The next day of Greek Tourism

November 2018

Executive summary (1/2)

- Tourism is a main contributor to the growth of the economy
- **Demand** for Greece has been **growing steadily** since 2012 and it has four features:
  - **35% of the bulk originates from 4 EU countries** and most of it from EU;
  - most of it is **deployed in only five destinations** and,
  - it is **very peaky with a 3 month period** amounting for the bulk of demand.
  - **the average stay is systematically dropping,** but with daily receipts remaining robust
- **Supply** is deployed along **three dimensions**; **geography, star rating** and hotel **unit size**. It would appear that geography drives rating which in turn pull the unit size.
- The prospects of Greek tourism are good within its structural limitations. **Arrivals are increasing**, the **length of stay is not declining fast**, average daily **spending is constant, the number of significant tourist origins is going up**. On the other hand, **arrivals remain peaky**, **daily spending is modest** by international standards and the **same legacy destinations attract most of the demand**
- **Financial performance** reflects demand/supply mismatches as well as the relative competitiveness of hotel units. Financial performance **differs by region, star rating and hotel unit size**. Competitiveness, which is broader than any single financial metric, is moving along the same line as performance
- Hotels in Greece are in general internationally competitive. In **prime destinations** they form the majority, as they also **tend to be in the 4*** category and in **small size units**. Most of the **Zombie hotels reside in lesser destinations and they tend to be large and 5* rated**
- **The Greek market has been gradually upgrading to 5* hotels**. Between 2010 and 2015 over € 1.8bn of capital expenditure was made, concentrating mainly on 5* large hotels at main destinations
- Currently, there are **14 greenfield projects**, carried out by the private sector, which target main destinations. A further **12 tourist projects have been included in the Fast-Track process.** Typical greenfield projects take more than 15 years to complete and the bulk of them never reaches construction
- **The total hotel investment needs are estimated at around € 6.2bn over a five year period** and are split into € 1bn for construction of additional beds, €4.8bn for capacity upgrade and € 0.3bn for heavy maintenance

Executive summary (2/2)

- There are over **400 hotels which require financial restructuring** before attracting any new investment. This may need debt write offs to the tune of € 2.6bn
- Three main strategies are applicable in the hotel universe:
  - **Develop lesser destinations,** mainly targeting 5* Grey hotels at Thessaly, Western Greece and Western Macedonia
  - **Add capacity at main destinations** focusing on Star hotels, with 3* hotels being a solid target
  - **Upgrade Star hotels to the next class** and especially 4* to 5*
- The most promising investment strategy, in terms of value potential, appears to be the development of lesser destinations followed by upgrading 4* to 5* hotels, as well as adding capacity to existing 3* hotels
- **Trapped Zombie acquisition is a doubtful strategy** although it could prove remunerative in certain cases
- The Greek hotel **M&A market should have been more active**. Hotel finances are **non Greek GDP driven** (they are mostly EU GDP driven), hotels are competitive and in **good financial standing**
- The total value of 18 **reported hotel transactions**, all in main destinations, in 2017 and 2018 reached **€ 310mn**
- There are **65 operating hotel companies and 35 hotel properties advertised** for sale representing about **3% of the available hotel capacity**
- The hotel companies for sale, located mostly in main destinations demonstrate a significant gap (100%) between asking price and equity value. The hotel properties for sale, located mostly in main destinations are priced at about 60% of the cost of new construction
- **Greek Tourism is bound to remain one of the main growth drivers of the Greek economy, but it needs some strategic adjustments** raise its value contributions
- There are few specific risks in the horizon to deter future growth, and most of them are encapsulated in the tourism cycle
- Four interrelated policies need to be implemented systematically to address the problems and increase the value of tourism:
  - **Strengthen demand from high income destinations**
  - **Introduce complementary products and paying demand**
  - **Expand peak demand across destinations**
  - **Upgrade the tourist product**

Tourism is a big force in the economy

1

Tourism is a big force in the economy

Greek Hospitality sector (2017)

27.2 mn* *Tourist arrivals (non residents)*

€ 14.6 bn *Tourism receipts*

8.0% *Direct contribution to GDP, with total contribution reaching 19.7% of GDP ***

459,000 *Travel & tourism direct employment (12.2% of country's employment)*

Source: BoG and SETE intelligence

- Every € 1 created by tourism activity, has been found to cause indirect additional economic results of € 1.5, while in total creates € 2.5 GDP (KEPE***)
- 2017 was another record year for tourism in Greece in terms of arrivals, the direct contribution of Tourism to GDP rose from 5% in 2010 to 8% in 2017 (€ 14.3bn) and direct employment to 459,000 workers in 2017

Natural and cultural attributes

	Greece	EU 28 Average
Coastline length (km)	13,676	2,357
Blue flag beaches	393	80
Hours of sunshine (daily average)	7.6	5.5
World heritage cultural sites (UNESCO)	18	14

Source: World Economic Forum, CIA World Factbook, Foundation for Environmental Education, Climatemps

**Excluding arrivals from cruises (2.9 mn in 2017)*
***World Travel & Tourism Council (2018)*
****Centre of planning and economic research, Greek Economic Outlook*
http://www.kepe.gr/images/oikonomikes_ekselikseis/issue_24.pdf

EU-28 countries are the main source of tourists for Greece, accounting for 68% of the total and showing a 40% increase between 2014 and 2017

- *Four countries (Germany, UK, Italy and France) account for 35% of all arrivals*
- *Tourists coming from Romania marked a significant increase the last 3 years*
- *Five destinations (Crete, South Aegean, Central Macedonia, Ionian Islands and Attica) accept 87% of all incoming tourists*

Foreign tourist arrivals

In '000`	2014	2015	2016	2017	Δ% 14/17	% of total tourist arrivals (2017)
EE-28	13.249	14.974	17.217	18.583	40%	68%
Germany	2.459	2.810	3.139	3.706	51%	14%
UK	2.090	2.397	2.895	3.002	44%	11%
Italy	1.118	1.355	1.387	1.441	29%	5%
France	1.463	1.522	1.314	1.420	-3%	5%
Romania	543	540	1.026	1.149	111%	4%
Cyprus	448	470	652	632	41%	2%
Other**	7.218	8.690	6.804	7.233	41%	27%
Other countries *of which*	8.784	8.625	7.583	8.611	-2%	32%
Russia	1.250	513	595	589	-53%	2%
USA	592	750	779	865	46%	3%
Australia	183	183	169	324	77%	1%
Canada	146	182	153	198	36%	1%
*China****	47	55	150	175	272%	1%
Total	**22.033**	**23.599**	**24.799**	**27.194**	**23%**	**100%**

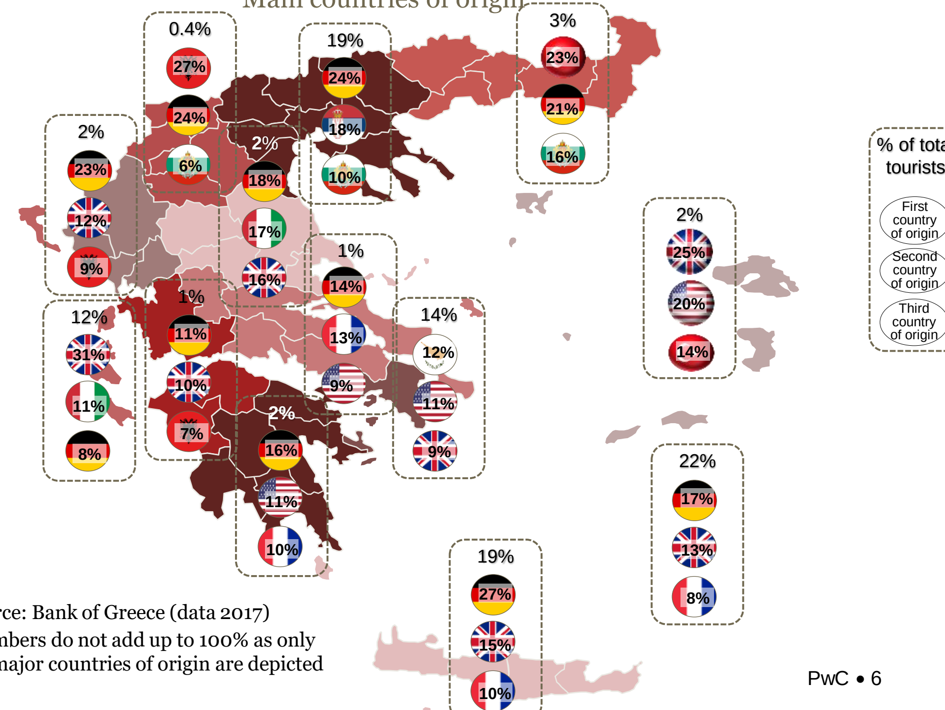
Source: Bank of Greece (data 2017)

**other countries with less tourist arrivals include: Austria, Belgium, Spain, Netherlands, Denmark, Sweden, Czech Republic, Albania, Switzerland,

***Press

Overnight visitors by region (%)

Main countries of origin*

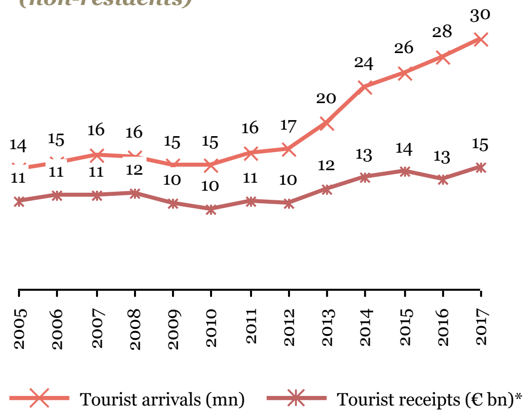


Source: Bank of Greece (data 2017)

*numbers do not add up to 100% as only the major countries of origin are depicted

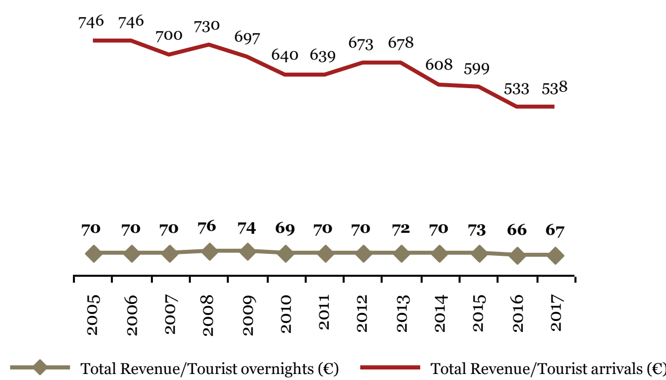
Despite the sharp gains in tourist arrivals, receipts are lagging behind mainly due to shorter stays…

Receipts from tourism and tourist arrivals (non-residents)



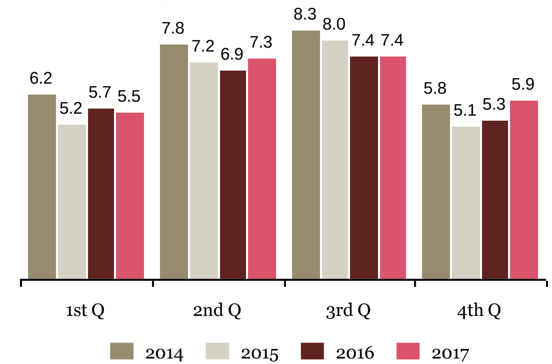
Source: Bank of Greece

Receipts per tourist arrival & revenue per tourist overnight (€ mn)



Source: Bank of Greece

Average length of stay for non residents (number of days)



Source: Bank of Greece

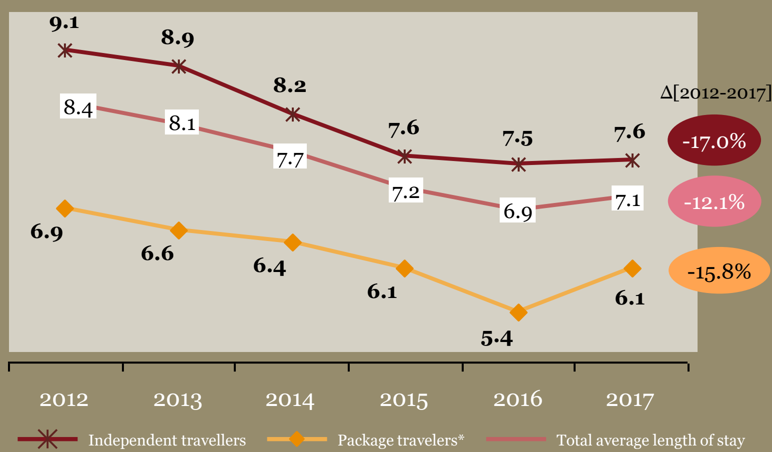
- There has been a significant increase from 2012 onwards in tourist arrivals(12%), while tourist receipts follow with a smaller increase (7%). Tourist receipts are relatively stable y-o-y since 2005
- Even though revenues per overnight stay are fairly stable over the last years (-0,5%), total revenues per tourist arrivals have been dropping by 3% p.a. implying lower spending from inbound tourists or spending in the shadow economy
- Average annual length of stay is on a downward path since 2014 (7.7 days) standing at 7.1 days in 2017. The first and the fourth quarter average stay is fairly robust, but with few tourist arrivals, while the second and the third quarter stays have been declining in recent years

The drop in tourism receipts may be partly attributed to Airbnb users, whose expenditure is not recorded

* Tourist receipts refer to accommodation, sustenance, local transport etc. of inbound non-resident visitors during their stay in the destination country (Methodology can be found in BoG Economic Bulletin 27, 2006)

...by packaged travelers and main tourist countries

Average length of stay for non-residents (number of days)



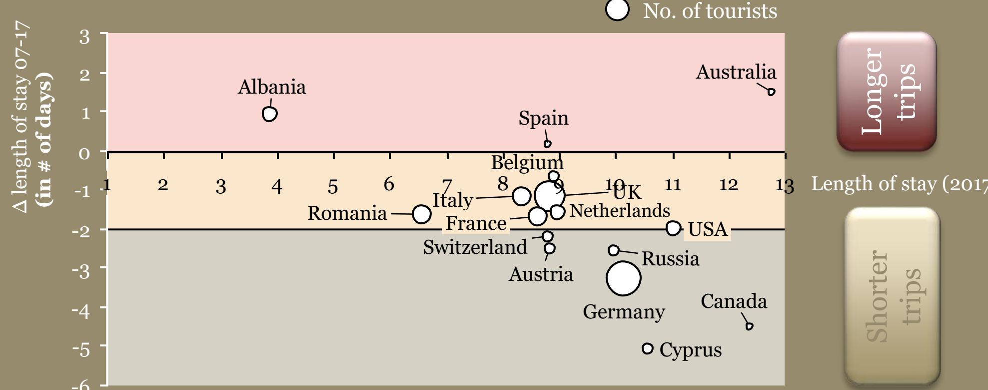
Source: Bank of Greece

Historically independent travelers stay for longer and it seems that the length of stay has stabilized

In the case of packaged tours, their average stay rebounded in 2017 after a big drop in 2016 and remained roughly 1.5 to 2 days less than that of independent travelers

*Package travelers include any combination of travel services for tickets, accommodation and other services, provided by travel agencies

Shift to shorter length of trips



Source: Bank of Greece

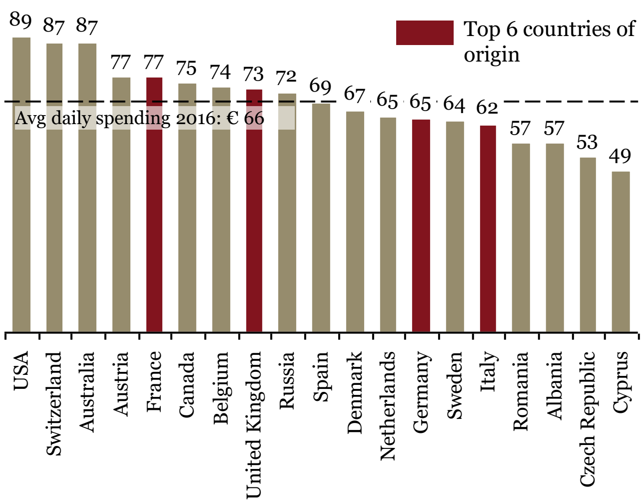
Tourists from Spain, Australia and Albania have increased their length of stay, while all others decreased their trip by 2.3 days on average

Germans, who represent a significant portion of visitors used to stay longer in Greece, but reduced their trips by approximately 3 days since 2007, whilst visitors from the UK, Italy and France by 1.4 days

The top countries in terms of length of stay are non European (Australia, USA, Russia) mainly due to travel distance

