Executive Summary

Healthcare spending in Greece was severely affected by the economic crisis, leading to a decrease of approx. 40% during the period 2009-2015. Healthcare spending has fallen every year since 2009, reaching €14.1b in 2014, mainly due to the contraction in Government and Social Security coverage. However, this decline in healthcare spending appeared to be smaller for Hospitals, which proven to be more resilient than other market players (e.g. pharmacies, private practices etc.).

In Greece there is a total of 283 hospitals, both private and public, with the significant part of these located in the Attica region. These hospitals operate 46,200 beds. International Benchmarks suggest that there is a 18%-28% oversupply of beds in Greece.

Following a considerable growth until 2009, Net Sales of Private Hospitals have been since declining, with the exception of 2012. The introduction of Rebates and Clawback mechanism in 2013 was a main contributor to this decline of hospitals’ revenues.

The aforementioned incidents, accompanied with an increasing competition and sharply climbing costs, appear to have initiated a process of consolidation in the healthcare sector. These signs are apparent in the private sector, as the number of hospitals has been reduced by ~21% and the average size has been increased by ~5% during the period 2012-2014.

The first months of 2017 presented a number of interesting developments, including the discussions about a new legislation on Primary Healthcare, the announced figures for healthcare statistics for 2015, which indicate a recovery of expenditure to €14.7b, as well as the demonstrated appetite for business agreements by international investors.
Macroeconomic Environment & Healthcare Expenditure

An economy in crisis

At the end of 2015, the size of the Greek economy had contracted by ~24% compared to the beginning of the crisis.

Key Contributors

- The catalyst to the crisis has been the inability for Greece to finance its debt, due to high deficit (15.4% of GDP in 2009) – leading to the signing of 3 MoU’s since 2010, pertaining to financial assistance in exchange for specific reforms.
- Furthermore, Greece had (and, to an extent, still maintains) a gap in competitiveness, which is apparent in the relevant business reform rankings (ranked 58th among 190 countries in the Doing Business ranking by World Bank).

Key Impact

- Unemployment grew from approx. 8% in early 2009 to 25.0% in 2015, while Disposable Income contracted by more than 28%.
- Corporate financing and household loans have been reduced, as the Commercial Banks lost ~25% of their Assets, mainly due to reduction in Deposits and reduction in Loans (over 40% between 2010 and 2015).

...and the healthcare sector in particular

Healthcare spending typically follows a trend similar to the GDP even in structurally different economies, with different economic performance and cultural characteristics. Healthcare spending was severely affected by the economic crisis, leading to a drop of 40% during the period 2009-2015.

Normalized Evolution of GDP (Real Prices) (2009=100)

Normalized Evolution of Healthcare Expenditure (2009=100)

Source: Eurostat, Hellenic Statistical Authority, Deloitte analysis
Macroeconomic Environment & Healthcare Expenditure

Healthcare spending has fallen every year since 2009, reaching €14.7b in 2015, mainly due to the contraction in Government and Social Security coverage. However, this decline in healthcare spending appeared to be smaller for Hospitals, which proven to be more resilient than other market players (e.g. pharmacies, private practices etc.).

Healthcare Expenditure per Capita
There is a gap in terms of per capita healthcare spending, between Greece and the countries under consideration. The closest country to Greece (Portugal) seems to spend ~17% more and the top country (France) seems to spend ~96% more than Greece.

Health expenditure in USD PPP per capita, Group of Countries, 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>2009</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>2.245</td>
<td>2.631</td>
</tr>
<tr>
<td>Spain</td>
<td>3.153</td>
<td>3.272</td>
</tr>
<tr>
<td>France</td>
<td>4.407</td>
<td>4.003</td>
</tr>
<tr>
<td>Portugal</td>
<td>2.631</td>
<td>4.003</td>
</tr>
</tbody>
</table>

Source: OECD
PPP: Purchasing Power Parity

Evolution of Healthcare Expenditure
Total Healthcare expenditure (public & private) stood at €23b in 2009, while it has since contracted at a -7% CAGR. This decline was smaller for Hospitals, thus implying a higher resilience.

Healthcare Expenditure Financing
In terms of financing, Greece demonstrates a high % of ‘Out of Pocket’ share and a low penetration of ‘Private Insurance’ vs. other OECD countries.

Expenditure on health by type of financing, Group of Countries, 2013 (or nearest year)

<table>
<thead>
<tr>
<th>Country</th>
<th>GG</th>
<th>OoP</th>
<th>PI</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>59,1%</td>
<td>35,5%</td>
<td>3,7%</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>71,5%</td>
<td>23,8%</td>
<td>4,4%</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>78,7%</td>
<td>6,7%</td>
<td>13,9%</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>77,4%</td>
<td>21,7%</td>
<td>1,0%</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>66,6%</td>
<td>27,2%</td>
<td>5,3%</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>83,3%</td>
<td>9,5%</td>
<td>3,4%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Elstat for Greece (2015 Data), OECD for the rest
GG: General Government and Social Security, OoP: Out of Pocket, PI: Private Insurance
CAGR: Compound Annual Growth Rate

Hospitals: General, Mental Health, Specialised
Retailers: Pharmacies, Medical appliances and goods
Others: Medical & Dental Practices, Ambulatory Services, Diagnostics

Hospitals appear to be more resilient than other market players
7-year CAGR for different market players
Other -7%
Total 7-year CAGR: -7%
Healthcare Infrastructure

There are ~280 private and public hospitals operating ~45,900 beds in Greece. International Benchmarks estimate an oversupply of 18%-28% in beds. Signs of consolidation in the private sector are apparent, as the number of hospitals has been reduced by ~6% while the average size has been reduced by ~1% during the period 2012-2015.

