is five years.
- We forecast total revenues to increase at 15% CAGR over the next five years driven by higher patient volume, expansion of bed capacity and increased occupancy rate with the gestation of Akay and Demet and capacity improvements in mature hospitals, particularly in Etlik and Sincan. Note however, in line with the Group's strategy, we can see additional selective hospital acquisitions, which can push revenue growth even higher.
- With increased bed capacity and higher occupancy, we expect both total inpatient and outpatient volume to increase by a CAGR of 5.8% in the next five years.

FIGURE 2: Valuation Summary (TL,mn)

| | 2017T | 2018T | 2019T | 2020T | 2021T | 2022T |
|-----------------------------------|------------|----------|-----------|-----------|-----------|-----------|
| Revenue | 240 | 285 | 337 | 399 | 448 | 490 |
| Adjusted EBITDA | 29 | 36 | 48 | 66 | 74 | 83 |
| Operating Profit | 20 | 25 | 35 | 50 | 57 | 65 |
| (-) Tax | 3 | 3 | 5 | 7 | 7 | 13 |
| (+) Amortization and Depreciation | 9 | 9 | 11 | 13 | 15 | 16 |
| (-/+ Change in Working Capital | -14 | -5 | -3 | -6 | -4 | -3 |
| (-) CAPEX | -14 | -18 | -19 | -12 | -13 | -15 |
| DCF | -2 | 8 | 20 | 39 | 47 | 51 |
| Discount rate | | 1,0 | 1,1 | 1,3 | 1,5 | 1,7 |
| DCF | | 8 | 17 | 30 | 32 | 29 |
| Terminal Growth | 4,0% | | | | | |
| Enterprise Value | 400 | | | | | |
| Adjusted Net Debt 2017 | 84 | | | | | |
| Share buy-back | 9,8 | | | | | |
| Minority Interest (-) | 74 | | | | | |
| Adjusted Target value | 251 | | | | | |
| Target Price / share | 10,46 | | | | | |
| Current MCAP | 154 | | | | | |
| Current Price / share | 6,40 | | | | | |
| Upside Potential | 63% | | | | | |

Source: Is Investment Estimates

Lokman Hekim Engurusag

- We pencilled in a revenue/patient growth lower than the inflation during our forecast period due to competition. Particularly for Van hospitals, we expect revenue/patient growth to be slower than for Ankara hospitals.
- With the capacity upgrades and renovations, we expect revenue/bed to increase at a CAGR of 11.5% at Akay. With completed renovations by 2019, we expect Akay to be the largest revenue generating hospital in the portfolio. Starting 2021, as the University will become operational, we expect added contribution to Akay and Sincan, which will become university hospitals.
- Driven by stronger top-line growth and margin improvements thanks to stabilizing cost trends, we project EBITDA margin to be on average c.14% during our projection period and rising as high as 16.5% in 2022E.
- Our model moderately includes potential margin improvement that will be driven by Lokman Hekim University. We include income and expense related to the University in other operations. The Group donated a TL1.2mn valued land for the inception of the university. We expect the donation policy to continue going forward and pencil in between TL1.5-2mn in donations every year. We project a TL4mn income coming from the University every year starting in 2020.
- We assume capex to make up on average 7% of revenues between 2017-2019 including capacity improvement and maintenance. Between 2020-2022, with reduced capacity improvement needs, we pencil in mainly maintenance capex at 3.4% of revenues.
- In terms of working capital requirement, we forecast WCR/Sales to be on average at 10.4% in our forecast period.
- Lokman Hekim owns 51% of Van Health Services (Van Sağlık Hizmetleri ve İnşaat Taahhüt A.Ş.) comprising of Van and Van Hayat hospitals. We assume TL80mn revenues and 15% EBITDA margin for Van Health Services in 2018. In order to reach fair value for Lokman Hekim we deduct 49% of Van Health Services as minority interest.
- We estimate Net debt level to increase with the additional loans to finance capacity increase and modernization investments in 2017. After 2019, a visible decline should be seen in leverage as the Group finishes major capacity investments and renovations unless it gets interested in M&A activity. Lokman Hekim stated in its presentation that it can internally finance the acquisition of one hospital w/100 bed capacity every 24 months but anything beyond that would require external funding.
- Note that the Group has a deferred tax liability dating from November 2011, when the Van earthquake took place, that the Revenue Administration delayed the collection of until 2018. Based on the Group's audit report, the collection starts in January 2018, and the Group will pay back the TL27.7mn tax in 60 months, 30 equal instalments. We pencilled in TL5.5mn Van Tax liability every year between 2018-2022. We calculate an adjusted net debt including the TL27.7mn Van Tax liability when running the DCF and calculating the multiples.
- We took the share buy back into consideration when calculating our target value, calculating the share buy back from the share's current price of TL6.40 for a total of TL9.8mn.

FIGURE 3 : Sensitivity table (equity value, TL mn)

| Terminal Growth rate | WACC | | | | |
|----------------------|-------|-------|-------|-------|-------|
| | 12,9% | 13,9% | 14,9% | 15,9% | 16,9% |
| 2,0% | 251 | 231 | 214 | 199 | 187 |
| 3,0% | 275 | 251 | 232 | 214 | 199 |
| 4,0% | 305 | 275 | 252 | 231 | 214 |
| 5,0% | 342 | 305 | 276 | 251 | 231 |
| 6,0% | 390 | 342 | 306 | 275 | 251 |

Source: Is Investment

FIGURE 4: Key Assumptions

| | 2016A | 2017E | 2018E | 2019E | 2020E | 2021E | 2022T | 17 - 22 CAGR |
|--------------------------------------|--------|-------|-------|-------|-------|-------|-------|-----------------|
| Operational Projections | | | | | | | | |
| Total Bed Capacity | 613 | 613 | 613 | 690 | 730 | 747 | 747 | 4,0% |
| Total Occupancy Rate (%) | 58% | 72% | 77% | 74% | 77% | 78% | 79% | |
| Toplam Patient Volume (thds) | 1.006 | 1.056 | 1.122 | 1.214 | 1.336 | 1.385 | 1.403 | 5,8% |
| Inpatient Volume | 50 | 62 | 66 | 72 | 79 | 82 | 83 | 5,8% |
| Outpatient Volume | 955 | 994 | 1056 | 1142 | 1257 | 1303 | 1320 | 5,8% |
| Average Revenue / Patient (TL) | 194 | 227 | 254 | 278 | 299 | 323 | 349 | 9,0% |
| Average Rev / Outpatient (TL) | 85,9 | 108 | 120 | 131 | 142 | 153 | 166 | 8,9% |
| Average Rev / Inpatient (TL) | 2094,6 | 2.127 | 2.360 | 2.579 | 2.791 | 3.043 | 3.286 | 9,1% |
| Revenues / Bed (TL) | 318 | 382 | 451 | 472 | 529 | 600 | 656 | 11,4% |
| Ankara Etilik | 814 | 825 | 899 | 964 | 1.034 | 1.106 | 1.195 | 7,7% |
| Ankara Sincan | 308 | 340 | 370 | 365 | 380 | 407 | 435 | 5,1% |
| Akay | 207 | 580 | 845 | 775 | 837 | 954 | 1.078 | 13,2% |
| Demet | 10 | 334 | 364 | 390 | 419 | 448 | 479 | 7,5% |
| Van | 255 | 255 | 269 | 276 | 288 | 299 | 311 | 4,0% |
| Van Hayat | 371 | 370 | 390 | 401 | 417 | 434 | 451 | 4,0% |
| Financial Projections (TL mn) | | | | | | | | |
| Total Revenue | 195 | 240 | 285 | 337 | 399 | 448 | 490 | 15% |
| YoY growth % | 38% | 23% | 19% | 18% | 19% | 12% | 9% | |
| Ankara Total | 111 | 154 | 194 | 243 | 301 | 346 | 383 | 20% |
| Van Total | 76 | 75 | 80 | 82 | 85 | 88 | 92 | 4% |
| Arbil | 1 | 3 | 3 | 3 | 3 | 4 | 4 | 9% |
| Other | 8 | 9 | 9 | 9 | 10 | 10 | 10 | 4% |
| OPEX/Sales | 4,5% | 4,4% | 4,4% | 4,1% | 3,8% | 3,4% | 3,3% | |
| EBITDA | 28 | 29 | 36 | 48 | 66 | 74 | 83 | 24% |
| EBITDA Margin | 14,6% | 12,0% | 12,7% | 14,3% | 16,5% | 16,6% | 17,0% | |
| Capex | 36 | 14 | 18 | 19 | 12 | 13 | 15 | |
| As a % of sales | 4,2% | 7,8% | 7,5% | 6,5% | 3,6% | 3,4% | 3,3% | |
| Working Capital Needs/Revenues (%) | 6,6% | 11,1% | 11,1% | 10,4% | 10,2% | 9,9% | 9,7% | |
| Macroeconomic Projections | | | | | | | | |
| GDP Growth (%) | 3,2 | 6,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | |
| Average inflation (%) | 7,8 | 11,1 | 11,0 | 9,3 | 8,3 | 8,0 | 8,0 | |

Source: IS Investment, Company reports

Peer Comparison

Trades at discount vs its international peers

LKMNH trades at 6.6x 2018E EV/EBITDA and 11.3x 18E P/E multiples, implying 52% and 64% discount vs its developing country peers. In terms of 2017 EV/EBITDA and P/E multiples, the stock trades at 50% and 34% discount, respectively.