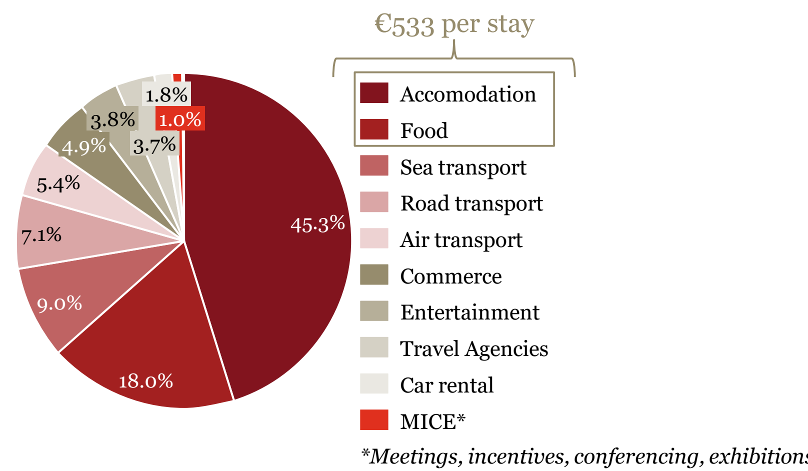
Tourists from the main origins spend daily around the average

Tourist expenditures per overnight stay by country of origin (€)



Source: Bank of Greece

Tourist expenditures per stay (€)

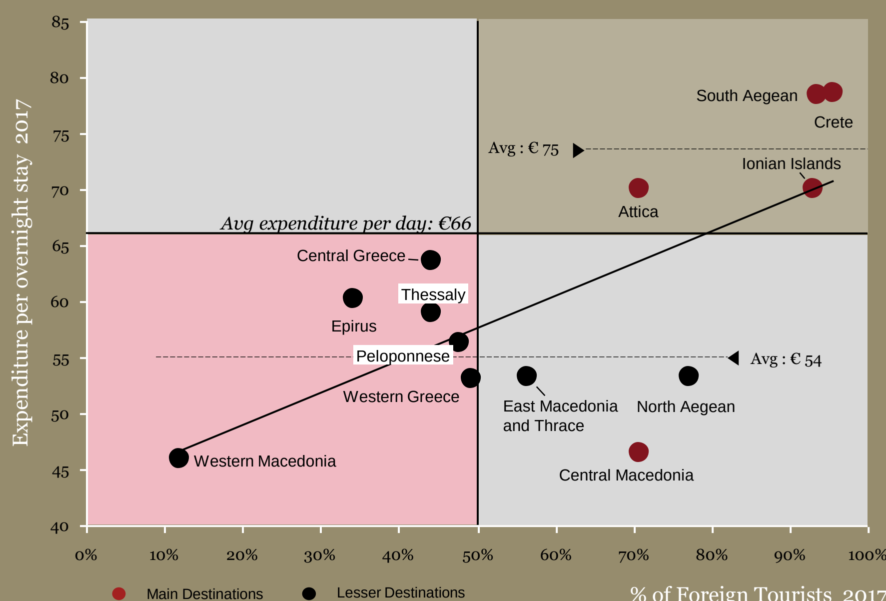


Source: SETE (2014 data)

- The main spenders per day are tourists from non-European countries (USA, Australia) and Switzerland. Tourists from Cyprus, Czech Republic and Albania lag behind in spending
- The **bulk of expenditure** goes to **accommodation services** and **food expenditure**, while transportation is the next larger expense of tourists with the most revenue directed in sea transport then road and the least being air transport

Tourism expenditure and occupancy are higher at the main destinations

Destinations' characteristics



Source: Bank of Greece (Data 2017)

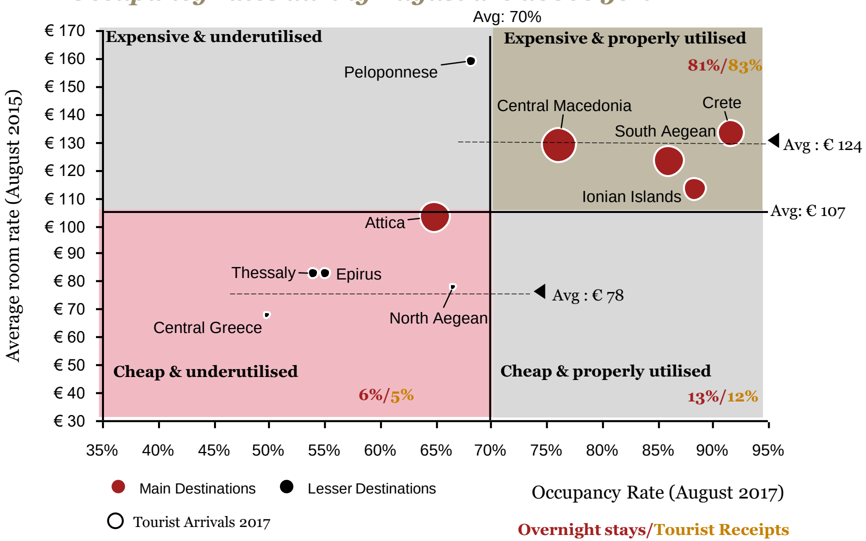
Destinations, like South Aegean, Crete and Ionian islands, where foreign tourists prevail, are more expensive

Destinations driven mainly by domestic demand lie below the average daily spent

North Aegean, Central Macedonia and East Macedonia & Thrace attract lower budget foreign tourists

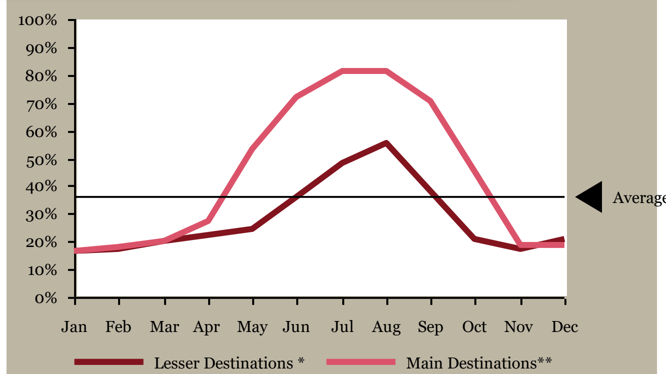
Tourists arriving at the main destinations appear to be paying on average a premium compared to lesser destinations, with the exception of Peloponnese

Occupancy rates during August are above 50%



Source: Bank of Greece, Hellenic Chamber of Hotels 2015, Eurostat

Occupancy rates per month



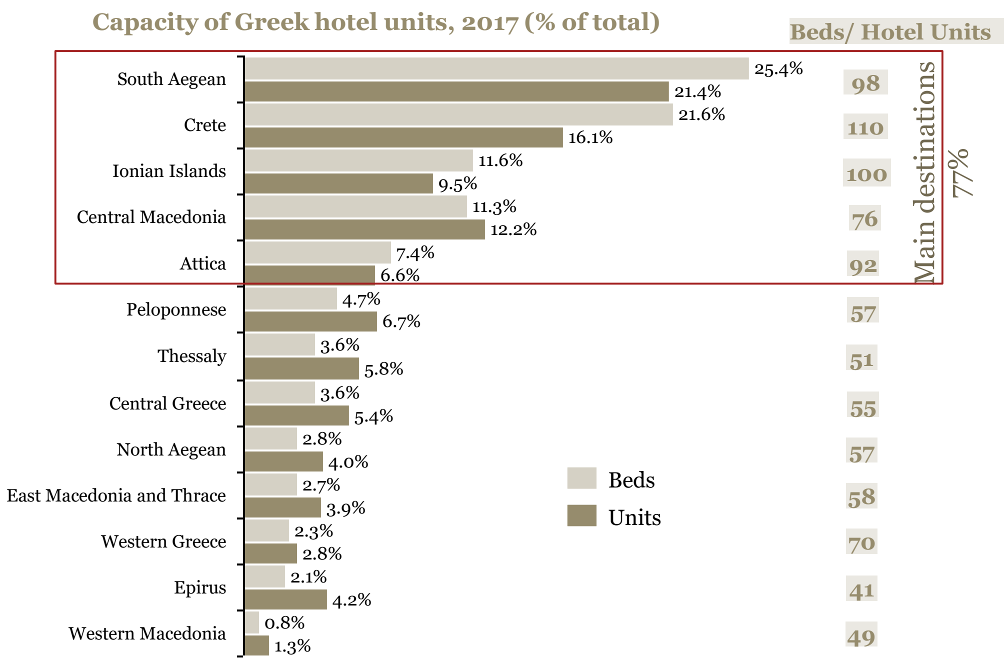
The destinations have been characterized as **main and lesser** according to the overnights of the last available year. Main destinations are above 1.5 mn overnights

Source: ELSTAT 2017

- The five main destinations concentrate 77% of the total bed capacity and 88% of the total overnight stays in Greece
- Tourism demand is concentrated in expensive destinations and during the 2nd and 3rd quarter, with the exception of Peloponnese
- The highest occupancy rates are in Crete, Ionian Islands, South Aegean and Central Macedonia
- Peloponnese is an outlier with very expensive room rates in August at around €160 per bed-night, mainly affected by Costa Navarino

*Lesser Destinations: North Aegean, Epirus, Thessaly, Western Macedonia, Eastern Macedonia and Thrace, Peloponnese, Western Greece (less than 1.5 mn overnights)
**Main Destinations: Crete, South Aegean, Central Macedonia, Ionian Islands, Attika (more than 1.5mn overnights)

Almost 77% of the country's total bed capacity resides at the main destinations



Source: Hellenic Chamber of Hotels, 2017
The next day of Greek Tourism

Tourism accommodation (2017)	*Average hotel unit*
9,783 hotel units	
414,127 rooms	**42** rooms
806,045 beds	**82** beds

No of Beds					
Stars	***1****	***2****	***3****	***4****	***5****
% of total	6%	25%	23%	26%	19%

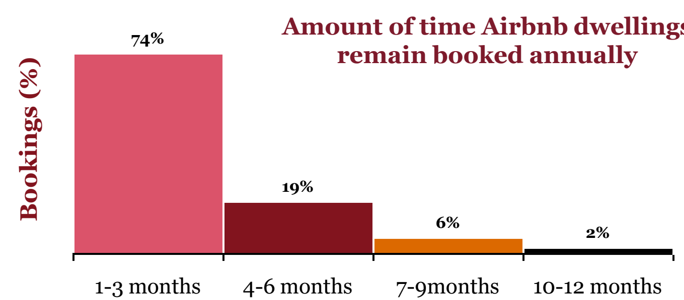
The average hotel unit in Greece has 42 rooms and 82 beds, while in the Ionian Islands, South Aegean and Crete the average unit has 53 rooms and 103 beds

Airbnb, at its current state, adds supply to the market without being disruptive

Airbnb activity 2017 (Indicative destinations)					
Location	Active Rentals	Average Daily rate	Occupancy Rate	Avg Monthly Revenue	Average # of Bedrooms
Cities					
Athens	8,068	54	80%	1,005	1.5
Thessaloniki	1,641	40	65%	606	1.4
Prime Resort Destinations					
Crete	14,650	80	50%	950	2.1
Corfu	3,897	75	53%	1,001	2
Santorini	3,039	220	76%	3,936	1.7
Mykonos	2,738	277	50%	3,150	2.8
Rhodes	2,312	89	52%	1,138	2.1
Kassandra	2,187	97	40%	936	2.3
Paros	2,085	111	36%	1,146	2.2
Zakynthos	1,830	90	43%	952	2.2
Kefalonia	1,649	90	53%	1,177	2
Naxos & Small Cyclades	1,424	85	46%	960	1.8
Lefkada	1,374	117	46%	1,279	2.2
Sithonia	1,148	89	50%	990	2.1
Total	**48,042**	**108**	**53%**	**1,373**	**2.03**

Source: AirDNA (data does not include all destinations)

- Airbnb adds about 96k beds* (12%) to the market
- Supply is concentrated in city and prime resort destinations with most of the rentals being active for 1-3 months throughout the year
- Most registered rentals are located in Crete, which accounts 30% of total rental activity, while Athens is following with 17%
- Large cities such as Athens and Thessaloniki seem to have more universally distributed bookings throughout the year
- In terms of revenues, Santorini and Mykonos are well ahead with an average monthly revenue of € 3,500
- Airbnb appears to cater for self catered tourists with large families or for low cost urban holiday makers



* Based on reported active rentals, average number of bedrooms

The length of stay and the available capacity at the main destinations are the key factors shaping up current hospitality performance

Demand

Length of stay

- Tourist arrivals are on a high trend during the last four years registering an increase of 38% since 2013, with Germany, the United Kingdom, Italy and France accounting for 35% of tourist arrivals
- There is a clear distinction between high demand main destinations and low demand lesser destinations
- Despite the rise in tourist arrivals, tourist receipts per arrival have been dropping for the last four consecutive years due to a decrease in length of stay of both independent and package tour travelers
- Average spend per night is fairly robust at around € 65 with tourists from EU countries spending at roughly that rate

Lengthening the average tourist stay will boost receipts

Supply

Available capacity at main destinations

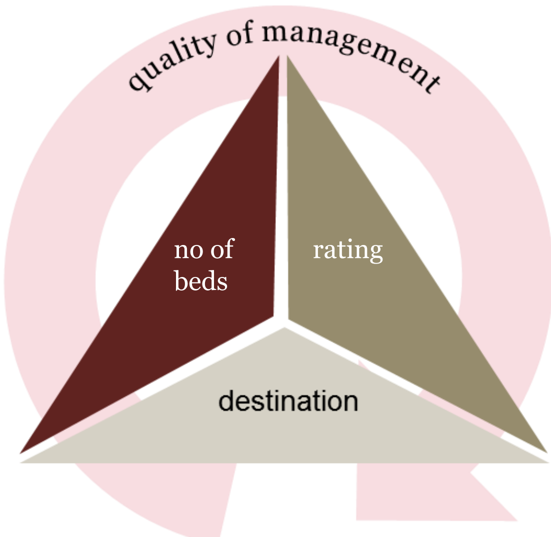
- 77% of overall bed capacity is concentrated in five main destinations, and 43% of beds are in the 4* and 5* hotel classes
- The main destinations, with the exception of the Ionian islands, have on average 20% of beds in 5* hotels, with beds in 5* hotels having registered an increase of 26% since 2011
- Airbnb, accounts for around 12% of the overall bed supply, however it is concentrated at city and prime destinations and does not appear to be generally disruptive

Ensuring enough capacity at the main destinations is critical to raising receipts

The performance of the hotel industry

2

Destination, class and the size of the unit determine hotel economics



- **Geography drives the quality of the offering,** which influences the hotel rating, which in turn pulls the unit size
- **Destination, or location** at a more granular level, affects the rates earned per room, the average occupancy and to an extent the capital cost because of land prices
- **Rating** determines in the main the average rates charged, as well as the capital costs for construction
- The **size of the hotel** unit influences the operating cost and the non room component of the revenue as well as capital costs for construction
- The **quality of management** also affects performance within each grouping, reflecting on its overall competitiveness

The sample comprises of 1,258 hotels with more than € 1mn annual revenue, mainly represented by 4* & 5* category ratings

Sample Description

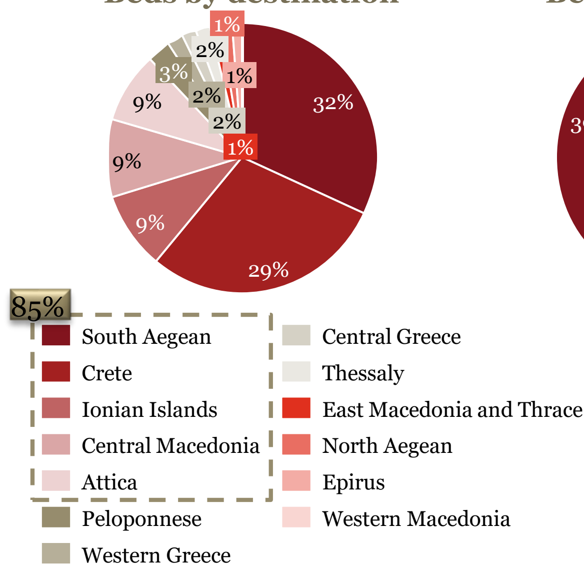
1,258 hotel units (13% of total)

167,750 rooms (40.5% of total)

339,349 beds (42.1% of total)

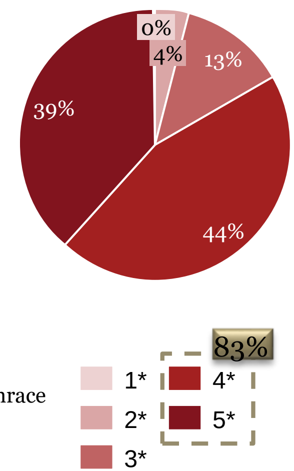
To understand better hotel economics we have analysed a sizeable sample comprising 1,258 hotels with annual revenues in excess of € 1mn