Number of Inpatient Beds per Region

International benchmarks on the demand of hospital beds suggest that Greece, and the Attica region in particular, is characterized by an **oversupply of beds**.

Number of Hospitals per Region

**Signs of consolidation in the sector**

Signs of consolidation in the private sector are apparent, as the number of hospitals has been reduced by ~6% and the average size has increased by ~1% during the period 2012-2015.

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1 Source: Hellenic Statistical Authority, 2015 – does not include military hospitals
2 Source: Deloitte analysis (2015 estimates based on OECD median of medically reasonable demand)
Competitive Landscape

In 2015, the Greek Private Healthcare Providers’ sector was estimated at €1.4b., which may be further broken down into €0.8b for General Hospitals & Diagnostic Centers and ~€0.2b for Maternity Hospitals in Attica region. The Gross Revenues of the top hospitals were significantly affected by the introduction of rebates & clawback in 2013. In 2015, the top 8 private hospitals contributed more than 60% to the total revenue of the private sector.

**Addressable Market**

In 2015, out of a total healthcare expenditure of €14.7b, ~€1b is attributed to Private Healthcare Providers operating in Attica, which may be further broken down into €0.8b for General Hospitals & Diagnostic Centers and ~€0.2b for Maternity Clinics.

**Market Concentration**

In 2015, the top 8 private healthcare providers in terms of net sales represented approximately ~64% of total Net Revenue and 42% of total inpatient beds of all General Hospitals in Greece.

**Evolution of Net Sales of Private Companies**

After a considerable growth until 2009, Net Sales of Private Healthcare Providers have been declining, with the exemption of 2012. In 2013, revenues saw a significant drop which was largely attributed to the introduction of rebate and clawback mechanism.
Competitive Landscape

Key Operational and Financial Performance Indicators for the top 8 Private Hospitals (where available)

**Operational KPIs**

<table>
<thead>
<tr>
<th>KPI</th>
<th>Bottom Performer</th>
<th>Top Performer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue per bed (in € ‘000)</td>
<td>122</td>
<td>446</td>
</tr>
<tr>
<td>Revenue per employee (in € ‘000)</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>Employees per bed</td>
<td>2.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Cost per bed (in € ‘000)</td>
<td>138</td>
<td>414</td>
</tr>
<tr>
<td>Occupancy Rate (%)</td>
<td>33%</td>
<td>80%</td>
</tr>
<tr>
<td>Average Length of Stay (days)</td>
<td>2.2</td>
<td>4.4</td>
</tr>
</tbody>
</table>

**Financial KPIs**

<table>
<thead>
<tr>
<th>KPI</th>
<th>Bottom Performer</th>
<th>Top Performer</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA margin (as a % of net sales)</td>
<td>-69%</td>
<td>17%</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>-157%</td>
<td>24%</td>
</tr>
<tr>
<td>Debt to Equity</td>
<td>226%</td>
<td>58%</td>
</tr>
<tr>
<td>Interest Coverage</td>
<td>-3.7X</td>
<td>4.3X</td>
</tr>
<tr>
<td>Debt to EBITDA</td>
<td>-142.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Net Increase in Fixed Assets/Net Sales</td>
<td>-5%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Note: 2015 figures
Source: Published Financial Statements, Companies’ Official Sites
Latest Update

New Legislation on Primary Care
Draft under discussion

Latest Draft of Legislation on Primary Healthcare:
• New ‘Local Health Groups’ to be established, in order to facilitate access to Hospitals.
• 239 units in the pipeline, in 65 cities.
• The purpose is for these units to guide the patients in the appropriate course of treatment, through pre-booked appointments in the hospitals.

Recovery of Healthcare Expenditure in 2015
Latest ELSTAT data

Latest Statistical Information, published in Q2 2017:
• Healthcare expenditure grew to 8.38% of GDP in 2015 (7.94% in 2014).
• The increase is attributed to General Government Contribution (+€600 m).
• In terms of providers, small increase for Hospitals (+5.5%), larger for private practices (+13.4%). Decrease for Diagnostics (-12.2%).

2016 results
Published information on key market participants

• HYGEIA: Consolidated EBITDA rose markedly by 45.5%, amounting to €32m.
• IATRIKO: Consolidated EBITDA rose by 677%, amounting to €23.5m.
• IASO General: Consolidated EBITDA reduced by 123%, amounting to - €0.2m, mainly due to increased provisions for rebate & clawback.

International Investors Appetite
Published information

• METROPOLITAN: On April 2017, CVC Capital Partners successfully acquired a majority stake in Metropolitan Hospital Group.
Contacts

George Koutsos
Partner
Strategy & Operations
Greece
Office tel.: +30 210 6781207
Email: gkoutsos@deloitte.gr

Yiannis Valvis
Senior Manager
Strategy & Operations
Greece
Office tel.: +30 210 6781215
Email: yvalvis@deloitte.gr

Offices

Athens
3a Fragoklissias & Granikou Str.
151 25 Maroussi
Athens, Greece
Tel: +30 210 6781100
Fax: +30 210 6776232
www.deloitte.gr

Thessaloniki
1a Adrianoupoleos str.
551 33 Kalamaria
Thessaloniki, Greece
Tel: +30 2310 406550
Fax: +30 2310 416447
www.deloitte.gr
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3a Fragkoklissias & Granikou str., 151 25 Maroussi, Attika – Greece,
Tel: +30 210 6781100
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