LKMNH trades at a discount with its 2017TTM EV/EBITDA of 8.2x compared to 2017TTM EV/EBITDA multiple 13.4x of Medical Park, calculated with 12-mo trailing EBITDA and Mcap based on on the low-end of IPO price range at TL 19.0 TL.

FIGURE 5: Peer Comparison

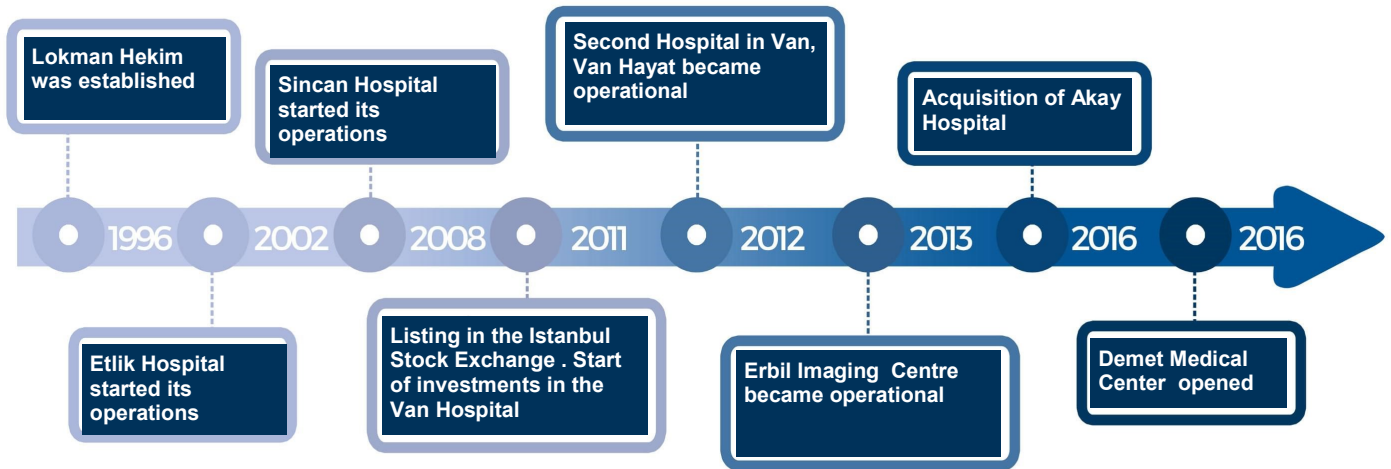
| Peer Comparison Company | Ticker | Country | Mcap (USD mn) | P/E | | | EV/EBITDA | | |
|--|------------------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | 2017E | 2018E | 2019E | 2017E | 2018E | 2019E |
| IHH Healthcare Bhd | IHH MK Equity | Malaysia | 12.230 | 70,8x | 49,4x | 38,4x | 22,2x | 18,9x | 16,1x |
| Mediclinic International PLC | MDC LN Equity | South Africa | 6.133 | 18,0x | 18,9x | 17,2x | 12,1x | 11,4x | 11,3x |
| Life Healthcare Group Holdings | LHC SJ Equity | South Africa | 3.144 | 20,2x | 17,7x | 15,6x | 10,0x | 9,1x | 8,4x |
| Georgia Healthcare Group PLC | GHG LN Equity | Georgia | 619 | 34,4x | 25,4x | 15,0x | 17,6x | 13,5x | 11,3x |
| Fortis Healthcare Ltd | FORH IN Equity | India | 1.178 | 52,4x | 59,2x | 29,4x | 20,4x | 17,5x | 13,5x |
| Middle East Healthcare Co | MEH AB Equity | Saudi Arabia | 1.374 | 16,2x | 15,5x | 13,6x | 15,6x | 13,8x | 12,8x |
| Mitra Keluarga Karyasehat Tbk | MIKA IJ Equity | Indonesia | 1.964 | 40,3x | 38,2x | 35,2x | 29,7x | 26,6x | 23,9x |
| Siloam International Hospitals | SILO IJ Equity | Indonesia | 1.094 | 129,8x | 105,1x | 90,6x | 20,5x | 16,3x | 13,6x |
| MD Medical Group Investments P | MDMG LI Equity | Russia | 771 | 16,3x | 14,1x | 11,9x | 7,7x | 6,3x | 5,3x |
| Bangkok Chain Hospital PCL | BCH TB Equity | Thailand | 1.217 | 44,5x | 38,2x | 33,1x | 10,6x | 8,9x | 7,2x |
| Developing countries median | | | | 37,4x | 31,8x | 23,3x | 16,6x | 13,7x | 12,1x |
| RHOEN-KLINIKUM AG | RHK GR Equity | Germany | 2.481 | 57,5x | 44,3x | 35,8x | 16,9x | 14,1x | 12,5x |
| Healthscope Ltd | HSO AU Equity | Austria | 2.739 | 17,7x | 18,6x | 17,1x | 11,5x | 12,0x | 11,0x |
| Capio AB | CAPIO SS Equity | Sweden | 792 | 13,2x | 12,5x | 11,2x | 9,0x | 8,1x | 7,5x |
| Developed countries median | | | | 17,7x | 18,6x | 17,1x | 11,5x | 12,0x | 11,0x |
| Lokman Hekim Engurusag Saglik | LKMNH TI Equity | Turkey | 50 | 24,4x | 11,3x | 6,7x | 8,2x | 6,6x | 5,0x |
| LKMNH Developing Markets Premium/Discount | | | | -35% | -64% | -71% | -50% | -52% | -59% |
| LKMNH Developed Markets Premium/Discount | | | | 37% | -39% | -61% | -28% | -45% | -55% |

Source: Bloomberg and Is Investment Estimates

Group Overview

Lokman Hekim Group, a steady growth hospital operator established in 1996 in Ankara. The Group currently owns four hospitals in Ankara, two hospitals in Van and an imaging centre in Erbil, Iraq.

FIGURE 6: Group history



Source: Company Report, iŞ Investment

The Group opened its first hospital in the Etlik district of Ankara in 2002 and its second hospital in Sincan in 2008, which became the largest hospital in the district. In 2011 the Group became listed on Borsa Istanbul and raised a total of TL10.5mn listing 20% of its shares. With the registered shares, the free float ratio was at 99.19%.

After financing its working capital needs and paying back its bank loans, the Group started investing in its expansion with the IPO proceeds. In June 2011, Lokman Hekim invested in 51% of Van Health Services, which had the inactive Van Hayat hospital and the 133 bed capacity Van Hospital for a TL19.2mn consideration payable in 48 months. In 2012, the Group inaugurated the Van Hospital after making modernization and capacity increase investments.

In 2013, the Group made its first investment outside Turkey, in the Northern Iraqi city of Erbil with an imaging centre, for which it invested 10.5mn Iraqi Dinar (around TL1.8mn).

In 2016, Lokman Hekim acquired the license to operate Demet Medical Centre for a TL1.5mn consideration and acquired Akay Hospital in the Çankaya District of Ankara for a TL22.3mn consideration. In July 2017, Lokman Hekim opened the Demet Medical Centre, a medical clinic in Ankara, which is the latest addition to the hospital portfolio.

Lokman Hekim has a highly fragmented shareholder base with 70,78% of its shares listed on Borsa Istanbul (BIST).

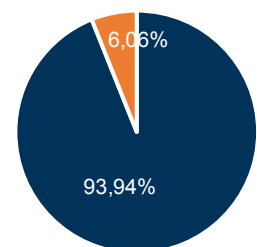
Currently the major shareholders are Lokman Hekim Engurusag (6.06%).

Note that the Group made a capital increase in 2014, growing its share capital from TL16mn to TL24mn.

Share buy back policy

The Group has a share buy-back policy since 2014. Based on market conditions, in order to diminish volatility and keep the stock stable, the Group buys back its own shares when it deems necessary. Accordingly, Lokman Hekim can buy up to 10% of its own shares within a price range of 0 to 6.00 TL or until the total buy-back size reaches TL2.4mn nominal shares without any price or transaction limit. To date, the Group bought back TL1.531mn nominal shares (6.38% of total shares).

FIGURE 7: Ownership



Legend: ■ Other ■ Lokman Hekim Engurusag

Source: Company Report, iŞ Investment

Group Strategy and Future Growth Drivers

Lokman Hekim, present in the sector for the last 21 years, is a niche hospital operator in Ankara, Van and Arbil. The Group has a portfolio of five hospitals, a medical outpatient centre in Turkey and an imaging centre in Northern Iraq. The Group has a strategy to position itself in Central and Eastern Anatolia and grow in underpenetrated regions, where they have a competitive edge. Lokman Hekim is currently one of the main private hospital players in Ankara and the largest hospital group in Van.

The Group grew both organically and inorganically so far. Future growth is also expected to come from those two areas. The first two hospitals of the Group in Ankara, namely Etlik and Sincan and the second hospital in Van were greenfield investments, while the first hospital in Van and Akay hospital in Ankara were acquired. Once hospitals are open or acquired, the Group expands them by increasing their bed capacity, adding new medical units and improving their service quality. Unlike large hospital chains in Turkey, Lokman Hekim does not have an aggressive growth strategy. The Group prefers a steady, secure growth model, taking controlled risks, and paying consistent dividends.

Lokman Hekim University offers new growth opportunities. Starting in 2015, Lokman Hekim undertook steps to found a university. The Group first donated a TL1.2mn valued land in 3Q15 to Sevgi Foundation for the purpose of building a university and subsequently made yearly financial donations in 2016 and 2017, which are expected to continue.