Beds by destination



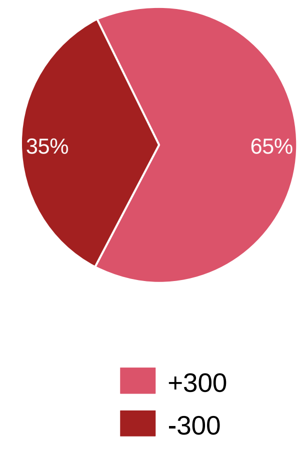
Central Macedonia, Crete, Ionian Islands, South Aegean and Attica account for 85% of hotels, while Crete and Southern Aegean, account for more than 55% of all capacity

Beds by star rating



Large high star rating hotels, mainly 4* & 5* hotels, account for ~83% of total sample's beds

Beds by size of hotel



405 hotels with more than 300 beds each, account for 65% of the total

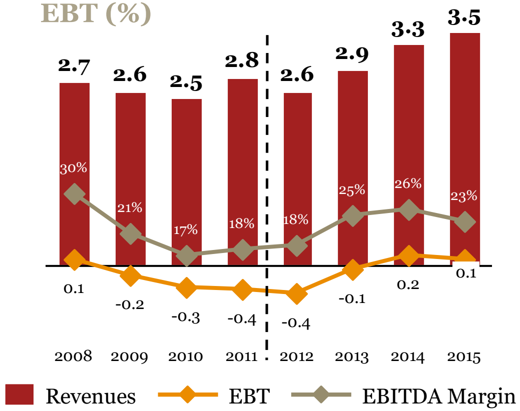
Sample hotel companies showed a marked improvement in financial performance since 2012

- Sample revenues reached to € 3.5 bn in 2015, marking an increase of 27%since 2008
- EBITDA margin rebounded to the range of 25% the last 3 years, following a steep drop of 12pps from 2008 to 2012

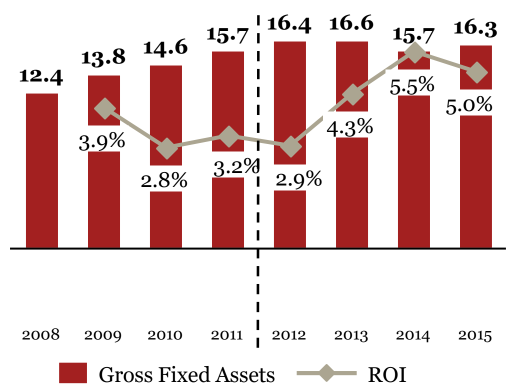
- Gross fixed assets rose by 32.2% p.a. within 2008 to 2012 and since then, they have remained fairly stable
- ROI recovered the last 3 years to an average of 5% from a low of 3%

- Sample's total debt stood at a stable € 5.3 bn in 2015
- Average Net Debt/EBITDA, as a measure of debt sustainability, dropped from 10.2x in 2012 to 5.6x in 2015, mainly as a result of increasing profitability
- On average hotel balance sheets are reasonably well capitalized, with Net Debt to Capital Employed remaining constant at about 40% throughout the period

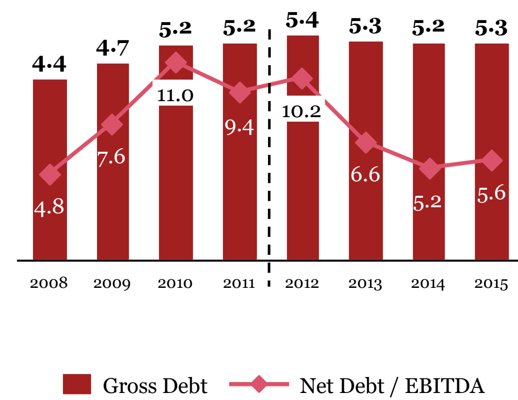
Revenues (in bn), EBITDA Margin, EBT (%)



Gross Fixed Assets (in bn), ROI (%)



Gross Debt (in bn), Net Debt / EBITDA (x)



Main destination hotels report on average higher performance per bed compared to lesser destinations

Revenue/bed (€k)

Main Destination
Lesser Destination
Gap € 3.2k

EBITDA/bed (€k)

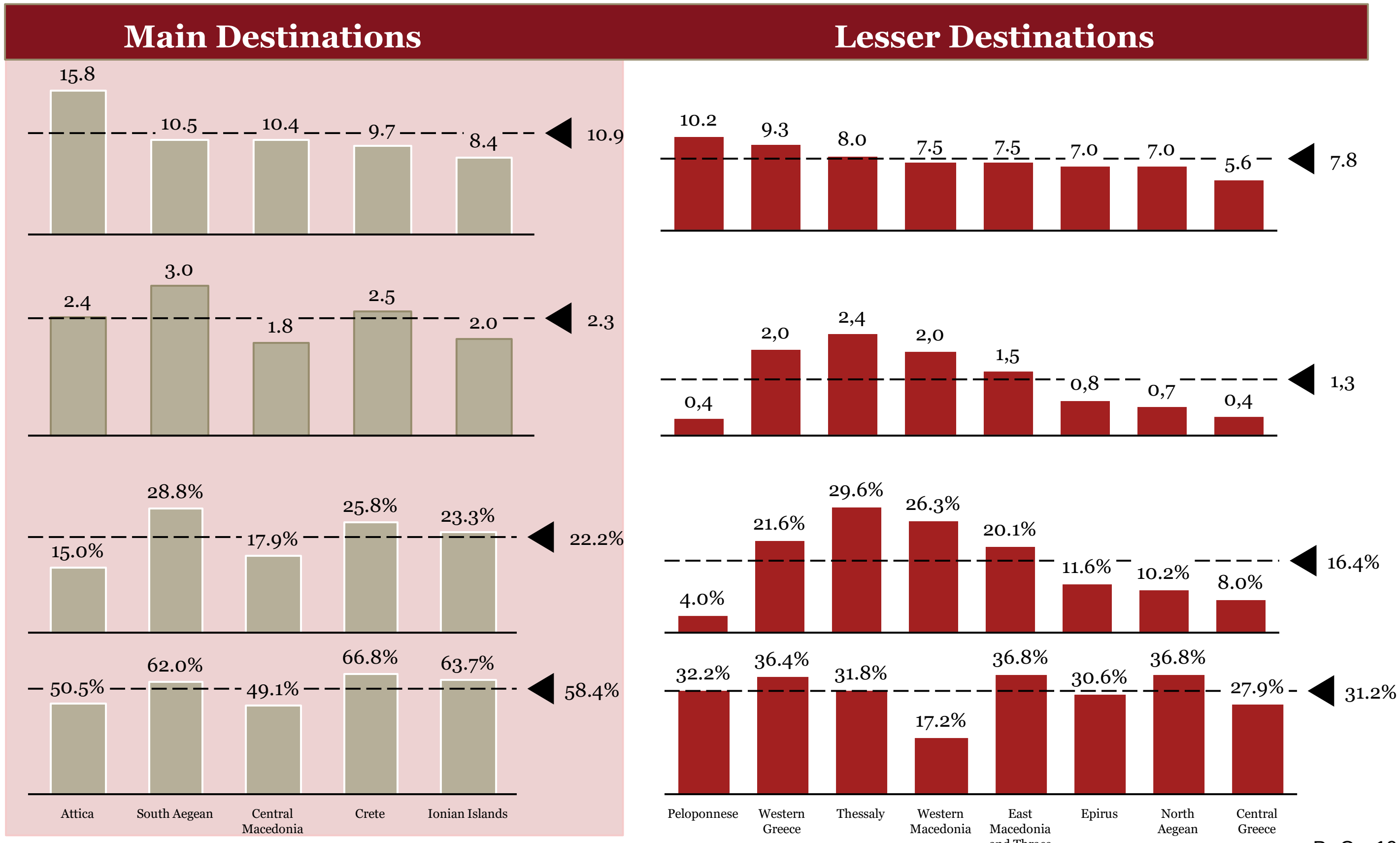
Main Destination
Lesser Destination
Gap € 1.0k

EBITDA margin (%)

Main Destination
Lesser Destination
Gap 5.8pps

Occupancy rate 2017 (%)

Main Destination
Lesser Destination
Gap 27.2 pps



There is no statistical difference in the average investment per bed amongst destinations, but there is significant difference. Higher EBITDA at main destinations boosts ROI

Gross Fixed Assets/bed (€k)

Main Destination / *Lesser Destination* — Gap € 2.0k

Net Debt/ bed (€k)

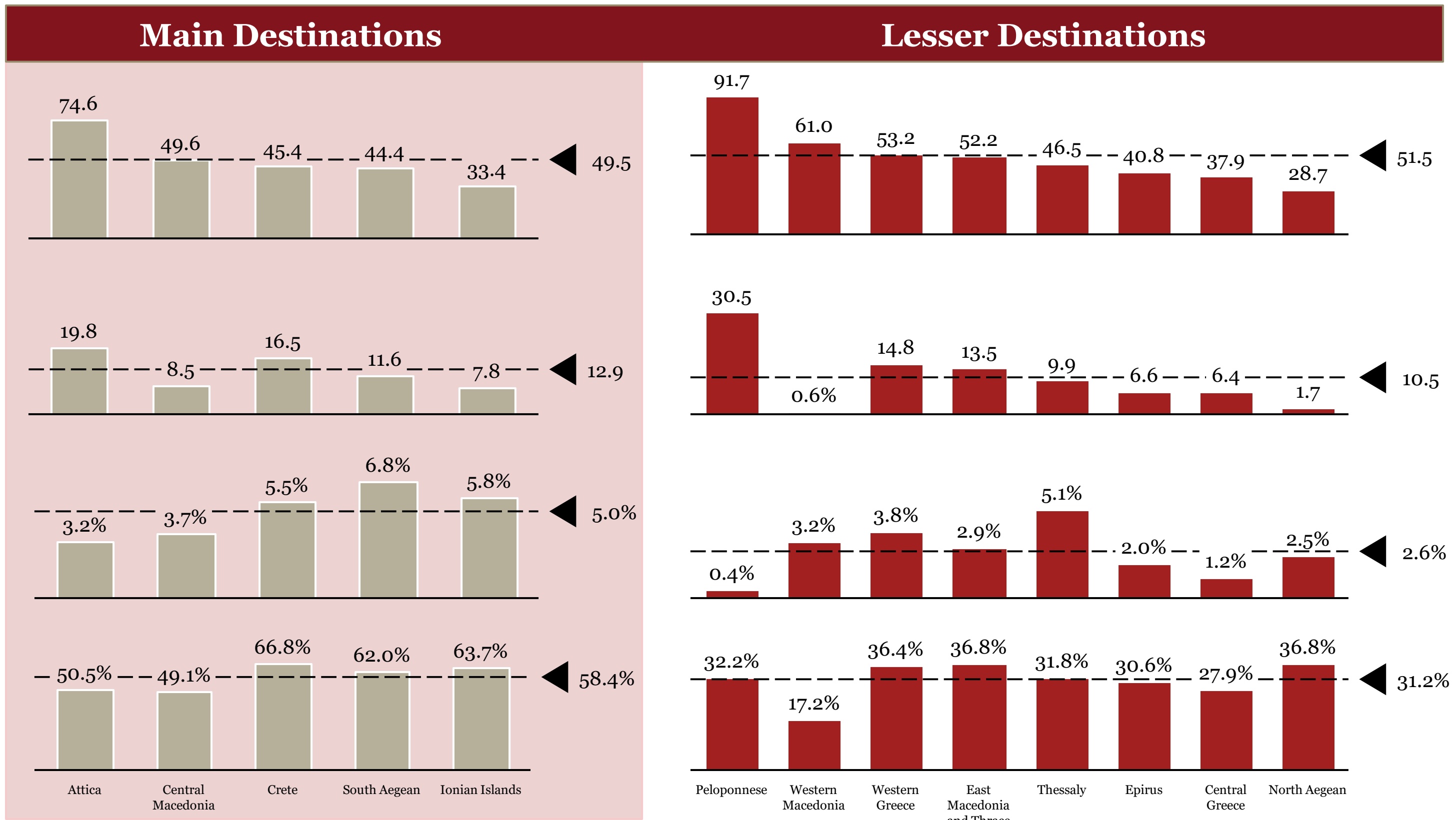
Main Destination / *Lesser Destination* — Gap € 2.4k

ROI (%)

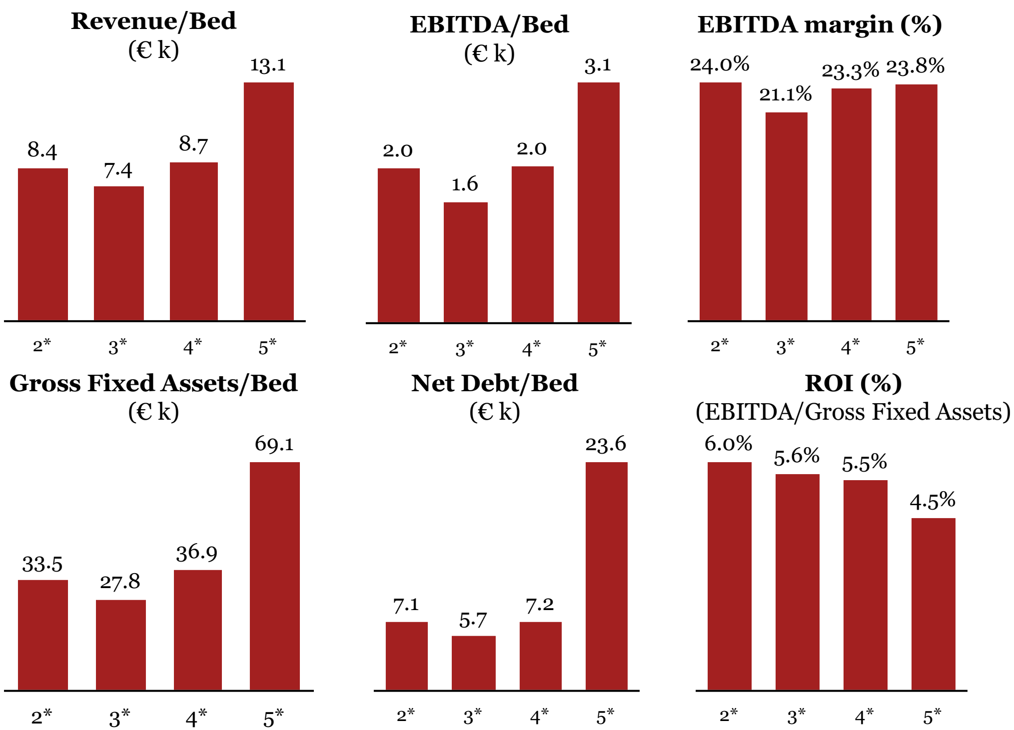
Main Destination / *Lesser Destination* — Gap 2.4 pps

Occupancy rate 2017 (%)