There are certain advantages related to being affiliated with a university medical school. First of all, once a private hospital becomes a university hospital, it can increase its prices. Private university hospitals can increase their bed capacity considerably and thus increase their revenues by volume. Additionally, they are run by a special protocol, which allows them more flexibility compared to other private hospitals.

University hospitals are allowed to open specialty complex medical branches and offer related treatments, while unaffiliated private hospitals need special permissions from MoH.

There are also workforce advantages to being affiliated with a university. Medical doctors, nurses and other personnel are readily available and trained. The university hospital can also employ interns at a low cost.

Management of city hospitals a potential new area of expansion. Under the “City hospitals”-Healthcare PPP projects, there are 33 new large hospitals that are set to open. Four of them have been completed and 17 of them have been tendered. The government plans to have all hospitals become operational before the end of 2020. Investments in city hospitals will be carried out by the private sector, however physicians and nurses will be assigned by the government. Services such as imaging, laboratory, data processing, security, cleaning, parking and patient admission will be operated privately. The management and supply of these services could be a new area of growth for Lokman Hekim since it already has expertise in those fields.

The Group announced on February 5th that it signed an agreement with a Rönesans Holding company for the procurement of physiotherapy and rehabilitation services for the new Elazığ City hospital for a period of five years. Based on the Group’s forecasts, services will be provided starting the end of 2018. These services are likely to have lower margins compared to traditional business of Lokman Hekim, but will also need much lower capital requirement, thus contributing positively to the return on capital. Although, the scope of the services offered at Elazığ will be limited initially, we see this as a new business opportunity for the Group, which can be developed further through the addition of new service areas.

A new city hospital is also being built in Etlik and Lokman Hekim could be a potential operator and benefit from cost synergies among its existing Ankara hospitals.

New acquisitions can push the revenue growth higher. In line with its strategy to grow inorganically, Lokman Hekim is open to opportunities for brown-field acquisitions domestically in regions where it believes to have a competitive edge. Contributions from the acquisition of a few new hospitals in Turkey would increase the existing bed capacity and revenue further.

Downside Risks

Delay in planned expansions could have a negative impact on future earnings. Longer than expected digestion of Akay and delayed capacity increase investments in other hospitals is a near-term risk. Current ramp-up time for newly acquired hospitals are two years, however it might take longer to reach desired occupancy and profitability levels.

Change in economic conditions or the governmental policies could create vulnerabilities for Lokman Hekim. Moreover, change in competitive conditions and economic parameters in Turkey, might delay Lokman Hekim's growth and profitability targets. Other risks we see are the competition from city hospitals and potential decrease in health expenditures by the Social Security, as the population gets older in the long term.

Current generous dividend policy might limit future M&A opportunities. Shareholders preference for dividends over inorganic growth opportunities is another risk which may cap future growth potential. Although variable from year to year, dividend pay-out ratio stood on average at 59% during 2013-2017 period and has been mostly above 45% (2017: 56%, TL4mn).

Lokman Hekim Engurusag
Hospital Portfolio

Ankara, the capital, is also the second largest city in Turkey with a population of nearly 5.3mn. Lokman Hekim has three hospitals and a medical centre in the city and is the top private hospital operator with a 15% market share. The Group opened two hospitals in the neighbourhoods of Etlık and Sincan and acquired Akay hospital in the wealthy neighbourhood of Çankaya in 2016. Both Sincan and Çankaya are also among the most populated areas in the capital. Following Akay's acquisition, Lokman Hekim has the largest private hospital network in Ankara with 337 bed capacity and operates in the most crowded four districts of the capital.

In addition the Group opened Demet outpatient medical Centre in Ankara in 2016.

Lokman Hekim has two hospitals in Van, which are 51% owned by the Group. Van Hospital, with a bed capacity of 216, is the largest private hospital serving the city of Van with a population of 2 million inhabitants and it also services the surrounding regions. Van attracts a large number of Iranian tourists thanks to its close proximity to Iran. Lokman Hekim has Kurdish, Farsi, Azeri speaking doctors and medical staff in its Van hospitals, which makes it attractive to medical tourism from many neighbouring countries.

Outside of Turkey, Lokman Hekim has an imaging centre in Arbil, which is the largest city in northern Iraq with a population of 1.1mn.

FIGURE 8: Hospital portfolio and acquisition/ opening dates

| Hospital | Acquisition/ opening date |
|---------------|---------------------------|
| Ankara Etlık | 2002 |
| Ankara Sincan | 2008 |
| Akay | 2016 |
| Demet | 2016 |
| Van | 2011 |
| Van Hayat | 2012 |
| Arbil | 2013 |

Source: Company presentation, IS Investment

FIGURE 9: Bed capacities of hospitals

| | 2014 | 2015 | 2016 | Sept 17 |
|---------------------|------------|------------|------------|------------|
| Bed Capacity | | | | |
| Etlık | 37 | 37 | 37 | 37 |
| Sincan | 201 | 201 | 201 | 201 |
| Demet | | | 10 | 10 |
| Akay* | | | 89 | 89 |
| Ankara Total | 238 | 238 | 337 | 337 |
| Van | 207 | 207 | 216 | 216 |
| Van Hayat | 52 | 54 | 55 | 55 |
| Van Total | 259 | 261 | 271 | 271 |
| Erbil | 5 | 5 | 5 | 5 |
| Total | 502 | 504 | 613 | 613 |

* Note that the officially announced bed capacity at Akay in Group presentations is 121 as of 2016 and 9M17. However due to renovations and capacity increases, some beds are unoperational. Thus we only included the bad capacity that is available for use.

Source: Company presentation, IS Investment

Lokman Hekim has four subsidiaries namely Van Hayat Hospital, Erbil Imaging Centre, Demet Medical Centre and Hay Süt.

FIGURE 10: The Group's subsidiaries

| Company Title | Scope of activities | Paid-in Capital | Participation rate in the company (%) |
|--|---------------------|-----------------|---------------------------------------|
| Lokman Hekim Van Sağlık Services-Hayat Hospital | Medical Services | TL4mn | 51.00% |
| Engürüsağ General Commerce- Erbil Imaging Centre | Medical Services | TL15mn | 95.00% |
| Lokman Hekim Medical Centres- Demet | Medical Services | TL50k | 100.00%(*) |
| Hay Süt Milk Products and Cattle Breeding | Dairy, Livestock | TL2.1mn | 73.62% |

(*) Lokmanhekim has 66% of the management representation and 100% of the profit share

Source: Company presentation, IS Investment

Ankara Hospitals

• **Etlik Hospital**

It is the first hospital of the Group with 2.900m2 closed space. The hospital building was rented for 15 years in 1999 and the rental was subsequently renewed in 2014 for 5+5 years.

Its current bed capacity stands at 37 beds but it is expected to reach 100 beds. The Group plans to increase the hospital size and capacity. For that purpose it bought the adjacent facility to build an additional hospital building and a 100 vehicle car park. The construction started in 3Q17 and is expected to be completed within 24 months.



• **Ankara Hospital**

Located in Sincan in 17.500 m2 closed space, the hospital has 201 bed capacity. The Group is supporting the baby-friendly hospital initiative conducted by Unicef and the MoH and obtained the baby-friendly hospital certification.

The Group plans to reach 220 bed capacity for the hospital.

Lokman Hekim owns the entire real estate at Ankara Sincan hospital and has no rent expenses related to the facility. This is an important fact as it is one reason why the Group's rent cost margins lie below its competitors.



• **Akay Hospital**

Located in Ankara's wealthy Çankaya district in 17.500 m2 closed space, the hospital has a bed capacity of 89. The Group acquired 100% of the hospital in 2016 for a TL22.3mn consideration and rented the building for 15 years from the previous owners for TL185Ka month with a pre-emptive right in sale transactions. The transaction was funded entirely by secured bank loans.

The hospital has a solid reputation with renown doctors in cardiology and healthcare services. General medicine and orthopaedics are the top growing divisions in the hospital.

Following the acquisition, the Group undertook a project to upgrade the technology, infrastructure and service quality of the hospital. The Group plans to reach 140 bed capacity for the hospital.



• **Demet Medical Centre**

Opened in 2016, the hospital treats outpatients and has 10 bed capacity. Although considerably small compared to other hospitals in the portfolio, Demet is a lot more important for the Group than its sheer size suggests. The clinic has an important location advantage as the district is densely populated but also due to its proximity to other Group hospitals in Ankara.



Van Hospitals

• **Van Hospital**

Occupying 12.500 m2 closed space, the hospital has a bed capacity of 216. The hospital has the highest standard and state of the art technology and serves most areas of medicine. The Group plans to reach 235 bed capacity.

Lokman Hekim has Kurdish, Farsi, Azeri speaking doctors and medical staff in the hospital, which makes it attractive to medical tourism from neighbouring countries.



• **Van Hayat Hospital**

Occupying 4.500 m2 closed space, the hospital has a bed capacity of 55. The hospital has the highest standard and state of the art technology and serves most areas of medicine. The Group plans to reach 75 bed capacity.

Like Van hospital Lokman Hekim has Kurdish, Farsi, Azeri speaking doctors and medical staff in this hospital as well, which makes it attractive to medical tourism from neighbouring countries.



Northern Iraq

• **Erbil Imaging Centre**

Occupying 2.000 m2 closed space, the centre is small and encompasses a radiology division and a laboratory. Lokman Hekim has 95% stake in the centre, which was set up with a 15mn Iraqi Dinar share capital.

Hay Süt

Established in 2007 in Ankara, the company is a subsidiary of Lokman Hekim operating outside of the medical sector. Lokman Hekim has 73.62% stake in the company. Hay Süt produces milk in accordance with European standards and is involved in cattle breeding. The paid-in capital of the company is at TL2.1mn. As of 9M17, the company owned 1,486 animals (2016: 1216). Hay Süt recorded TL8.2mn in revenues in 9M17, making up 5% of the Group's total revenues.

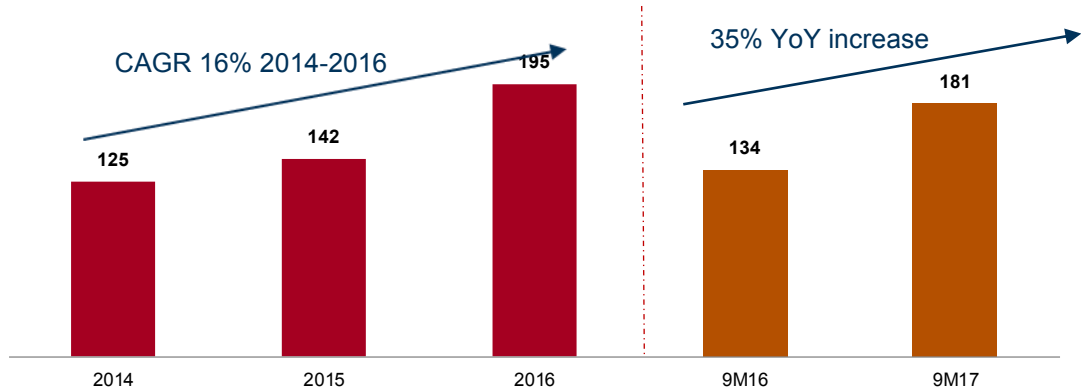
Lokman Hekim has no announced strategy about Hay Süt. There is no strategic plan to sell it although it might make business sense for the Group to divest it in the long-run to further focus in the hospital business.

Financial Analysis

Revenues

Lokman Hekim recorded a CAGR of 25% in sales revenues between 2014-2016 and generated TL195mn revenues of 2016YE. The Group recorded TL181mn in net sales as of 9M17 up 35% compared to 9M16.

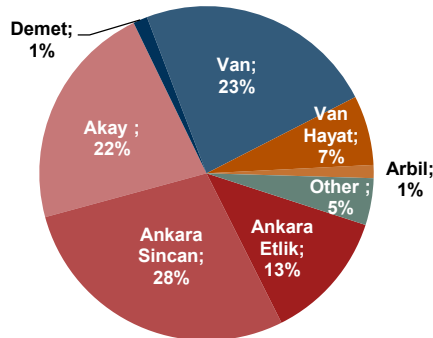
FIGURE 11: Evolution of sales revenues in the last 3 years (TL mn)



Source: Company Report, IS Investment

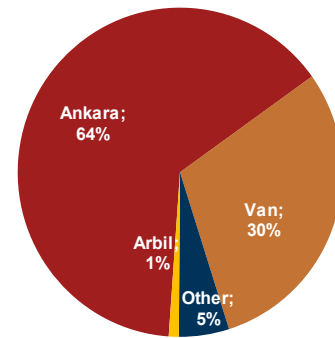
In terms of revenue breakdown, the major portion of revenues are generated from Ankara hospitals (64%), followed by Van hospitals (30%) and Erbil Imaging Centre (1%). Ankara Sincan, the first large hospital of the Group opened in 2008, makes up the major portion of the revenues with 28% share, followed by Van hospital opened in 2011 (23%) and the newly acquired Akay hospital in Ankara (22%). Note that the Group bought the Akay hospital in 3Q16 and is expecting a boost in its sales going forward thanks to improvements that have been undertaken. 5% of the revenues are generated outside of the hospital business, by the group’s subsidiary Hay Süt from dairy production and cattle breeding activities.

FIGURE 12: Revenue breakdown by hos-



Source: Company Report, IS Investment

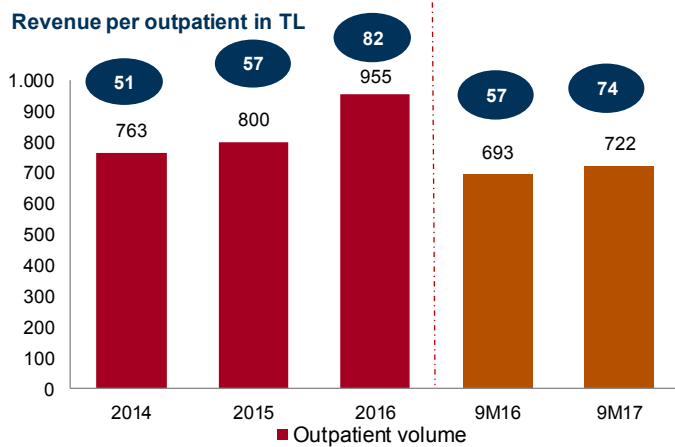
FIGURE 13: Revenue breakdown by geog-



Hospitals that have been operational for 2-3 years are considered mature hospital for the Group. In that sense Ankara Etlik, Sincan, Van, Van Hayat and Arbil Imaging Centre are mature hospitals. Akay and Demet on the other hand are developing hospitals, which are expected to bring their full contribution starting 2018-2019.

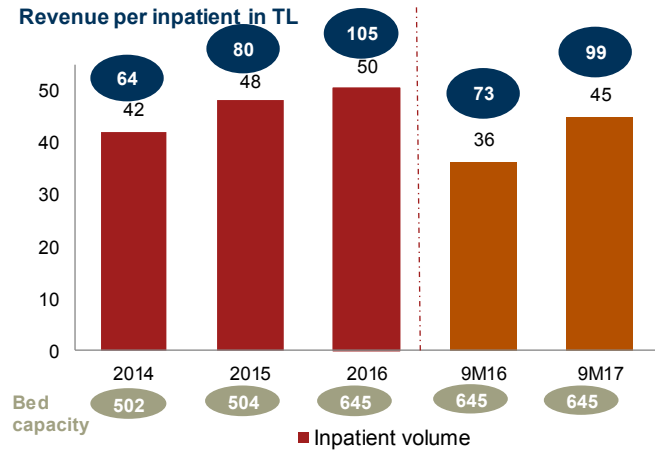
Inpatient/Outpatient growth. Lokman Hekim steadily grew the volume of its patients over the years. Total inpatient volume, including inpatients and outpatients grew at a CAGR of 8% in the last three years reaching 1,006 in 2016. Outpatients make up the major portion of the total patient volume (95%) but 42% of the revenue. Inpatients make up 5% of the total patient volume, and 54% of the revenue. Inpatient and outpatient volumes grew respectively at a CAGR of 6% and 8% respectively between 2014-2016 period. The ratio of inpatient/outpatient went up to 6.2% in 9M17 from 5.3% in 2016YE and were on average 5.6% between 2014-2016. Revenue/patient went up from TL155 in 2014 to TL236 in 9M17. Note that the increase in patient volume and in revenue/patient are the major drivers of revenue growth.

FIGURE 14: Evolution of outpatient volume (thds)



Source: Company Report, IS Investment

FIGURE 15: Evolution of inpatient volume (thds)

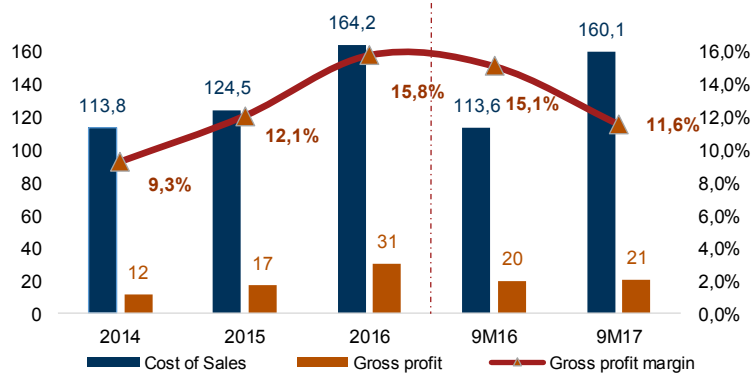


Source: Company Report, IS Investment

Cost of Sales and Opex

Cost of sales is composed of cost of medical services sales and dairy feed and livestock sales costs. Medical services sales costs composed mainly of doctor and medical personal fees, make up the main portion of cost of sales with 96% share. Cost of sales as a percentage of sales declined from 91% in 2014 to 84% in 2016 and stood at 88% as of 9M17. Personnel costs increased by 41% YoY between 9M16-9M17 to TL93mn in 9M17, triggering a margin erosion and pushing the gross profit margin to 11.6% in 9M17. Margin decline was mainly due to the renovation and ramp-up at newly acquired Akay hospital which had negative contribution to the operating line in 9M/17.