Main Destination / *Lesser Destination* — Gap 27.2 pps



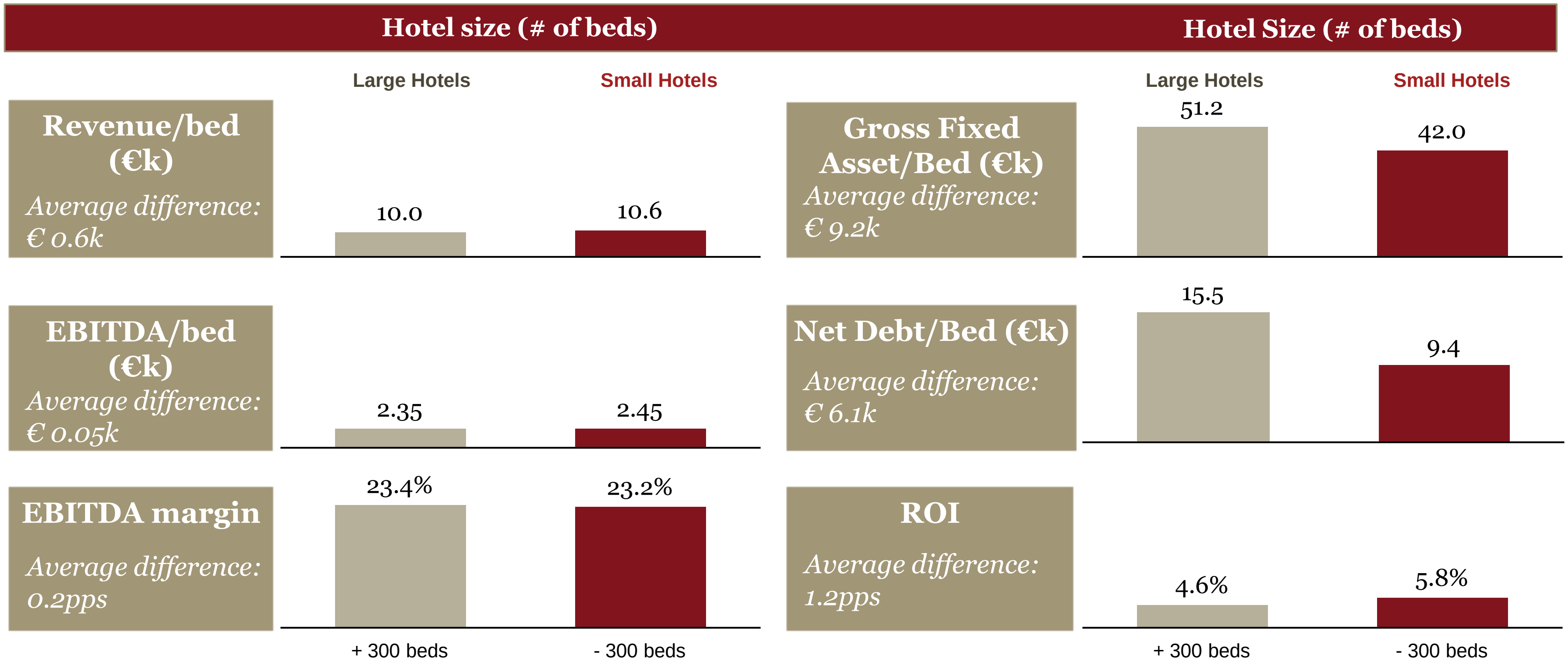
5* hotels generate more revenue and profit per bed, but require higher investment than all other ratings



- 2*, 3* and 4* hotels have similar profitability, showing marginal differences in returns
- EBITDA margin is fairly robust for different star ratings

- Hotels in the 5* category show disproportionally higher investment per bed from the other ratings, thus suffering in terms of capital returns
- 5* hotels borrow more relatively to other ratings but not out of proportion

Similar operating profitability for large and small hotels, but significantly more investment and debt for the large ones, with correspondingly lower capital returns



Location, star ratings and hotel unit size have a statistically significant impact on EBITDA/bed

$\ln(EBITDA/Bed) = \alpha + \beta_1 Destination_i + \beta_2 Star\ Rating_i + \beta_3 Hotel\ Size_i$*										
(EBITDA/bed in €)	**5***		**4***		**3***		**2***		**1***	
	300+	**300-**	**300+**	**300-**	**300+**	**300-**	**300+**	**300-**	**300+**	**300-**
Main Destinations										
South Aegean	3.185	4.600	1.794	2.591	1.380	1.994	1.561	2.254	1.187	1.714
Attica	2.787	4.025	1.570	2.267	1.208	1.745	1.366	1.973	1.039	1.500
Crete	2.434	3.515	1.371	1.980	1.055	1.523	1.193	1.723	907	1.310
Ionian Islands	2.314	3.342	1.303	1.882	1.003	1.448	1.134	1.638	862	1.246
Central Macedonia	1.547	2.235	872	1.259	671	969	758	1.095	577	833
Lesser Destinations										
Thessaly	2.399	3.465	1.351	1.951	1.040	1.502	1.176	1.698	894	1.291
Western Macedonia	2.012	2.905	1.133	1.636	872	1.259	986	1.424	750	1.083
Western Greece	1.441	2.081	812	1.172	624	902	706	1.020	537	776
Peloponnese	1.300	1.878	732	1.058	563	814	637	920	485	700
Epirus	1.298	1.875	731	1.056	563	812	636	919	484	699
East Macedonia and Thrace	1.161	1.677	654	945	503	727	569	822	433	625
Central Greece	959	1.384	540	780	415	600	470	678	357	516
North Aegean	806	1.165	454	656	349	505	395	571	301	434
Adjusted R^2=97%										

Regression coefficients are provided in the appendix

Moving from 4* to 5* provides a gain in EBITDA/bed, while 2* hotels have a larger EBITDA/bed than 3* hotels

Small hotels have a more significant impact on EBITDA/bed compared to large

The operating profitability of hotels in Thessaly and Western Macedonia is comparable to that of prime destinations

* Destination, Star Rating and Hotel Size are vectors including dummy variables controlling for hotel geography, star category and size

Destination appears to be the prime determinant of a hotel's financial performance, with size and rating following

ROI per region, star rating category and size of hotel

	Peripheries	2*		3*		4*		5*		Average
		Large	Small	Large	Small	Large	Small	Large	Small	
Main destinations	South Aegean	7%	15%	6%	67%	7%	30%	6%	20%	**20%**
Main destinations	Crete	5%	11%	5%	13%	11%	11%	7%	11%	**9%**
Main destinations	Ionian Islands		8%	9%	8%	4%	9%	5%	13%	**8%**
Main destinations	Attica		6%	5%	19%	5%	9%	3%	3%	**7%**
Main destinations	Central Macedonia	1%	3%	7%	9%	6%	2%	3%	7%	**5%**
Lesser destinations	Peloponnese			4%	35%	-3%	3%	-3%	30%	**11%**
Lesser destinations	East Macedonia and Thrace		7%	-1%	18%	7%	5%		3%	**7%**
Lesser destinations	Epirus		1%		1%		27%	2%	2%	**7%**
Lesser destinations	Thessaly		9%		2%	4%	6%	13%	7%	**7%**
Lesser destinations	North Aegean		2%		5%		5%	6%	11%	**6%**
Lesser destinations	Western Macedonia				1%		4%		4%	**3%**
Lesser destinations	Western Greece		2%		-2%	3%	3%	5%	5%	**3%**
Lesser destinations	Central Greece			N/A*	2%	N/A*	1%	2%	3%	**-21%**
	Average	**4%**	**6%**	**5%**	**15%**	**5%**	**10%**	**5%**	**9%**	

ROI ≥ 6% (green) ROI < 6% (red) * The sample is small

Hotels at main destinations over-perform

Star rating and the size of the hotel unit have a limited impact on financial performance

On average, the most remunerative type of hotel is small 3* in South Aegean

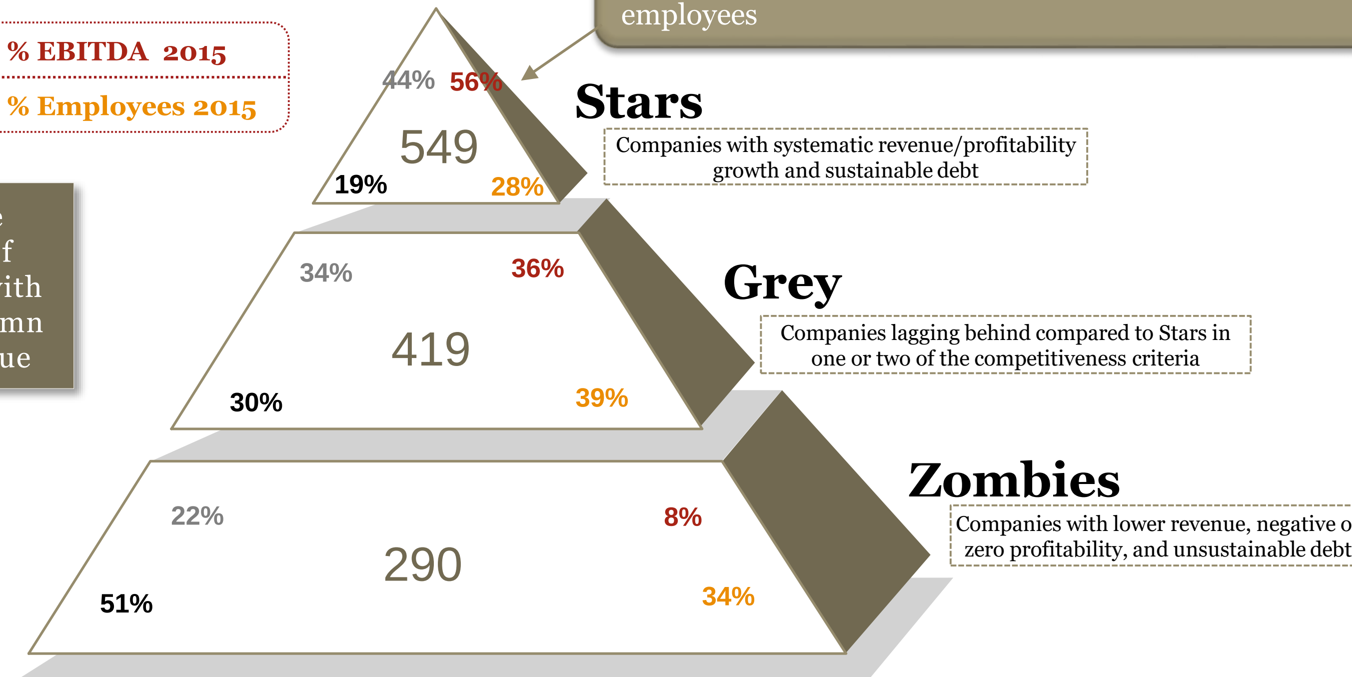
Central and Western Greece, and Western Macedonia are not conducive to high returns, independently of the type of the hotel

Hotel competitiveness is high moving along the same lines as financial performance

Almost 45% of the sample's hotels are Stars generating 56% of operating profits, while employing almost 30% of the sample's employees

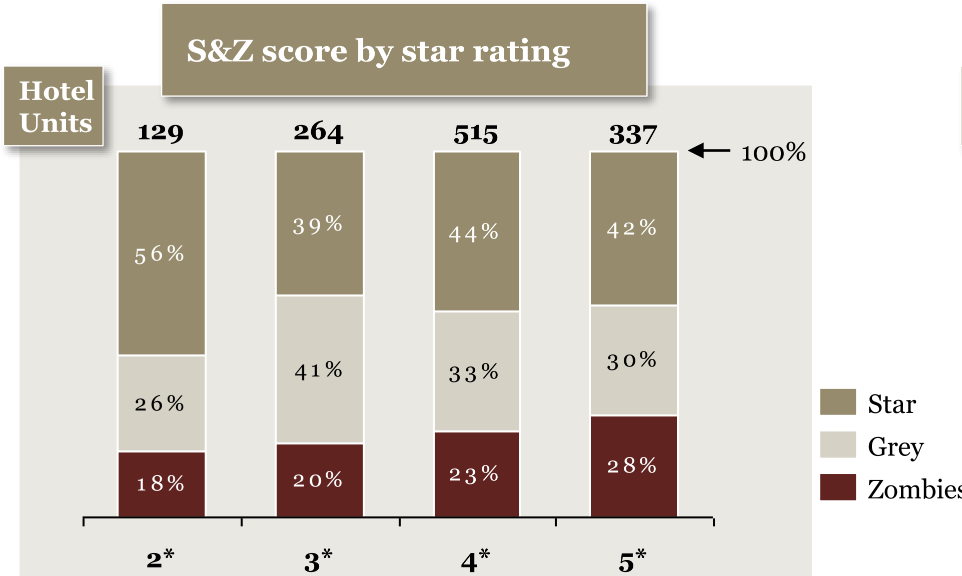
% Revenues 2015	% EBITDA 2015
% Debt 2015	% Employees 2015

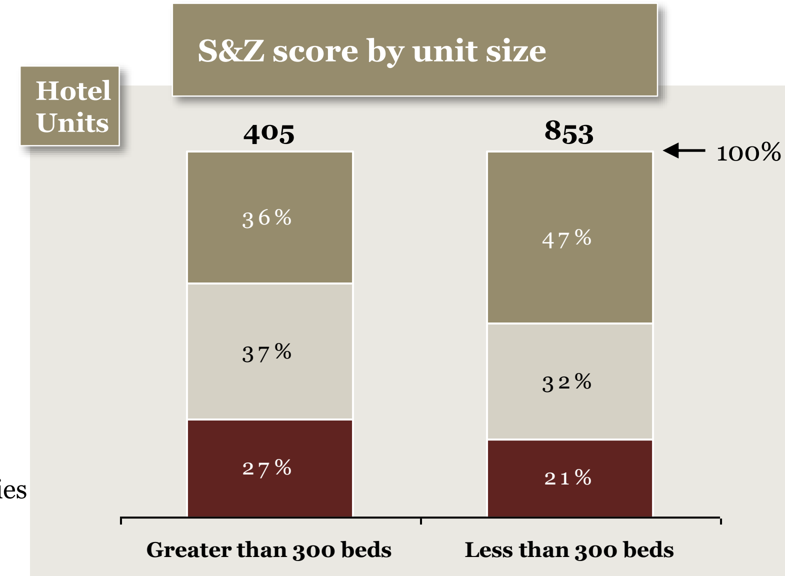
The sample comprises of 1,258 hotels with more than € 1mn annual revenue



No. of hotel units

Competitiveness remains fairly constant down the star ratings and it is higher for smaller hotels





- As we move from 3* to 5* hotel units, the concentration of Zombies increases but Stars remain fairly stable
- Zombie companies represent 28% of 5* hotels
- Large hotels have overall 6pps more Zombies than small hotels
- Small Star hotels account for nearly 50% of total

The typical hotel company tends to be small with annual revenues between €2mn and €6mn independently of how competitive it is

** € mn*

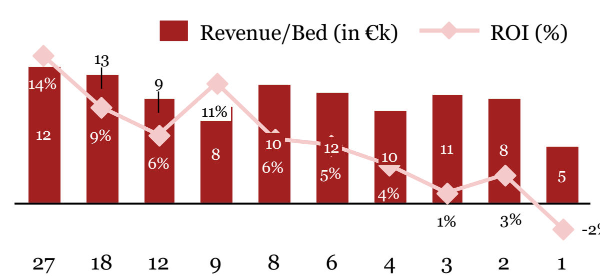
	Stars			Grey				Zombies		
Competitiveness Index\Typical Company	**27**	**18**	**12**	**9**	**8**	**6**	**4**	**3**	**2**	**1**
Revenue (€ in mn)	3,6	4,3	5,3	3,2	5,9	4,0	4,8	4,0	5,3	2,0
CAGR '08-'15	23%	12%	11%	9%	6%	8%	5%	14%	2%	-5%
EBITDA (€ in mn)	1,2	1,4	1,4	1,0	1,5	1,0	0,9	0,3	0,9	-0,4
EBITDA margin	33%	33%	27%	31%	25%	26%	18%	7%	18%	-20%
EBT (€ in mn)	0,8	0,8	0,6	0,5	0,4	0,2	0,0	-1,1	-0,8	-1,1
Gross Fixed Assets (€ in mn)	8,7	15,4	22,3	8,8	24,0	19,0	24,0	29,5	36,4	16,7
Return on Investment (ROI)	14%	9%	6%	11%	6%	5%	4%	1%	3%	-2%
Capital Employed (€ in mn)	5,6	11,6	15,3	4,3	16,0	12,1	17,7	25,8	32,5	11,4
ROCE	16%	8%	5%	15%	4%	5%	2%	-3%	0%	-7%
Net Debt (€ in mn)	-0,3	1,0	3,6	0,7	5,3	5,3	8,3	11,1	19,9	5,5
Net Debt/EBITDA	-0,2	0,7	2,5	0,7	3,6	5,1	9,5	38,8	21,1	-14,0
Capital Employed (€ in mn)	5,6	11,6	15,3	4,3	16,0	12,1	17,7	25,8	32,5	11,4
# of Employees	8	9	18	30	19	23	21	17	36	26
# of Hotels	139	189	221	87	80	143	109	61	139	90
# of Beds	21.200	44.767	68.283	19.373	23.722	37.478	37.323	17.888	43.546	25.768

As we move from the most to the least competitive hotels:

- revenue growth drops
- EBITDA margin on average drops from above 30% to minus 20%
- revenue increase with the exception of real Zombies
- profitability declines
- gross fixed assets increase considerably
- significantly more capital is employed
- more staff is employed
- net debt increases disproportionately

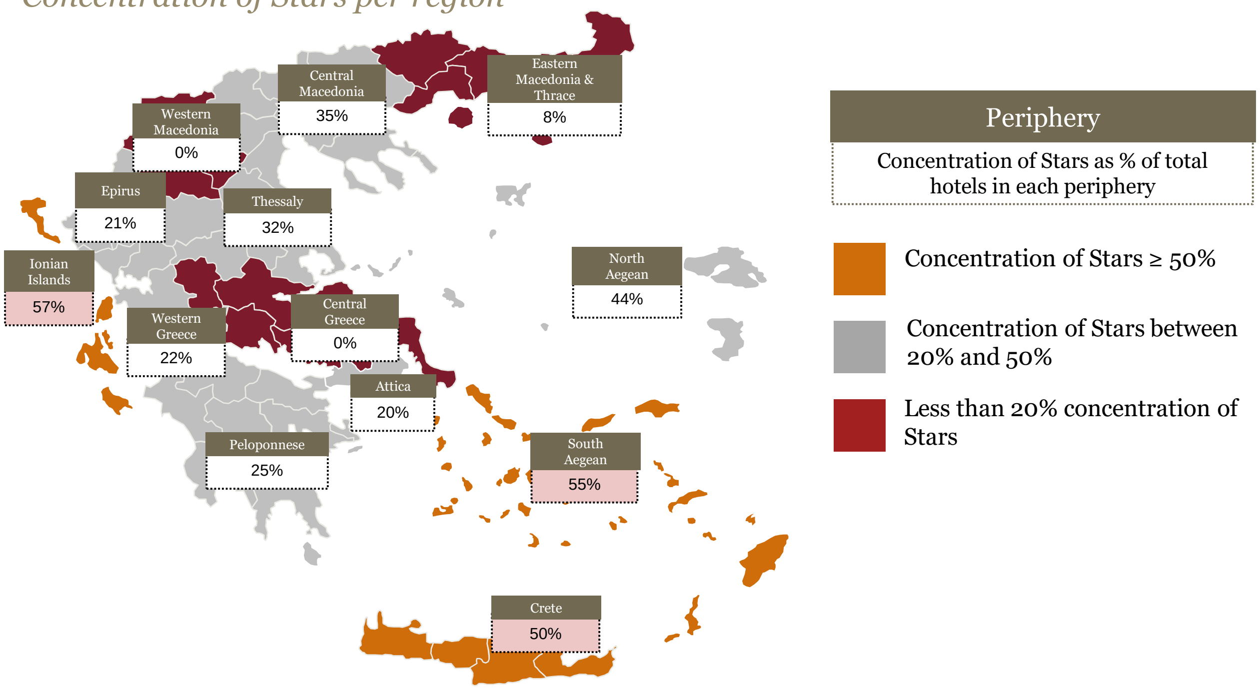
In summary, Star hotel companies use less fixed assets and employ capital more productively than Zombie companies

Revenue/bed & ROI per S&Z scoring



Hotels in the Ionian Islands, South Aegean and Crete are the most competitive

Concentration of Stars per region



In terms of competitiveness, Stars seem to populate main destinations

Regarding lesser destinations, the most competitive region is North Aegean with a concentration of 44%

Central Greece and Western Macedonia have no Star hotels

The typical Star hotel company tends to be small with annual revenues between € 3.5mn to € 5mn, enjoying consistent high growth and good capital returns

Competitive hotels match revenues to fixed asset far better

- More than 44% of all hotel companies are Stars. Competitiveness improves as we move down the star ratings and it is higher for smaller hotels
- As we move from the most to the least competitive hotel, revenues and profitability drop, in contrast to gross fixed assets and capital employed which increase in the Zombie categories suggesting that resources have been utilized inefficiently

Destination

Main destinations

- Star and Grey hotels seem to populate main destinations, whereas their presence is greatly diminished at lesser destinations
- The Ionian Islands, South Aegean and Crete are the most competitive regions with Stars concentration of 57%, 55% and 50% respectively

Hotel ratings

4 / 3* hotels*

- 4* and 3* hotels appear to be the most competitive
- The concentration of Zombie hotels increases with the rating

Size of Unit

Small units

- Large hotels have overall 6pps more Zombies and 13pps less Star hotels than smaller ones

Overall, the hotel industry is improving its economics, with significant variances amongst destinations and ratings

Destination

Main destinations

- The hospitality industry is split between main (Central Macedonia, Crete, Ionian Islands, South Aegean and Attica) and lesser destinations (Peloponnese, Western Greece, Central Greece, Thessaly, East Macedonia and Thrace, North Aegean, Epirus, Western Macedonia)
- Main destinations account for 85% of all hotels
- Hotels at main destinations have a significantly higher financial performance than in lesser destinations

Rating

3/4* hotels*

- All hotel classes exhibit similar operating performance and economics with the exception of 5* hotels
- 5* hotels perform better in terms of revenue and EBITDA per bed, but they suffer in terms of ROI due to disproportionately higher investment
- The best type of hotel in terms of capital returns is 3* followed by 4*

Size of Unit

Small units

- Unit size has a limited impact on operating profitability, but higher investment in larger units translates into lower capital returns
- The investment differential between large and small units is not consistent with the notion of economies of scale due to unit size
- Relatively small hotels at main destinations, independent of the star rating have the best financial performance

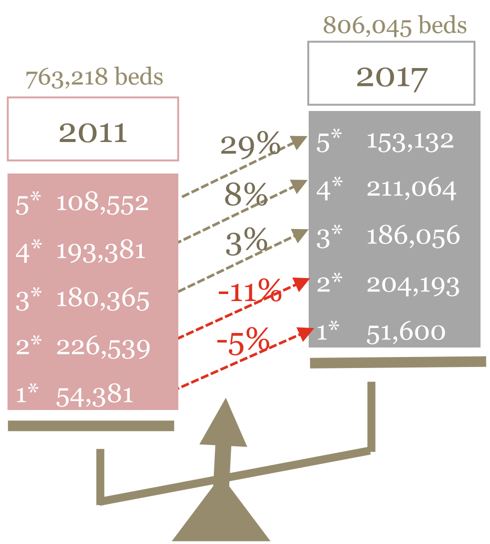
Changes in star ratings and size have a statistically significant impact on operating profits

Growth and capital needs

3

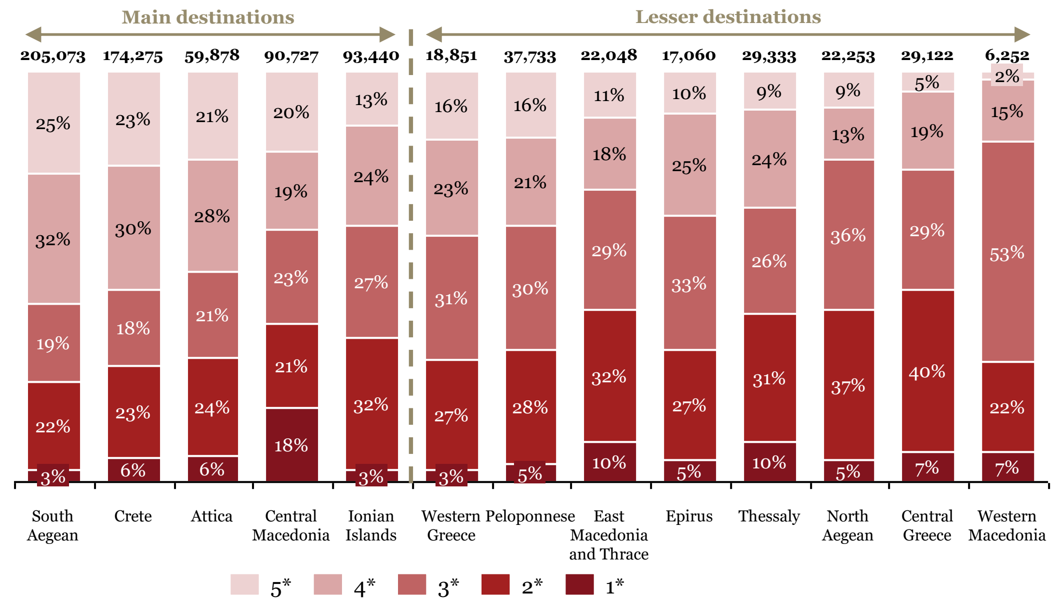
The Greek market has been gradually upgrading to 5 hotels. Their share at the main destinations is in excess of 20% with the exception of the Ionian islands. Lesser destinations are dominated by 3* and 4* hotels*

Evolution of beds by star rating



Source: Hellenic Chamber of Hotels, ITEP

Beds Capacity per Region & Star rating (2017)



Source: Hellenic Chamber of Hotels, ITEP

Between 2010 and 2015 over € 1.8bn of capital expenditure was made, concentrating mainly on 5* large hotels at main destinations

Total investment (€ mn) 2010-2015

	Peripheries	2*		3*		4*		5*		*Total Large*	*Total Small*	**Total destination**
		Large	Small	Large	Small	Large	Small	Large	Small			
Main	Crete	1	31	16	45	207	67	197	59	*421*	*202*	**623**
Main	South Aegean		12		0	144	3	143	113	*287*	*128*	**415**
Main	Central Macedonia		1	5		31	5	263	27	*299*	*32*	**332**
Main	Ionian Islands		7	3		18	6	53	19	*74*	*32*	**106**
Main	Attica		7		22			77	0	*77*	*29*	**106**
	Subtotal	**1**	**58**	**24**	**67**	**400**	**80**	**733**	**218**	*1,158*	*423*	**1,581**
Lesser	Peloponnese			1	4		6	60	13	*61*	*23*	**83**
Lesser	Thessaly		0		9	5	24	3	13	*8*	*47*	**54**
Lesser	Western Greece		0			6		49	2	*56*	*2*	**58**
Lesser	East Macedonia and Thrace		1	1		4	14		4	*5*	*19*	**24**
Lesser	Epirus				1		5	0	15	*0*	*22*	**22**
Lesser	Central Greece		0	0				9	7	*10*	*7*	**16**
Lesser	Western Macedonia				0		1		1	*0*	*3*	**3**
Lesser	North Aegean		1							*0*	*1*	**1**
	Subtotal	**0**	**2**	**2**	**14**	**16**	**51**	**122**	**55**	*139*	*122*	**261**
	Total	**1**	**61**	**26**	**80**	**416**	**132**	**855**	**273**	*1,297*	*545*	**1,842**

€ 1.383mn Investments in excess of € 50mn over five years

The bulk of invested capital between 2010-2015 accounted for hotels at main destinations, namely Crete, South Aegean and Central Macedonia

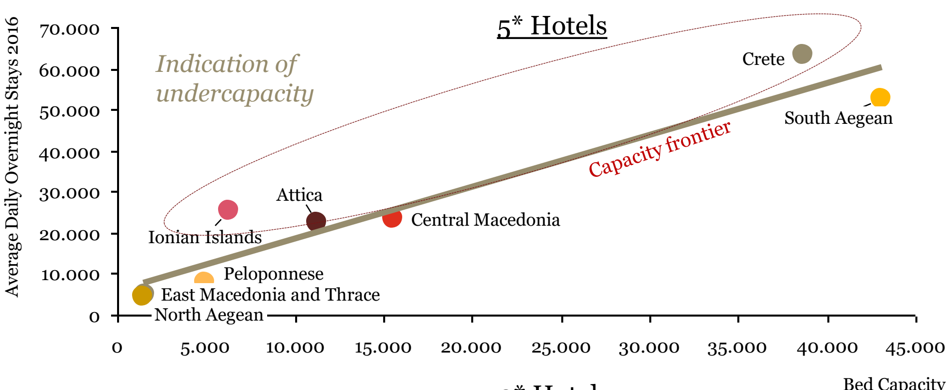
Investment/bed averaged at € 3.2k, a very low figure compared to new builds, suggesting minimal upgrade and refurbishment activity

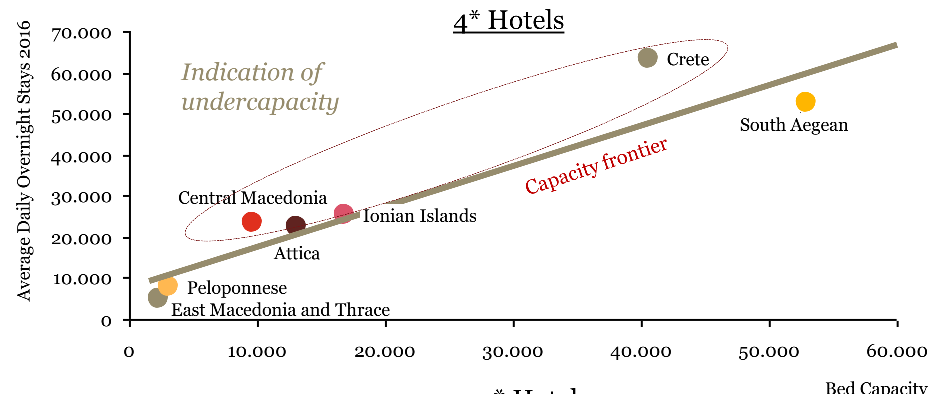
In terms of star rating, the most active in capital expenditure were 5*hotels, although the best performers have been 3* hotels

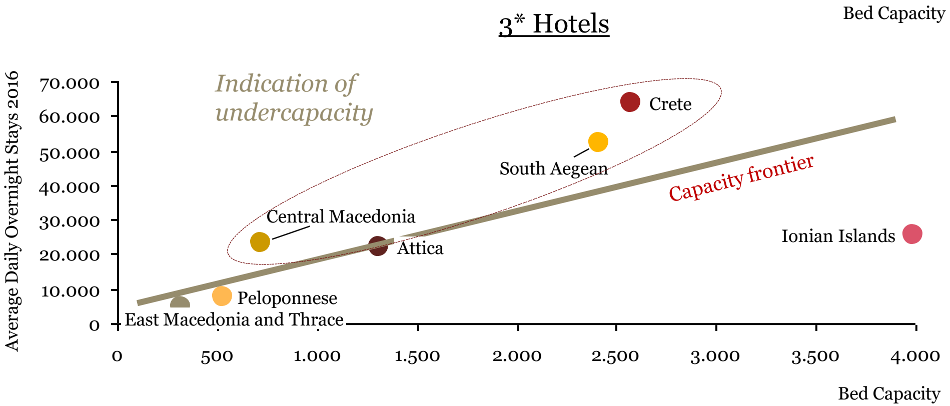
Large hotels attracted more capital expenditure despite fact that small hotels show consistently higher returns

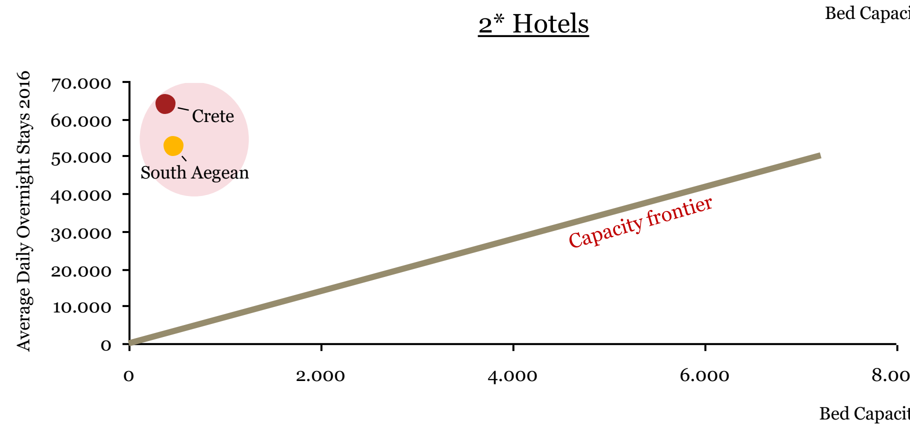
The average investment in main destinations was € 2.6k per bed, whilst in lesser destinations was € 541 per bed suggesting minimal upgrading in the latter case

There are indications of undercapacity in Crete, Attica and partially Central Macedonia and South Aegean



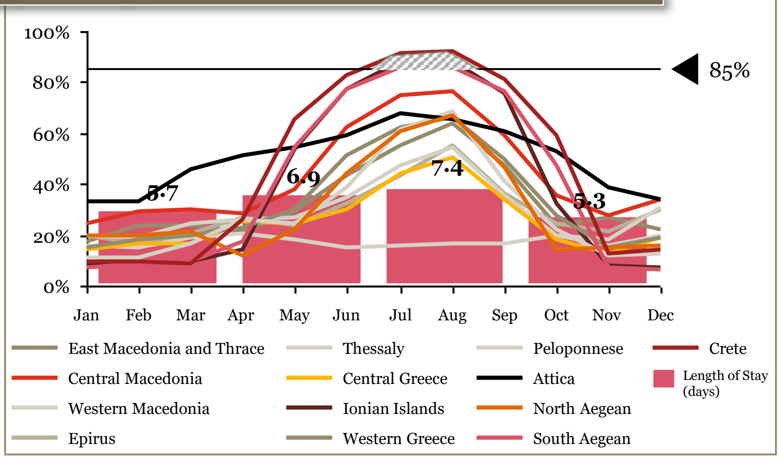






Greek destinations are in general oversupplied. Only at the peak season there may be a shortfall of capacity in 2022 in Crete, South Aegean and the Ionian islands

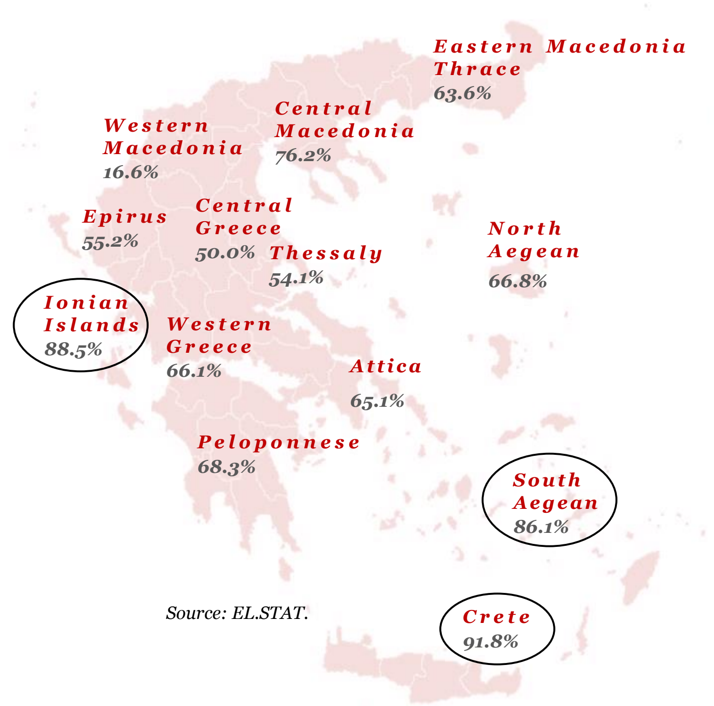
Occupancy rates and average length of stay (quarterly)



- Current capacity is utilized considerably less than 80% during the peak months at all but three destinations
- Western Macedonia, Peloponnese and Central Greece are suffering from severe excess capacity

Source: Hellenic Chamber of Hotels, 2017

Occupancy rates by region in August 2017



Source: EL.STAT.