FIGURE 16: Gross Profit (TL, mn) and gross profit margin (%)

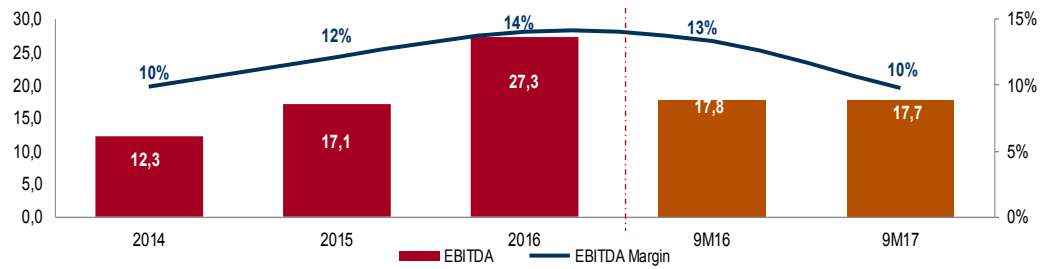


Source: Company Report, IS Investment

EBITDA and EBITDA Margin

Lokman Hekim's EBITDA grew in the last three years at a CAGR of 32% above revenue growth between 2014-16 period. In line with the increase in the number of patients and occupancy rates, thanks to economies of scale EBITDA margin went up to 14% in 2016 from 10% in 2014. Note that hospital operations are seasonal and 4Q and 1Q are the strongest seasons of the year.

FIGURE 17: EBITDA and EBITDA margin evolution (TL, mn)

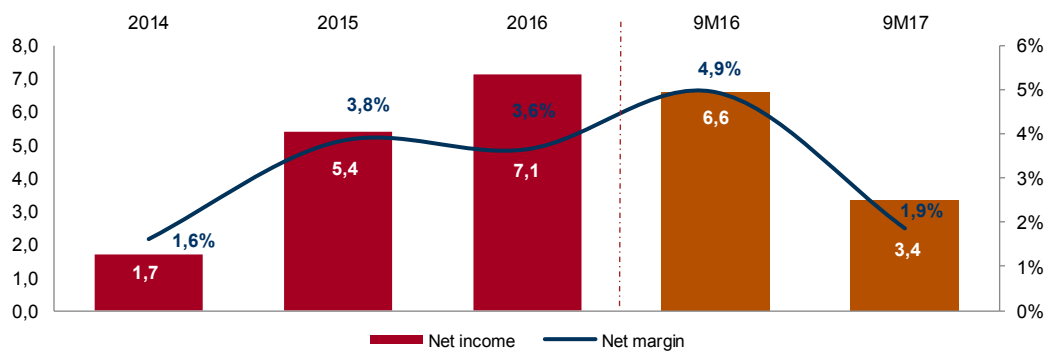


Source: Company Report, IS Investment

Net income

Parallel to the increase in the number of patients and improvement in operating profitability, net income rose gradually in the last three years from TL1.7mn in 2014 to TL7.7mn in 2016. Increase in interest expenses in 9M17 pushed financial expenses higher, resulting in a TL3.4mn net income in 9M17 versus TL6.6mn in 9M16. Note that the Group only borrows in TL and has no fx exposure from its loans.

FIGURE 18: Evolution in net income (TL, mn) and net margin (%)



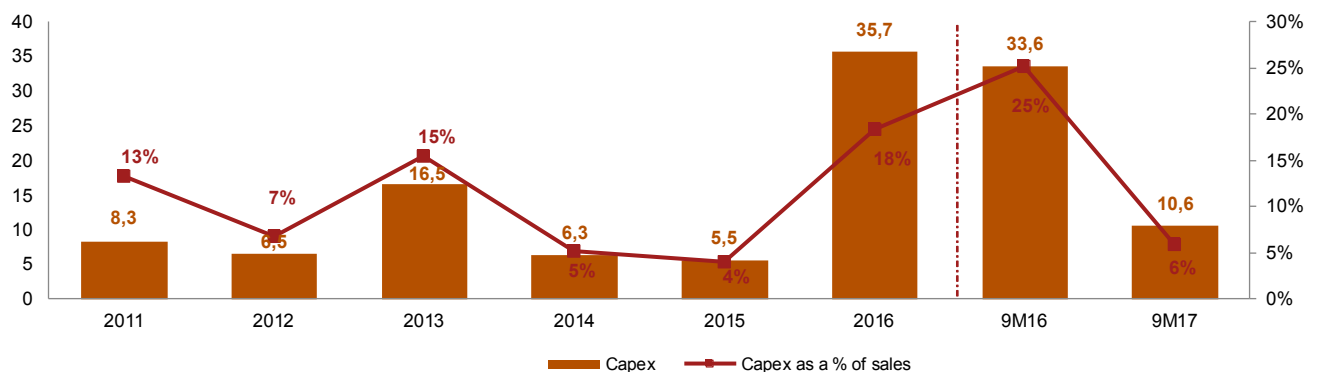
Source: Company Report, IS Investment

Capex

Since its listing in 2011 in BIST until 9M17 Lokman Hekim made a total of TL89,4mn of capex investments. Capex has been used for capacity increases and maintenance and averaged at TL13.1mn yearly and made 10% of sales during 2011-2016 period.

Starting in 2016 with the addition of Demet and Akay, capex went up to TL35.7mn, reaching its highest level and making up 18% of sales as the Group made investments to develop hospitality services and improve technology and modernization of its hospitals.

FIGURE 19: Capex investments (TL, mn)



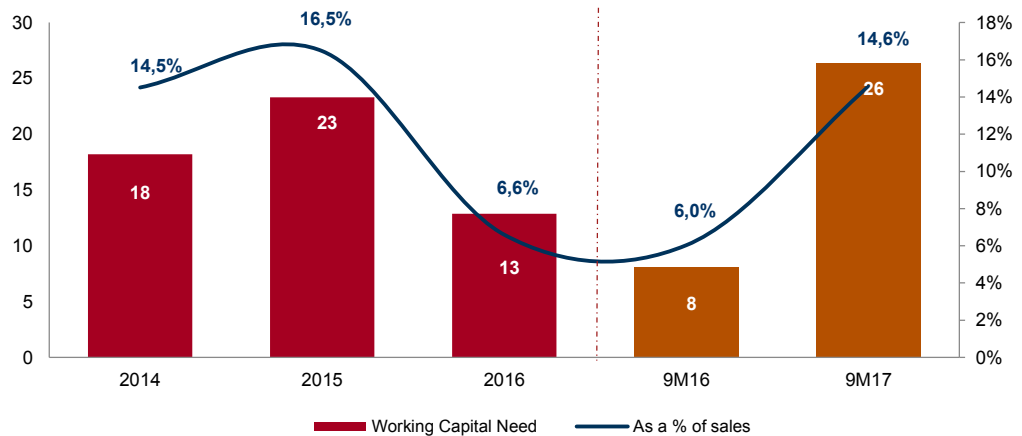
Source: Company Report, IS Investment

Working Capital requirement

Lokman Hekim's working capital needs were at TL26,4mn as of 9M17 and made up 14.6% of sales and were at their highest level. Increase in receivable days to 94 in 9M17 from 75 in 2016YE is the main reason behind the increase in working capital. As of 9M17, we calculate the Group's inventory days as 16 and payable days as 50.

Note that working capital requirement is seasonally high in the first and last quarter of the year. Although fluctuating in the last three years due to longer payable days, net working capital requirement, stood at 12,5% of total sales on average. We estimate net working capital requirement to remain around 10-11% of sales in the next five years.

FIGURE 20: Working capital needs' evolution

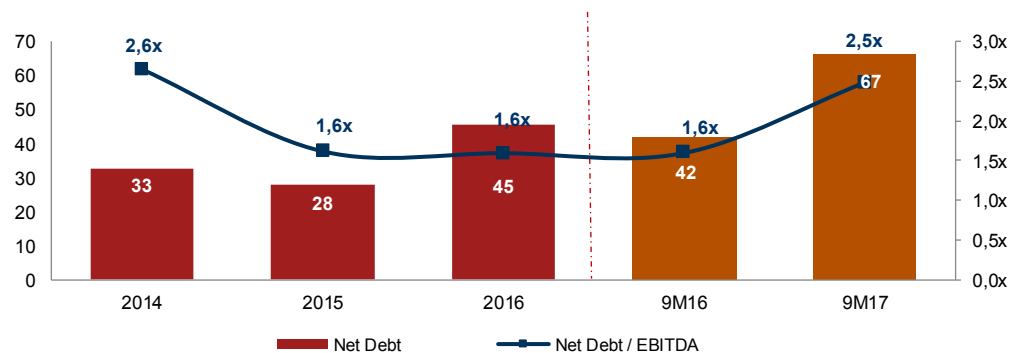


Source: Company Report, IS Investment

Net debt position

Although the net debt position of the Group increased due to higher capex requirements and the acquisition of Akay hospital in 2016, Lokman Hekim continues to have a low net debt/EBITDA ratio. As of 9M17, net debt stood at TL66.5mn and TTM net debt/EBITDA ratio was at 2.5x, up from TL27.8mn and a 1.6x net debt/EBITDA ratio in 2015. Parallel to increasing profitability over the years and a rather controlled increase in borrowing, the ratio remains low despite the increase in leverage.