About 24,000 new beds will need to be constructed until 2022 to meet demand at the three destinations that are close to full capacity

New beds needed*

24k beds

to be Added in order to meet ~85% occupancy (90% for Crete)

~12k rooms**

~ 90 hotel units**

CAPEX needs for construction of new hotel beds

€ 1,1bn

Destinations, such as **Crete, the Ionian Islands and South Aegean**, that are close to full capacity, are expected to need about 24k additional beds by 2022, to meet demand during peak months

* *We have assumed that the average hotel has around 132 rooms and 270 beds as per our sample, which has little representation of very small hotel units*

** *Complete methodology regarding Growth CAPEX calculations can be found in the Appendix*

Greenfield tourist investment projects are few and they take too much time to materialise

Construction of new supply

Greenfield

There are 14 tourist greenfield projects planned totaling 5,557 rooms, located in Crete, South Aegean, the Ionian Islands, and Central Greece

Beds ≈ 11,154*
Investment: €2,551 mn

Fast Track Greenfield

There are 12 tourist projects included in the Fast Track process by the public sector, adding to 1,381 rooms

Beds: 2,666
Investment : €2,754 mn

* Based on room data and assuming that one room consists of roughly 2 beds

14 Greenfield **hotel and villa** projects with a budget of € 2.5bn and for about 5.600 rooms

15 *years*

takes, on average, for a project to go from planning to commencing construction

All but one greenfield projects are at the main destinations and none is yet at the stage of building permits and construction

A/A	Hotel Name	Region	Star	Rooms	Area (acre)	Budget (€ mn)	Budget/ room (€ '000)	Completion Year
	Hotel Projects under construction							
1	Atalanti Hills	Central Greece	5*	3,300	3,052	1,500	455	N/A
2	Casa Cook Chania	Crete	5*	65	N/A	N/A	N/A	2018
3	Crown Royal Resort & Spa	Crete	5*	N/A	N/A	130	N/A	2019
4	Gerani Resort	Crete	5*	N/A	N/A	25	N/A	N/A
5	Pilotos SA new hotel in Madaros	Crete	5*	295	24	30	102	N/A
6	Vantaris Hotels new hotel in Madaros	Crete	5*	N/A	31	40	N/A	N/A
7	Elounda Hills	Crete	5*	646	840	408	632	N/A
8	Hotel complex in Cavo Sidero	Crete	5*	720	22,120	268	372	N/A
9	Sunprime Pearl Beach Kos	South Aegean	4*	97	N/A	N/A	N/A	2018
10	Amartos Oikologiki SA hotel in Rhodes	South Aegean	5*	135	12	N/A	N/A	N/A
11	Ammos SA Hotel in Rhodes	South Aegean	5*	187	13	N/A	N/A	N/A
	Total			**5,445**	**26,092**	**2,401**	**390**	
	Villas under construction							
1	Nana Imperial	Crete	5*	120	N/A	30	250	N/A
2	Robinson club Ierapetra	Crete	5*	N/A	36	N/A	N/A	N/A
3	Villas in Scorpios Island	Ionian Islands	5*	12	4	120	10,000	2020
	Total			**132**	**40**	**150**	**250***	
14	**Grand Total**			**5,577**	**27,032**	**2,551**	**640**	

* The villas on Scorpios Island are excluded from the grand total

Source: Press, PwC analysis

Fast track tourist projects are at the main destinations, as well as Central Greece and Peloponnese

"**Strategic Investment**" was enacted under the Law 3894/2010 from the Greek Government in order to minimise bureaucracy and limit the investment horizon for large investments in Greece and is managed by "Enterprise Greece"

Tourist Projects approved and submitted in the Fast-Track process

A/A	Hotel Title	Region	Star Category	Budget (in € mn)	Beds	Rooms	Budget/ room (€ '000)	Submission Year	Completion Year
Approved to be built									
1	Cavo Sidero	Crete	5*	268	1,936	N/A	N/A	2012	2019
2	Pravita Estate	Central Macedonia	5*	796	N/A	N/A	N/A	2013	N/A
3	Kilada Hills	Peloponnese	5*	418	N/A	N/A	N/A	2013	2019
4	Kerameia SA	North Aegean	5*	100	280	N/A	N/A	2016	N/A
5	RSR Eagle Resort	Central Greece	5*	191	N/A	400	477.5	2016	N/A
6	Elounda Hills	Crete	5*	408	N/A	646	631.6	2016	2027
Submitted									
7	Ithaca Resort	Ionian Islands	5*	400	N/A	N/A	N/A	2013	N/A
8	Sportsland SA	Central Greece	5*	123	N/A	N/A	N/A	2014	N/A
9	Porto Sarti	Peloponnese	5*	50	N/A	110	454.5	2016	N/A
10	Hera Bay Luxury Resort	North Aegean	5*	N/A	N/A	N/A	N/A	N/A	N/A
11	Mitsis Group	South Aegean	5*	N/A	450	225	N/A	2014	N/A
12	Arcadia Cultural Resort and Spa	Peloponnese	5*	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total				**2,754**	**2,666**	**1,381**	**1,564**		

Tourist projects that have been included in the Fast-Track process are all 5* hotels, with a total of more than 2,666 beds and 1,381 rooms

So far, **6 out of 12** submitted hotel projects have been approved into the Fast Track process, while **none of them has been completed or started operating**

Overall, **fast track projects are slow** with 3.7 years on average since submission

Source: Enterprise Greece, 2018

Strategic investments are defined by Enterprise Greece as productive investments that bring major qualitative and quantitative results to the national economy. In order for a tourist project to be approved into the Fast Track process, it must fulfill one of the following conditions: The total investment cost to exceed € 100mn or the total cost of the investment is over € 40mn and concurrently to create at least 120 new employment positions. At least 150 new employment positions are created from the investment in a viable manner, or at least 600 employment positions are retained

Hotels across destinations will continuously need to be upgraded and maintained in order to remain competitive

Average Investment	€ 12k /active bed

Upgrade of existing hotels (5 years forward)

- It is assumed that 80% of the sample's hotel bed supply (≈ 271,500) should be upgraded within the next 5 years
- From this a 20% of hotels is already in need of upgrade **(backlog)**
- Every year an additional 20% will need investment for upgrades **(recurring)**

Star Rating	Costs for upgrade/bed (€)	Upgrade CAPEX- 5 years (€ Mn)
5*	20,000	2,093
4*	17,200	2,050
3*	14,700	512
2*	10,500	113
1*	N/A	N/A
Total		4,768

Total CAPEX for upgrade/ refurbishment (in € Bn)

€ 4.8bn

Maintenance needs for existing hotels (annually)

- Annual Maintenance CAPEX is estimated roughly at 2% of hotel revenues*

** "Study for the Upgrade of Old Hotel Units" (2006), Hellenic Hoteliers Foundation*

Star Rating	CAPEX for maintenance** (€ Mn)
5*	171
4*	132
3*	32
2*	11
1*	1
Total	347

**Annual Total Maintenance costs * 5 years = € 69.4mn x 5 years

Total Maintenance CAPEX (in € Bn)

€ 0.35bn

Over 400 hotels with unsustainable debt, need to first restructure or refinance their debt before attracting new investment

Write off *about* ***€ 489mn*** to release assets *(around 18.6k beds);* mostly in Zombie hotels

Trapped Debt ***€ 0.5bn***

18.6k beds

in companies that have trapped debt in their balance sheet

75 hotel units

- 50 hotel units in main destinations
- 25 hotel units in lesser destinations

Restructure/refinance *about* ***€ 2.1bn*** to restore *operational profitability (around 108.3k beds)*

Refinancing Debt ***€ 2.1bn***

108.3k beds

in companies with unsustainable debt, but with potential to restore sustainability

342 hotel units

- 290 hotel units in main destinations
- 52 hotel units in lesser destinations

Methodology

- For every company with negative EBITDA, it was assumed that the debt committed cannot be repaid ("Trapped Debt")
- For every company with positive EBITDA, it was assumed that the debt level needs refinancing ("Refinanceable Debt") using the debt sustainability ratio of Net Debt/ EBITDA = 6.5x

There are funding needs of Greek hotels over the next five years amount to € 6.2bn and financial restructuring may necessitate the write off of up to € 2.6bn of debt

1 ***Funding needs for building new hotel units in destinations with estimated under-capacity in the next 5 years***

	Funding Needs (€ mn)	Hotels	# of hotels	Funding Needs (€ mn)	Debt restructuring needs (€ mn)
Growth CAPEX	1,056	New Hotels	90	1,056	N/A

2 ***Funding needs for updating existing (already operating) hotel units and restructuring needs for distressed hotels in all destinations***

	Funding Needs (€ mn)
Upgrade CAPEX	4,768
Maintenance CAPEX	347
Total	**5,115**

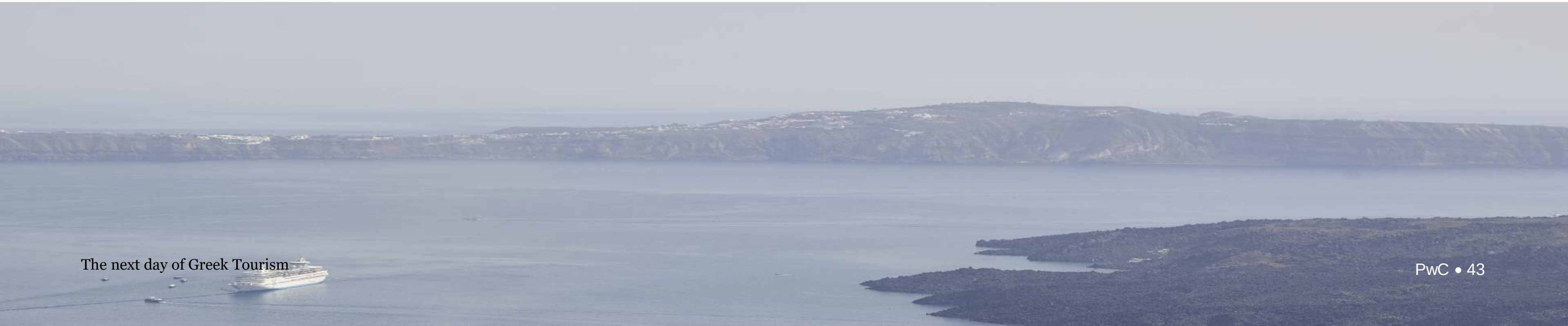
Hotels	# of hotels	Funding Needs (€ mn)	Debt restructuring required (€ mn)
Healthy Hotels	835	3,020	N/A
Distressed Hotels			
Hotels in need to refinance debt	342	1,739	2,127
Hotels with trapped debt	75	358	489
Grand Total	**1,252**	**5,115**	**2,616**

	Funding Needs (€ mn)
Grand Total	**6,171**

	# of hotels	Funding Needs (€ mn)	Restructuring needs (€ mn)
Grand Total	**1,342**	**6,171**	**2,616**

The capital picture of the hospitality industry

- Between 2010 and 2015 over € 1.8bn in investment took place, concentrated mainly on 5* large hotels at the main destinations
- The hospitality sector in Greece is generally oversupplied with the exception of Crete, South Aegean and the Ionian islands, where peak demand is expected to surpass capacity in the next 5 years
- The hotels industry is very slow paced when it comes to greenfield investment. Most projects are concentrated at main destinations and none is yet at the stage of building permits and construction. Average lead time to construction could be very long
- About 90 new equivalent hotels will need to be constructed within the next 5 years to meet demand in the three main destinations that are close to full capacity requiring circa € 1.1bn
- Hotels across destinations will need to upgrade and maintain their assets in order to remain competitive, spending around € 5bn over the next five years
- There is a need to restructure 342 Grey and Zombie hotels to make them financially sustainable in the long run before any new investment could take place. This may necessitate debt write offs to the tune of € 2.6bn



Business Strategies for the hotel industry

4

The economics of the hotel industry and their growth dynamics are driven by the country of origin of incoming tourists and is shaped by the capacity of the main destinations

Length of stay & spending

Origin concentration

Distribution of capacity over destinations

Hospitality Dynamics

- Arrivals
- Seasonality
- Pricing
- Spending

✓ New Investment
✓ Greenfield projects
✓ M&A Transactions

Developing lesser destinations seems to be the most promising business strategy in terms of value potential

Strategy A* : *Develop lesser destinations*

Gain Potential (x)			
Group	Develop lesser destinations		
	5*	4*	3*/2*/1*
Star	3.3	1.4	1.8
Grey	1.7	1.8	1.0

- at lesser destinations hotels tend to chronically underperform due to low occupancy and consequently low rates
- marketing lesser destinations hotels aggressively will improve operating economics
- no significant extra investment outside regular maintenance
- the most relevant lesser destinations for this strategy are North Aegean, Thessaly and Western Greece
- Star 5* hotels are the most suitable targets for this strategy, followed by Grey 4*
- developing a new destination could prove expensive, for the upgrade of infrastructure and marketing and may require state support

Strategy B* : *Add capacity at main destinations*

Gain Potential (x)			
Group	Build new hotels		
	5*	4*	3*/2*/1*
Star	1.1	1.1	1.2
Grey	0.7	0.6	0.7
Add capacity to existing hotels			
Star	1.6	1.6	1.8
Grey	1.0	0.9	0.9

- capacity in certain destinations is short of potential demand
- new capacity increases room availability and, depending on its rating distribution, it may increase average overnight stays
- when new units are combined in locations with existing ones, the economics improve
- adding capacity to existing Star hotels seems to be the best value option
- building new Star hotels has modest returns, while building new Grey hotels destroys value accretive at all

Strategy C* : *Upgrade hotel units to the next class*

Gain Potential (x)		
Group	Upgrade to next class (Main)	
	4* -- > 5*	3* -- > 4*
Star	1.5	1.4
Grey	1.6	1.1
Upgrade to next class (Lesser)		
Star	1.2	0.8
Grey	0.7	1.4

- investments in hotel upgrading appear due after years of under-investment
- upgrading to the next class will increase room rates at the expense of the incremental investment
- upgrading increases both operational profitability and return on investment
- the value improvement tends to be larger for Grey hotels when upgrading from 4* to 5*, followed by the Star hotels
- main destinations offer added value consistently

* Complete methodology can be found in the Appendix

Trapped Zombie acquisition is a doubtful strategy although it could prove remunerative in certain cases

1. *There are about 75 sizeable "trapped" Zombie hotels, which could be acquired as real estate*

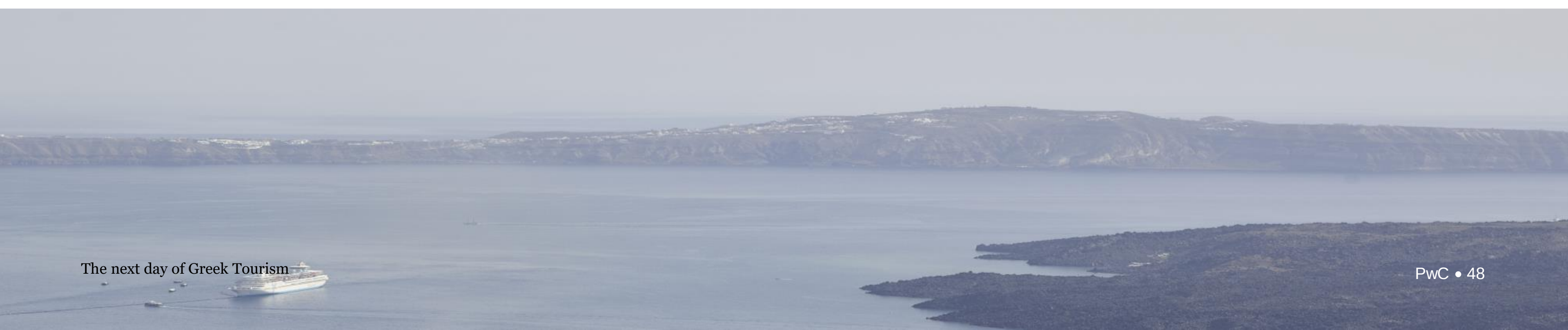
2. *They typically require significant upgrading investment and repositioning to attain the level of hotel economics for the destination*

3. *Depending on the acquisition price, the strategy could produce positive or negative financial results*

4. *Very few hotel cases, mainly in Attica, went down that route and have not yet become operational to judge the results*

The strategic path of the hospitality industry

- Tourist origin and hotel capacity are expected to be the main hotel investment drivers going forward
- Three investment strategies are applicable in the hotel industry:
  - **Develop lesser destinations**, mainly targeting 5* Grey hotels at Thessaly, Western Greece and Western Macedonia
  - **Add capacity at main destinations** focusing on Star hotels, with 3* hotels being a solid target
  - **Upgrade Star hotels to the next class** and especially 4* to 5*
- Trapped Zombie acquisition is a doubtful strategy, although it could prove remunerative in certain cases



Greek M&A activity

1	*Hotel transactions*
2	*Hotel Sales*
3	*Asking prices per bed*

5

Some M&A and hotel sales activity took place in 2017, however without adding significant value to the market

M&A activity

Hotel M&As

During 2017, 18 major hotel sales took place, mainly as divestments of non-core assets by the four systemic banks

Beds: 13,319
Investment : €310 mn

Available for acquisition

There are at least 100 hotels for sale throughout Greece, with 11,764 rooms on offer
The total rooms advertised for sale represent 3% of hotel capacity

Beds: 21,415
Investment : €902 mn

There were 18 reported hotel transactions in 2017 and 2018, concerning mostly divestments by Greek banks. Hotels were at main destinations and the total transaction value reached € 310mn

A/A	Target Hotel	Bidder Company	Region	Transaction Year	Star	Beds	Transaction* Value (€ mn)	Transaction* Value per bed (€ '000)
1	King George Hotel	Lampsa Hellenic Hotels	Athens	2017	5*	210	43	205
2	Athens Ledra	Hines	Athens	2017	5*	616	33	54
3	Amathus Hotel	London & Regional	Rhodes	2017	5*	688	30	44
4	Leto Hotel	Asteras 2020	Mykonos	2017	4*	48	17	352
5	Mistral	Private Investor	Piraeus	2017	3*	185	6	32
6	Capsis Hotel	Nikos Koutras	Rhodes	2017	5*	1,820	30	16
7	Avra Hotel	Smile Hotels	Rafina	2017	4*	240	4	17
8	Olympos Naousa	Grivalia Hospitality	Thess/niki	2017	5*	100	5,5	55
9	Stella Polaris Creta SA	TUI AG	Crete	2017	4*	N/A	N/A	N/A
10	Zorbas Village	Alltours (via Allsun)	Crete	2017	4*	558	N/A	N/A
11	Carollina Mare	Alltours (via Allsun)	Crete	2017	4*	683	N/A	N/A
12	Asteria Glyfadas	Grivalia Hospitality	Athens	2017	5*	800	30	38
13	Iniohos Hotel	3K Technical	Athens	2018	3*	335	>1.7	N/A
14	Lakitira Hotels	Atlantica S.A.	Kos	2018	4*-5*	1,137	62,9	55
15	Meli Palace	Grivalia Hospitality	Crete	2018	4*	395	11,4	29
16	Lazart Hotel	NBG Pangaia REIC	Thess/niki	2018	5*	185	7	38
17	Aldemar Mare & Paradise Hotels	HIG Capital	Rhodes	2018	5*	2,300	30	13
18	Golf Residences	Evergolf Tourism Investments S.A.	Crete	2018	4*-5*	3,020	N/A	N/A
	Grand Total					13,319	310	73

*Equity value

Most transactions were driven by the divestment plan of the four systemic banks which are in the process of eliminating non core assets from their portfolios

Source: Press, Pepper Greece Hospitality Report 2018

There were over 65 operating hotel companies and 35 hotel properties advertised for sale in June 2018

Hotel Companies*

- **65 hotel company** advertisements of which 90% refers to main destinations
- The majority of the ads concerns hotels in the Ionian Islands and Attica
- Total asking price stands at € 720mn

Hotel Properties**

- **35 hotel property** advertisements of which 91% refers to main destinations
- The majority of the ads concerns hotels in the Ionian Islands and South Aegean
- Total asking price stands at € 182mn

* Hotel businesses concern the sale of operational hotels
** Hotel properties refer only to the real estate part of the company and concern the sale of non-operational hotels

*There is a significant bid-ask gap for **hotel companies** on sale, which explains the modest number of completed transactions in recent years*

	Advertisements (Published data)				Sample	
Destination	No of Hotels	Asking price/Hotel (€ k)	No of beds	Asking Price/bed (€ k)	Imputed Equity value*/bed (€ k)	Asking Price/ Imputed Equity Value (x)
South Aegean	9	8,589	1.446	53.5	30.0	1.8
Crete	8	28,231	4.803	47.0	25.4	1.9
Ionian Islands	19	9,913	4.543	41.5	19.6	2.1
Central Macedonia	5	6,570	988	33.2	19.3	1.7
Attica	13	9,788	1.622	78.5	28.1	2.8
Main destinations	**54**	**12,067**	**2,680**	**50.7**	**24.5**	**2.0**
Thessaly	1	4,500	180	25.0	24.4	1.0
Peloponnese	2	5,400	627	17.2	8.5	2.0
Central Greece	8	6,619	1.854	28.6	5.9	4.8
Lesser destinations	**11**	**6,205**	**887**	**23.6**	**12.9**	**2.6**
Total	**65**	**9,136**	**2,008**	**37.2**	**20.2**	**2.3**

65 operating hotel companies for sale, located mostly in main destinations

The average asking price per bed

2.3x higher

compared to the sample average imputed value

The amount of hotel beds for sale represents roughly

2%** *of the total market*

Source: Press, PwC Analysis

*Imputed Equity Value/bed = 9.72 * EBITDA/bed – Net Debt/bed

** Based on the total number of hotel beds (806.045) and total beds in advertisements (16,063)

Hotel properties for sale, located mostly in main destinations, are priced at about 60% of new builds investment

	Advertisements - Published				Sample based	
Peripheries	No of Hotels	Asking Price/hotel (€ k)	No of beds	Asking Price/bed (€ k)	Imputed Cost of construction*/bed (€ k)	Asking Price/ Cost of construction (x)
South Aegean	7	6,829	1,336	35.8	44.4	0.8
Crete	5	6,140	998	30.8	45.4	0.7
Ionian Islands	8	4,628	865	42.8	33.4	1.3
Central Macedonia	5	4,240	763	27.8	49.6	0.6
Attica	5	5,986	688	43.5	74.6	0.6
Main destinations	**30**	**5,555**	**930**	**36.1**	**49.5**	**0.7**
Peloponnese	4	3,375	582	23.2	91.7	0.3
Central Greece	1	2,200	120	18.3	37.9	0.5
Lesser destinations	**5**	**3,140**	**351**	**20.8**	**64.8**	**0.3**
Total	**35**	**4,348**	**765**	**31.7**	**53.9**	**0.6**

Source: Press, PwC Analysis

35 hotel properties for sale, located mostly in main destinations

The average asking price per bed

40% smaller

compared to the average cost of construction of a new hotel

Hotel beds for sale represent roughly

0.6%* of the total market at main and*

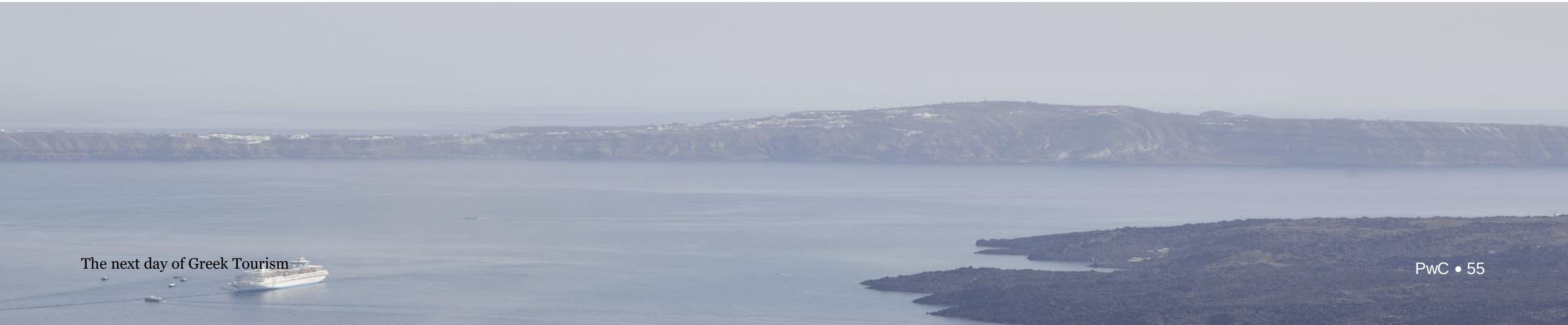
0.1%* at lesser destinations*

*Gross Book Value (2015)

** Based on the total number of hotel beds (806.045) and total beds in real estate advertisements of main (4,650) and lesser (702) destinations

A slow market for new investment

- Some M&A and hotel sales activity took place in 2017, however without adding significant value to the market
- Most reported hotel transactions in 2017 and 2018 were divestments by Greek banks. All hotels were at main destinations and the total transaction value reached € 310mn
- There are 65 operating hotel companies and 35 hotel properties advertised for sale representing about 2% and 0.7% of the total available hotel capacity respectively
- The hotel companies for sale, located mostly on main destinations demonstrate a significant gap (100%) between asking price and equity value. The hotel properties for sale, located again mostly in main destinations are priced at about 60% of the cost of new construction
- There is a very significant asking premium for main destinations

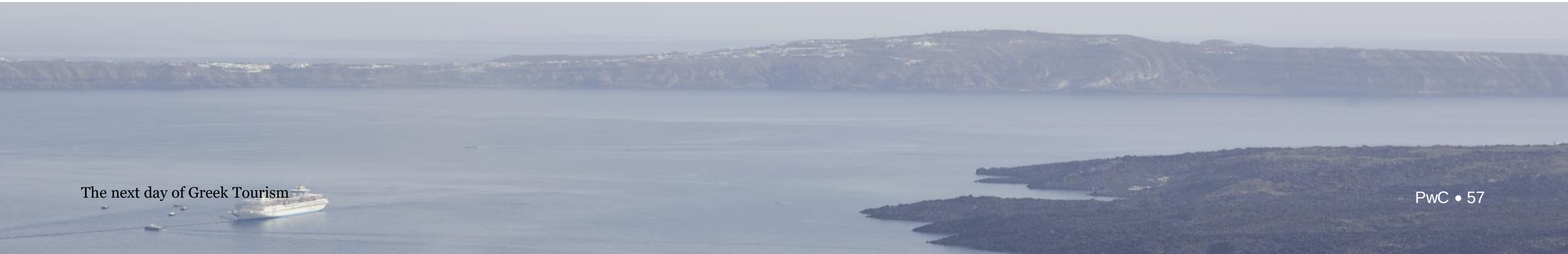


Policies for value accretion in Tourism

6

Greek Tourism is bound to remain one of the main growth drivers of the Greek economy, but it needs some strategic adjustments raise its value contributions

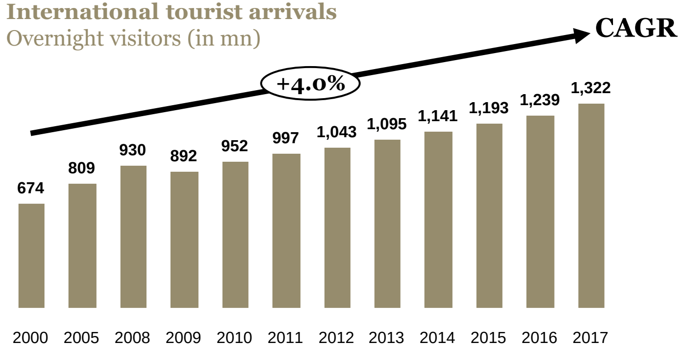
- Tourism is not GDP driven and enjoys long periods of growth followed by modest slowdown
- Hotel companies are significantly competitive in the main with a good financial standing
- By improving capacity utilisation and upgrading its product, the tourism sector will increase its value and its contribution to both GDP and growth
- A shift of attention from main to lesser tourism destinations, from larger to smaller units and from on-peak to off-peak, will facilitate and improve the sector’s economics
- A more explicit articulated strategy for managing demand at the origin so as to increase spending and average stay will also increase the value of the sector



Global tourism is on a growth path

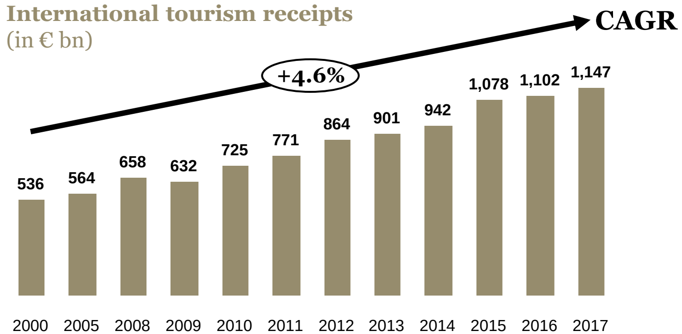
- 2017 marks the eighth consecutive year of growth in international tourism, with arrivals increasing by 4% or more year over year
- International tourism generated € 1.15tn in 2017, presenting a 5% increase y-o-y. Results are consistent with the solid trend in international tourist arrivals, which grew by 7%

International tourist arrivals
Overnight visitors (in mn)



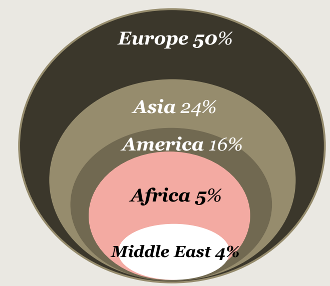
Source: World Tourism Organization (UNWTO), 2018

International tourism receipts
(in € bn)

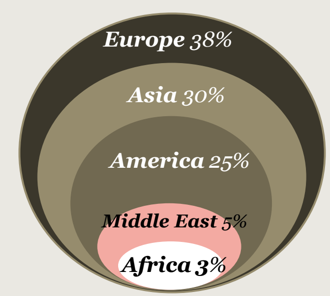


Source: World Tourism Organization (UNWTO), 2018

Tourist arrivals breakdown by destination (2017)



Tourism receipts breakdown by destination (2017)



24th

According to the Travel and Tourism Competitive Report 2017, Greece is ranked 24 worldwide in the travel and tourism competitiveness index (TTCI)

Greece is in the middle of the global tourism competitive rankings

- Greece ranks high in Price Competitiveness, and Safety and Security, but receives lower marks in Tourist Service Infrastructure and Health and Hygiene
- Greece, Egypt and Malta improved substantially since 2015, unlike Cyprus and Tunisia
- Cyprus, Malta and Italy have low scores in terms of price competitiveness