FIGURE 21: Net debt's evolution



Source: Company Report, IS Investment

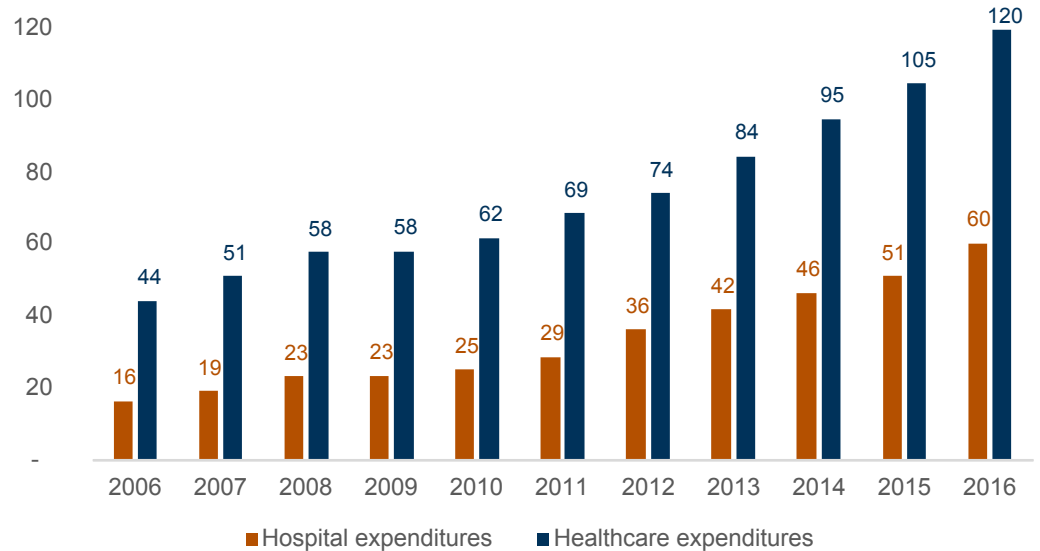
The sector

Increasing healthcare spending in Turkey

Thanks to favorable economic and demographic factors, there has been a fast growth in Turkey in healthcare spending and hospital expenditures in the last ten years.

Based on the Turkish Ministry of Health’s data, health expenditures in Turkey increased from TL44bn in 2006 to TL120bn in 2016 up 11%. Hospital expenditures rose from TL16bn to TL60bn in ten years with a CAGR of 14%.

FIGURE 22: Healthcare and hospital expenditures' evolution in Turkey between 2006-2016

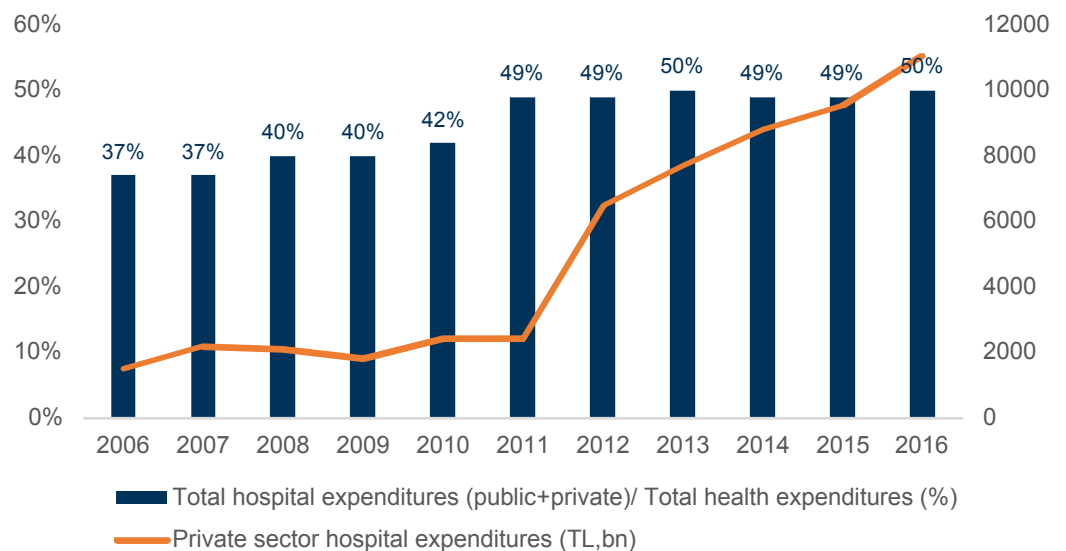


Source: Ministry of Health (MoH)

During 2006-2016, hospital expenditures’ share (both public and private) in total health expenditures rose from 37% to 50%.

Private sector hospital expenditures reached TL11bn in 2016 growing by a CAGR of 22% between 2006-2016.

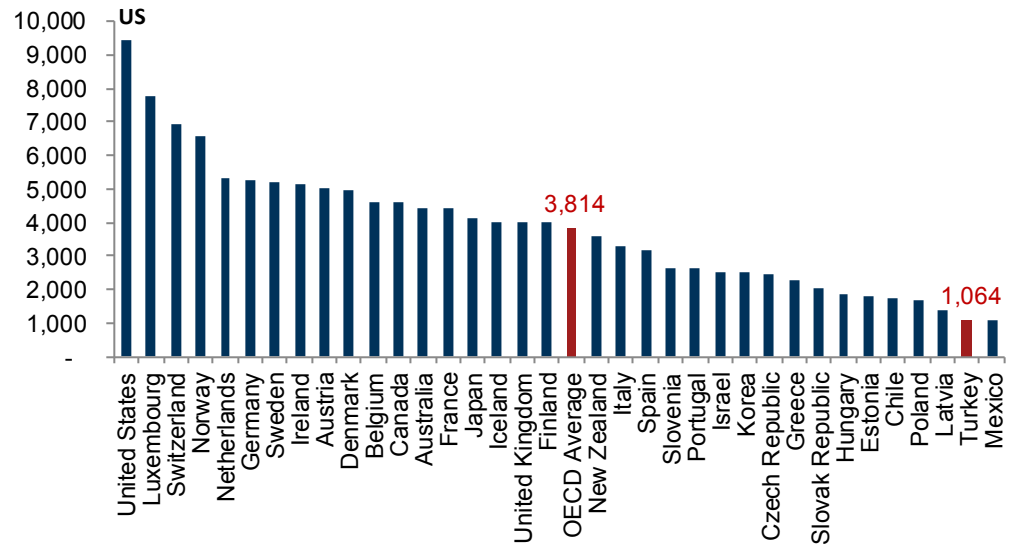
FIGURE 23: Hospital expenditures in Turkey between 2006-2016



Source: MoH

Per-capita healthcare expenditure at US\$1,064 in Turkey remains much lower than the average of US\$3,814 for OECD countries but this is an indication of the market’s growth potential.

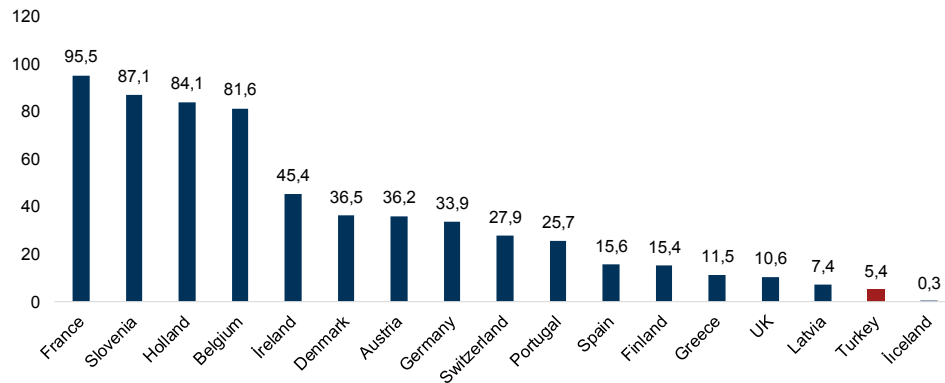
FIGURE 24: Per-capita healthcare expenditure in selected countries (USD, mn)



Source: OECD, IS Investment

Similarly total expenditure on healthcare makes up 5.4% of the GDP versus a 9% average for OECD countries.

FIGURE 25: Health expenditures/GDP in OECD countries



Source: OECD, IS Investment

Supporting demographics

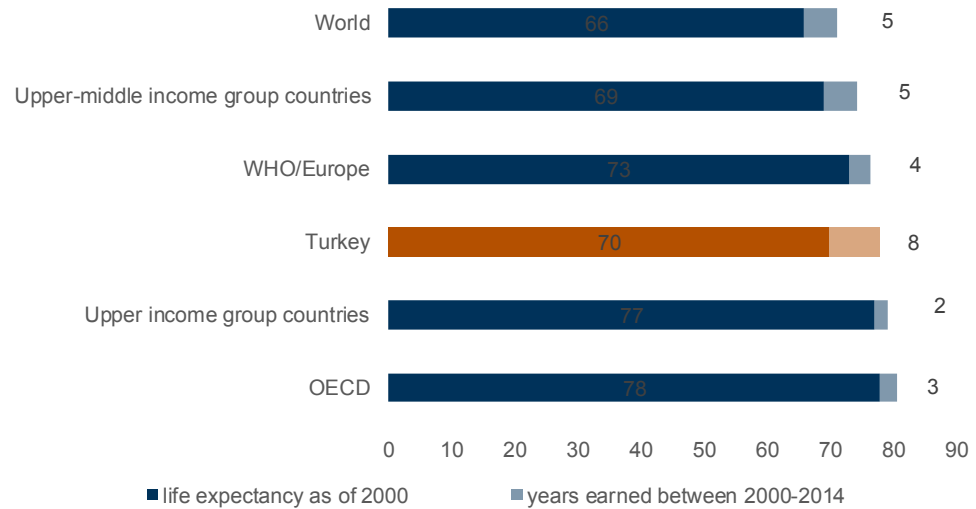
With the increase in income per capita in Turkey, healthcare spending per capita is expected to increase going forward. The disposable income of the highest 20% income group (approximately 16 million people) increased by 11.3% year-on-year from TL15.487 in 2006 to TL 45.173 in 2016.

The changes in the demographic structure support the increase in health spending in the coming periods. It is expected that the population above 65+ years’ in OECD countries, whose health expenditures is three times higher compared to the young population, will increase from 5.9 million in 2015 to 8.9 million in 2025.

Turkey’s population is starting to age and going forward this is expected to increase health expenditures, particularly in chronic/complex diseases according to the recently published TOBB Healthcare report.

An increase in life expectancy in Turkey from 70 years in 2002 to 78 years in 2014 has been having a considerable impact in the increase of future health expenditures. Moreover the population above 65+ years is expected to increase by 50% in 10 years.

FIGURE 26: International comparison of life expectancy at birth in 2014 and years earned



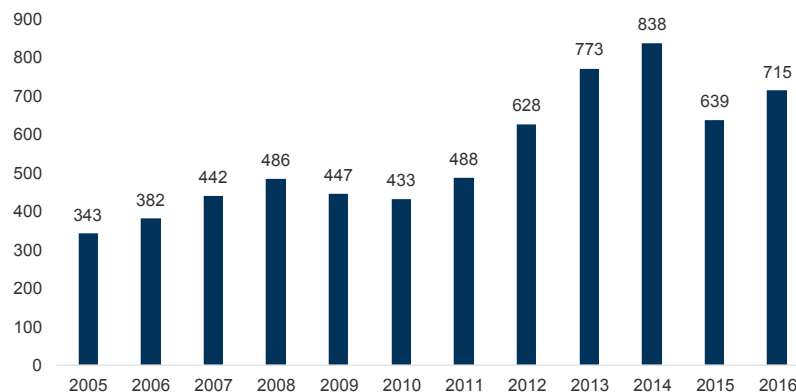
Source: MoH

Turkey as a popular medical tourism destination

Thanks to highly qualified doctors, a favourable geographic position, lower cost of treatment, government incentives and the use of advanced technology, Turkey became a popular healthcare destination in the region and is attracting medical tourists from a number of countries in MENA, Central Asia, CIS and Balkan countries.

According to the Ministry of Health’s data, the number of medical tourists grew at a CAGR of 15% between 2010-2016 reaching 377K in 2016. The top three medical specialties for which tourists are coming to Turkey are Ophthalmology, Orthopaedics and internal medicine.

FIGURE 27: Evolution of total tourism income within health expenditure, in USD mn



Source: Turkstat

Despite a decline after 2014, total tourism income has been growing by 9% per annum since 2010 reaching USD715mn in 2016. Note that starting 2015, new visa requirements from certain countries had a negative impact on the volume of tourist arrivals.

Cost is also a very important advantage attracting tourists and Turkey offers competitive prices compared to other popular medical destination. The estimated savings versus the cost of treatment in the USA is at 50-65% in Turkey.

Overview of the Turkish Health Sector

The main actor in the Turkish Health Sector is the government, which regulates, supervises, funds and provides healthcare services in Turkey.

In 2003, the government set up the Healthcare Transformation Program (HTP), a ten-year program with the aim of reforming the healthcare system in Turkey by increasing its quality and accessibility. The major change coming with this program has been the combination of the former three social security systems under the single roof of the Social Security Institution (SSI).

The SSI is currently financed through contributions from employees’ income through deductions, premiums from self-employed people and employers. The government also contributes for non-contributing members or in cases of budget deficit.

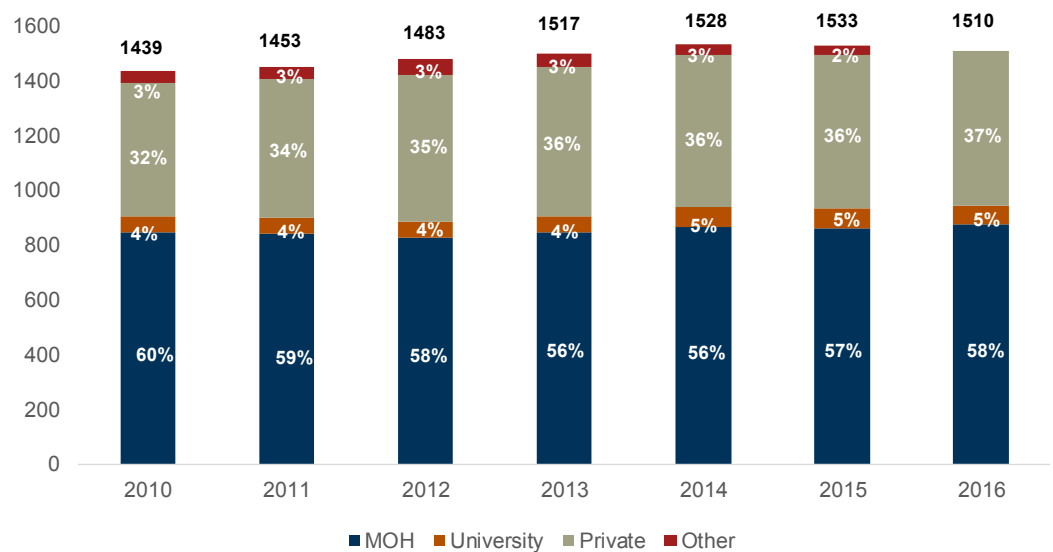
Starting in 2007, the Ministry of Health allowed private hospitals to treat patients covered under the SSI to increase the efficiency of healthcare services in Turkey. Depending on the agreements, while certain hospitals opened all their services to SSI patients, other hospitals had partial agreements and opened only certain critical services such as oncology, organ transplant, and heart surgery.

Reimbursements made by the SSI to the private healthcare providers are based on pre-established tariffs called SUT prices. Accordingly, private hospitals can price certain health services 200%-300% above SUT prices. However, certain services such as emergency, intensive care, burn and cancer treatment and heart surgery cannot be priced above these prices.

In 2012, citizens who were previously not covered under the SSI became covered. Accordingly, all Turkish and foreign residents in Turkey have access to basic health insurance coverage and can be treated both in state hospitals and in private hospitals that have an agreement with the SSI. Currently 98% of the population in Turkey has healthcare coverage.

The state continues to be the main service provider in Turkey despite the increase in the market share of private hospitals in recent years as a result of HTP reforms. Based on MOH’s latest data, 56% of total hospitals in Turkey are public. Between 2010-16, the number of hospitals both public and private grew at a CAGR of 1.7%. However, the number of public hospitals grew at a CAGR of 0.6% during this period, while the number of private hospitals grew at a CAGR of 3.8% and university hospitals grew at a CAGR of 2.9%.

FIGURE 28: Evolution of the number of hospitals by sector



Source: MoH

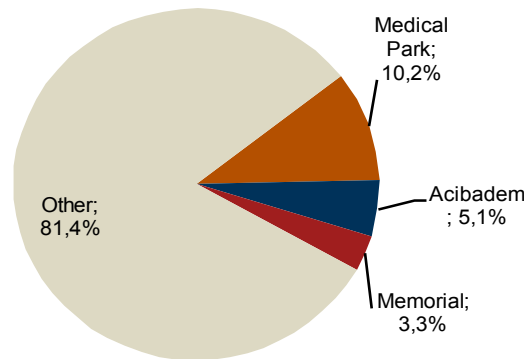
Private hospitals

Private hospitals developed considerably in recent years after the implementation of the Health reform and are expected to grow further thanks to increasing demand. However, there is considerable competition among private hospitals in Turkey mainly in big cities. The market is highly fragmented as there is a large number of players. According to MoH latest figures, the number of private hospitals were at 562 as of 2015. Patients choose their hospitals themselves mainly based on doctors’ and hospital’s prestige, brand awareness, clinical success and patient satisfaction.

Barriers to entry are high as no new private hospital licences have been granted since 2008 by the Ministry of Health. Hospitals that are currently under construction obtained pre-approval or approval of their licences prior to 2008. Currently there are 40 pending licences. Investors have the possibility to buy these licences and build new hospitals.

The fragmented nature of the private hospital industry combined with the limits related to license approvals makes the prospects for market consolidation highly attractive. Private hospital groups are looking to acquire existing inefficient hospitals and invest in them as a way to grow in the sector. According to the TOBB report, 13% of private hospitals are owned by the top five hospital chains.

FIGURE 29: Market share among private hospitals according to bed capacity



Source: MoH

The biggest private player in the sector is Medical Park, which has 10.2% market share by hospital beds among private hospitals. The second largest player is Acibadem Group (5.1%) followed by Memorial Hospitals (3.3%). Note that Lokman Hekim’s revenue per bed looks low due to substantial capacity additions and renovations in the hospital portfolio, which makes a large portion of beds idle throughout the year. For the larger hospitals, capacity additions are incremental therefore their revenue per bed would not differ materially from one year to the next.

FIGURE 30: Comparisons within the main private hospitals groups

| | Nbr of hospitals | Bed capacity | Revenue per bed (TL) | Segment |
|-----------------------------|------------------|--------------|----------------------|------------|
| Medical Park | 29 | 5.330 | 441 | B |
| Acibadem | 17 | 2.271 | 897 | A / A+ |
| Medicana | 11 | 1.440 | 419 | B |
| Memorial Hospitals | 10 | 1.451 | 619 | A / A+ |
| Anadolu Hastanesi | 7 | 518 | n.a. | C |
| Kolan Hospital Group | 6 | 558 | n.a. | C |
| Başkent Üiversity Hospitals | 6 | 1617 | n.a. | B/C |
| Grup Florence Nightingale | 5 | 900 | n.a. | A |
| Medipol | 5 | 845 | n.a. | C |
| Lokman Hekim | 4 | 613 | 287 | B/C |
| Bahat Sağlık Grubu | 4 | 880 | n.a. | C |
| American Hospital | 2 | 604 | n.a. | A / A+ |
| Bezmialem Hospital | 2 | 755 | n.a. | C |

Source: IS Investment, Company reports

Benefits private university hospitals and foundations

Starting 2015, Lokman Hekim undertook steps to found a university. Accordingly, based on a December 2017 announcement made at the Public Disclosure Platform, Lokman Hekim University will have a medical school, a health sciences, a dental, pharmacy, sports, and engineering faculties. It will also have a vocational health school and a health sciences institute under its roof.

There are certain advantages related to being affiliated with a medical school or being part of a medical foundation. First of all once a private hospital becomes a university hospital, it can increase its prices. Private university hospitals can increase their bed capacity considerably and thus increase their revenues by volume. Moreover, university hospitals can increase their health services fees between 10-90% particularly on inpatient treatments. Additionally, they are run by a special protocol, which allows them more flexibility compared to other private hospitals.

University hospitals are allowed to open specialty complex medical branches and offer related treatments, while unaffiliated private hospitals need special permissions from MoH.

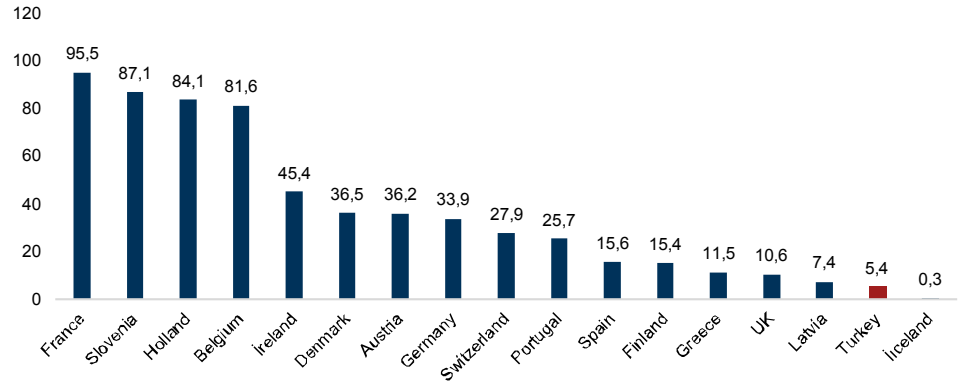
There are also workforce advantages to being affiliated with a university. Medical doctors, nurses and other personnel supply is readily available and trained. The university hospital can also employ interns at a low cost.

Main university hospital affiliated groups are Medicalpark, Acıbadem, Medipol, and Yenyüzyıl.

Private health insurance

The population covered under private health insurance is very low in Turkey. According to 2016 OECD statistics %5.4 of the population, around 4.3mn people are covered with private health insurance. Excluding emergency and travel insurance, this ratio comes down to 3%. The main insurance companies in Turkey are Allianz, Anadolu, Acibadem, Axa, Ergo, Groupama, and Mapfre Sigorta.

FIGURE 31: Private health insurance coverage as a % of total population

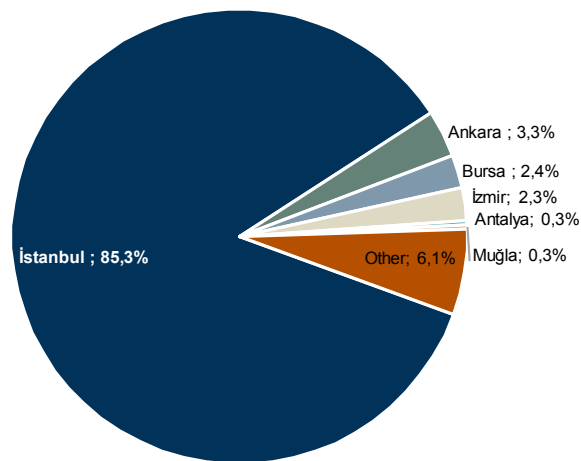


Source: OECD

However the number of people having private insurance has been on the rise, particularly in Istanbul and major cities in Turkey. The increase in the number of young, educated professionals and senior citizens are the biggest driver of higher private health insurance penetration rates in Turkey. In the last three years, the total number of people covered by private insurance increased by a CAGR of 14% reaching 3.275.

Looking at the regional breakdown, the large majority of private insurance holders are in Istanbul (85.3%), followed by Ankara (3.3%) and Bursa (2.4%).

FIGURE 32: Breakdown of individual health policies by major cities in Turkey



Source: MoH

Complementary health insurance

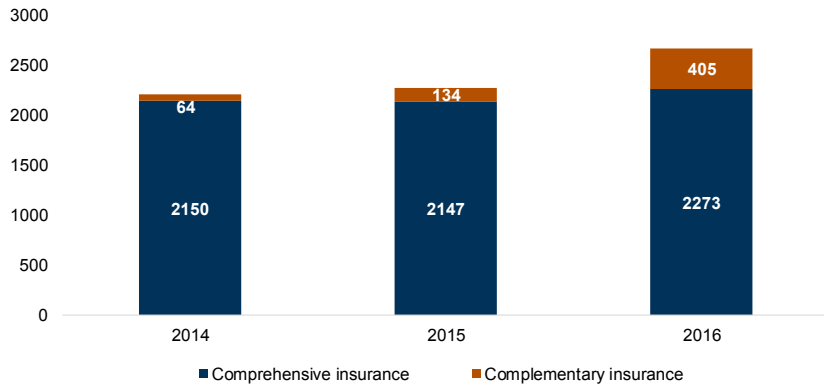
Introduced in 2014, complementary health insurance is a breakthrough for the insurance sector and is contributing positively to the growth of private hospitals. Different than comprehensive health insurance, complementary health insurance covers any expenses left outside of the Social Security Institute (SSI) for inpatient treatments and a number of limited visits for outpatient treatments. It works at any SSI affiliated private hospitals, and premiums are much lower, thus more affordable compared to comprehensive health insurance.

Lokman Hekim Engurusag

Between 2014-2016, the population insured by complementary health insurance increased by a CAGR of 152% reaching 405K. Comprehensive health insurance increased by a CAGR of 5% during the same period reaching 2.3mn people. Based on Insurance Association of Turkey’s data, 750K people will have complementary insurance by the beginning of 2018.

Complementary private insurance holders prefer to use private hospitals, which have agreements with the SSI, therefore with the expected growth in the number of insurers in this category, the demand for private hospital services is likely to increase.

FIGURE 33: Evolution of complementary and comprehensive health insurance between 2014-



Source: Insurance Association of Turkey

City Hospitals– Healthcare (PPP) Projects

To reduce the public burden of healthcare investments, renew the hospital infrastructure and encourage private participation in hospital management over time, the Turkish government started the “City hospitals”- Healthcare PPP projects. Accordingly the hospitals are built by the private sector and operated by a public private partnership.

Currently there are 33 on-going projects. Four of them have been completed and 17 of them have been tendered. The government plans to have all hospitals become operational before the end of 2020.

With these investments, the number of beds per 10,000 is expected to increase from 26.6 in 2017 to 32 in 2023. The total bed capacity of these hospitals, which will be built in large complexes and will be outside of most city centers, will be 44,000.

Investments in city hospitals will be carried out by the private sector, however physicians and nurses will be assigned by the government. Services such as imaging, laboratory, data processing, security, cleaning, parking and patient admission will be operated privately.

The main challenge regarding the city hospitals is location, as these will be very large buildings located outside the city centers.

However, these hospitals will have new and modern infrastructure and equipment and the services rendered by the private sector will have high standards and will be subject to penal sanctions in case of abuse. Therefore, these city hospitals might increase the competitive pressure on private hospitals in the B/C/D segments, which have agreements with the SSI.

FIGURE 34: City hospital projects-PPP

| Tendered projects | Bed capacity | In the tender process | Bed capacity |
|-------------------|--------------|--|--------------|
| Ankara Bilkent | 3660 | Samsun | 900 |
| Ankara Etlik | 3566 | Denizli | 1000 |
| İstanbul İkitelli | 2682 | Total | 1900 |
| FTR & YGAP & PH | 2400 | Preparing for tender process | |
| İzmir Bayraklı | 2060 | İzmir Yenişehir | 1200 |
| Gaziantep | 1875 | Aydın physiotherapy and rehabilitation | 150 |
| Şanlıurfa | 1700 | Antalya City Hospital | 1000 |
| Kayseri | 1584 | Diyarbakır Hospital | 750 |
| Adana | 1550 | Aydın Hospital | 800 |
| Bursa | 1355 | Total | 3900 |
| Mersin | 1250 | Pending for approval | |
| Konya | 1250 | İstanbul Sancaktepe | 4200 |
| Kocaeli | 1180 | Ordu | 900 |
| Eskişehir | 1081 | Total | 5100 |
| Isparta | 755 | Pre-feasibility process | |
| Kütahya | 600 | Trabzon | 1100 |
| Manisa | 560 | Sakarya | 1000 |
| Tekirdağ | 480 | Rize | 800 |
| Yozgat | 475 | Total | 2900 |
| Total | 30063 | | |

Source: MoH

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