Greece in a global tourism context

Country	Competitive TTCI INDEX		Selected Sub-indices (7=best)							
	Global rank 2017	Global rank 2015	Safety and Security 2017	Safety and Security 2015	Price Competitiveness 2017	Price Competitiveness 2015	Tourist Service Infrastructure 2017	Tourist Service Infrastructure 2015	Health and Hygiene 2017	Health and Hygiene 2015
Spain	1	1	6.2	6.0	4.5	4.2	6.7	6.6	6.3	6.1
France	2	2	5.4	5.4	4.1	3.0	5.7	6.2	6.5	6.5
Italy	8	8	5.4	5.7	3.9	4.0	6.0	6.7	6.2	6.3
Portugal	14	15	6.3	6.3	4.8	4.2	6.4	6.1	6.3	6.1
Greece	**24**	**31**	**5.6**	**5.5**	**4.7**	**3.9**	**5.7**	**6.1**	**6.6**	**6.6**
Croatia	32	33	6.1	6.0	4.4	4.3	6.3	6.3	6.4	6.3
Cyprus	52	36	5.8	6.0	4.3	4.0	5.6	6.8	5.8	5.8
Malta	36	40	5.9	6.0	4.4	4.2	5.5	5.6	6.4	6.4
Turkey	44	44	4.1	4.2	4.9	4.4	4.7	5.0	5.4	5.4
Tunisia**	87	79	4.7	4.9	5.9	5.6	4.1	4.5	5.2	5.2
Egypt**	74	83	3.3	3.4	6.2	6.2	3.2	3.6	5.4	5.4

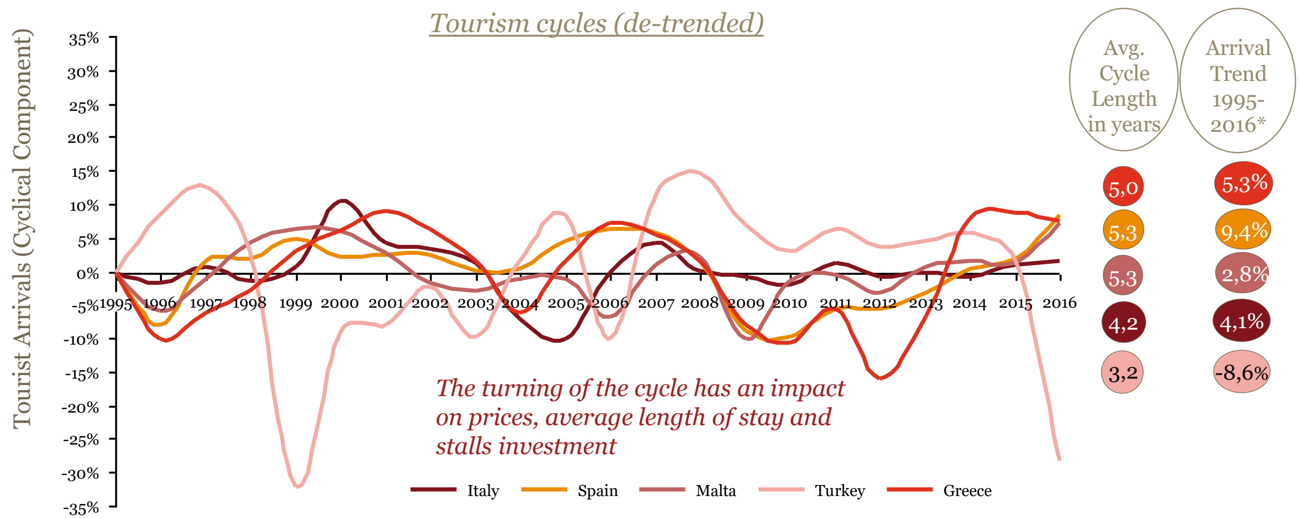
Source: World Economic Forum, Travel & Tourism Competitiveness Report 2015; 2017

* Southern and western Europe Region includes: Albania, Austria, Belgium, Croatia, Cyprus, France, FYROM, Germany, Greece, Italy, Luxembourg, Malta, Montenegro, Netherlands, Portugal, Serbia, Slovenia, Spain, Switzerland
** Tunisia and Egypt belong to the Middle East and North Africa Region

There are few specific risks in the horizon to deter future growth, and most of them are encapsulated in the typical tourism cycle

- The single most important risk is demand's downturn in the tourism cycle we are currently riding
- Tourist cycles are the result of a blend between origin economics and tourist patterns, as well as of competition between destinations
- Tourist cycles typically average 5 years and they are constantly upwards trended, very rarely leading to a real reduction in tourist flows and income
- Greece is in the upside of its current cycle and should expect a slowdown in tourism activity
- Any slowdown inevitably impacts pricing and average stay and delays investment

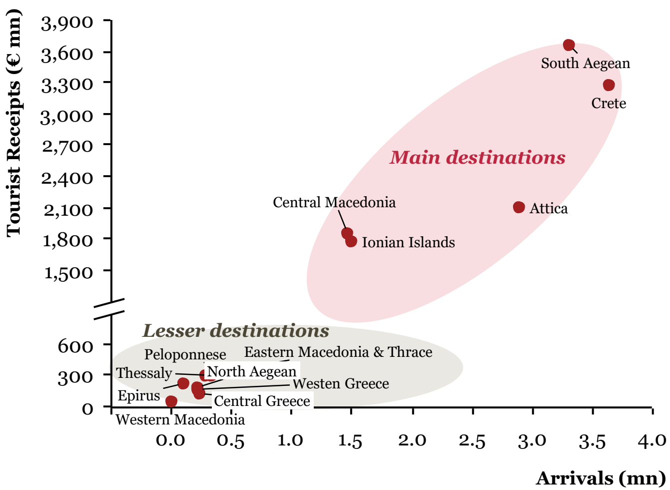
- *The average length of the tourist arrivals cycle (from peak to peak) varies by country but it is in the range of roughly 5 years*
- *Tourism cycles of competing countries are synchronised to a considerable extent*



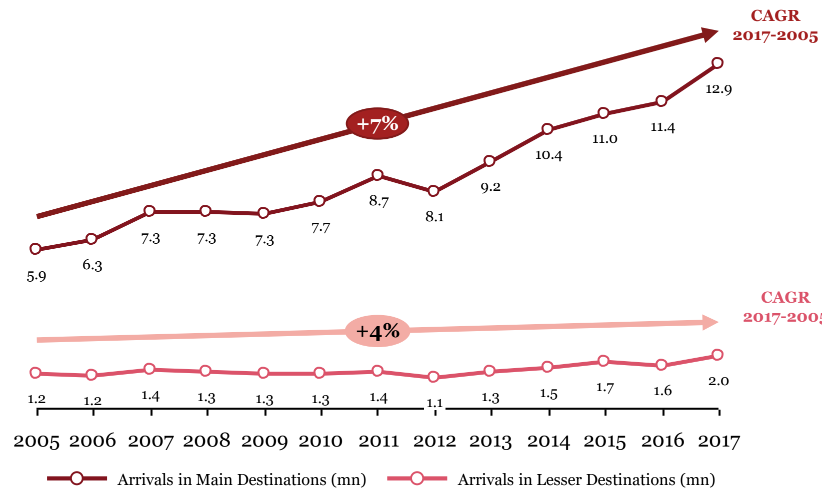
* From first peak to last peak (it can vary for different countries)

Source: World Bank (as of 18/10/2018)

Tourist arrivals at main destinations have increased sharply, after 2012, compared to lesser destinations



Source: Bank of Greece



Source: ELSTAT

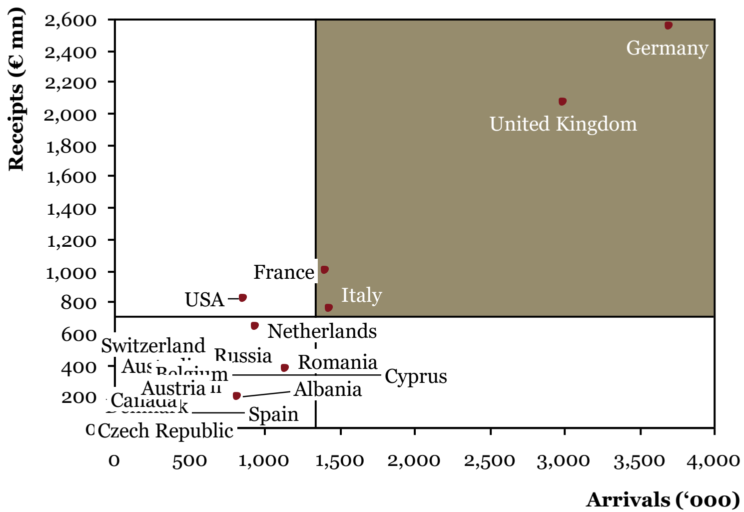
- Tourist spending was distinctively higher at main compared to lesser destinations in 2017

- Tourist arrivals at lesser destinations have increased since 2005, but arrivals at main destinations have shown roughly two times the growth rate of tourist arrivals in the same period

Main Destinations: Crete, South Aegean, Central Macedonia, Ionian Islands, Attika (more than 1.5mn overnights)
Lesser Destinations: North Aegean, Epirus, Thessaly, Western Macedonia, Eastern Macedonia and Thrace, Peloponnese, Western Greece (less than 1.5 mn overnights)

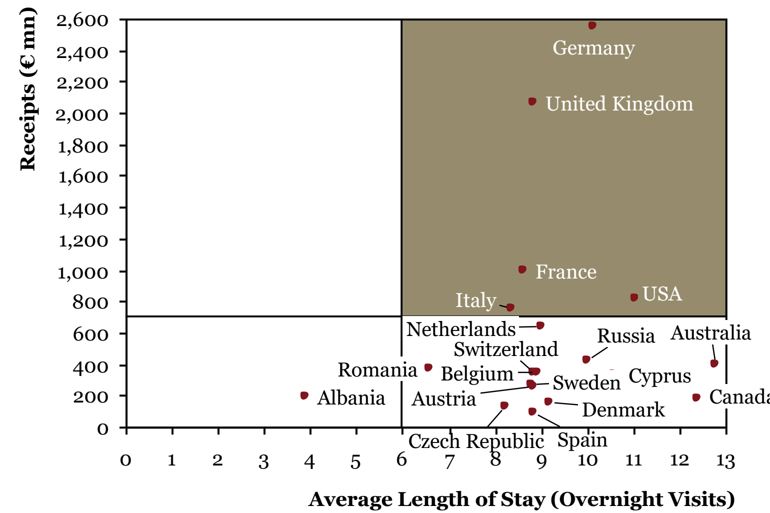
Tourists from Germany, the United Kingdom and USA lead in tourist expenditures and average length of stay

Tourist receipts and inbound tourist arrivals (2017)



Source: Bank of Greece

Tourist receipts & average length of stay (2017)



Source: Bank of Greece

The challenges of Greek tourism

1
High EU concentration

Tourist arrivals 2017

- EU Concentration**:** 68%

Major countries of origin 2017
(% of total arrivals)

- Germany: 14%
- UK: 11%
- France: 5%
- Italy: 5%
- USA: 3%

Countries with high growth in arrivals (CAGR2014-2017)

Australia: 21%

Countries with systematic long stays:

USA: 11.0 overnight stays
Germany: 10.2 overnight stays
UK: 8.8 overnight stays

2
High demand during peak periods

Seasonality of tourist arrivals 2017 -% of total

- 2nd & 3rd Quarter: 77%
- 1st & 4th Quarter: 23%

Purpose of travel
(% of total arrivals)

- Sun & Beach: 48%
- Cultural: 10%
- MICE: 3%
- Yachting: 4%
- City Break: 4%
- Other: 31%

3
Significant & systematic under-utilisation of capacity

Tourist visits by destination 2017

Main Destinations: 84%

Lesser Destinations: 16%

Annual Occupancy Rates
(average)

- Main Destinations: 45%
- Lesser Destinations: 28%

4
Under-invested in physical facilities and infrastructure

Completion time for a greenfield project~15 years

Hotel Companies CAPEX (2010-2015):

€ 1.8bn

Tourism related infrastructure projects pipeline €18.7 bn (2018-2023), *of which:*

- Rail: € 1.8bn
- Motorways: € 2.7bn
- Ports & marinas: € 0.5bn
- Airport: € 1.3bn
- Large Motorways: € 3.5bn
- Energy Interconnections: € 3.5bn
- Waste management: € 0.6bn

There are four interconnected public policies which need to be applied consistently to address the challenges and increase the value of tourism to the economy

	Attract high income tourists	Introduce complementary products	Expand demand to lesser destinations	Upgrade tourist product
	• Develop a complementary non EU distribution network • Create strong affiliation links with origins • Manage the risks associated with the tourism cycle	• Develop off season conference tourism • Introduce dynamic pricing • Set up off-season product distribution network • Offer clustered experiences • Strengthen complementary hospitality service marketing	• Market sun and sea features of lesser destinations • Improve air connectivity and link specific origins to lesser destinations • Upgrade product on lesser destinations (accommodation and service)	• Invest in new hotels • Greenfield hotels and villas projects • Investment in refurbishment and upgrade of hotels • Tourism product infrastructure and connectivity upgrade
Estimated impact	**+ € 6.9bn** *tourist receipts*	**+ € 2.6bn** *tourist receipts*	**+ € 2.1bn** *hotel earnings of lesser destinations*	**+ € 4.3bn p.a.** *direct impact on GDP*
Areas of impact	✓ Tourism receipts ✓ Hotel profitability × Investments	✓ Tourism receipts ✓ Hotel profitability × Investments	× Tourism receipts ✓ Hotel profitability × Investments	✓ Tourism receipts ✓ Hotel Profitability ✓ Investments

Policy 1

Attract tourists from high income and longer stay countries

- ***Attract more tourists from selected countries (high income %, longer stay)***
- ***We assume a 3% additional increase p.a. in the current annual growth rate of tourist arrivals for the period 2012-2017, from specific countries of origin in the next 5 years***

Tourist arrivals (mn)

Origin	2017	$CAGR_{2012-2017}$ + 3%	2022
Germany	3.7	14.9%	7.4
UK	3.0	12.3%	5.4
US	0.9	21.3%	2.3
France	1.4	10.8%	2.4
Italy	1.4	14.2%	2.8
Total Arrivals	10.4mn		20.3mn

Tourist receipts (€ mn)

Origin	2017	2022	+1 day in length of stay 2022
Germany	2,553	5,120	5,622
UK	2,065	3,695	4,114
US	814	2,135	2,329
France	994	1,656	1,848
Italy	753	1,463	1,638
Total Receipts	€ 7,179mn	€ 14,068mn	€ 15,551mn

+ € 1.5bn rise in receipts respectively

Timeline

2017 — 2022: ***Impact in arrivals***

10.4mn tourists from selected countries of origin

20.3mn tourists from selected countries of origin

2017 — 2022: ***Impact in receipts***

€ 7.2bn in tourist receipts from selected countries of origin

€ 14.1bn in tourist receipts from selected countries of origin

+9.8mn tourists from selected country of origin

+ € 6.9bn rise in receipts

Policy 2

Introduce complementary products to reduce seasonality and add paying demand

- *In order to expand tourism product, additional off-season demand can be introduced*
- *For yachting and city break tourism, we assume a 3% additional increase p.a. in tourist arrivals, while we assume that cultural and MICE tourism products can be expanded at a higher pace in the next 5 years (2017-2022)*

Tourist arrivals (mn)

Product	2017	*Assumed additional growth*	CAGR 2017-2022 + additional growth	2022
Yachting	1.3	*+3%*	12.1%	2.4
Cultural	3.1	*+50%*	9.1%	4.8
City Break	1.1	*+3%*	10.6%	1.9
MICE	0.8	*+100%*	17.3%	1.8
Total Arrivals	6.3mn			10.7mn

Tourist receipts (€ mn)

Product	2017	2022
Yachting	769	1,358
Cultural	1,707	2,641
City Break	767	1,267
MICE	441	981
Total Receipts	€ 3,684mn	€ 6,247mn

Timeline

2017 — 2022: ***Impact in arrivals***

6.3mn tourists from complementary tourist products

10.7mn tourists from complementary tourist products

2017 — 2022: ***Impact in receipts***

€ 3.7bn in tourist receipts from complementary tourist products

€ 6.3bn in tourist receipts from complementary tourist products

+4.4mn tourists from complementary hospitality

+ € 2.6bn rise in receipts

Policy 3

Spread peak demand to lesser destinations to utilise more capacity

- ***Future supply can be redirected to lesser destinations in order to cover excess capacity***
- ***We assume, that arrivals will continue to grow at the same pace (9.9% p.a.) in the next 5 years, maintaining the current tourist mixture***
- ***An additional 3% p.a. increase in tourist arrivals will be spread with a different mix in main and lesser destinations (20% and 80% respectively)***

Tourist arrivals (mn)

Destination	2017	Current tourist mix	CAGR 2017-2022	Tourist mix of additional arrivals (+3% p.a.)	2022
Main	12.9	87%	9.9%	20%	20.5
Lesser	2.0	13%		80%	5.6
Total Arrivals	14.9mn	100%	9.9%	100%	26.1mn

Hotel Earnings* (€ mn)

Destination	Hotel Earnings* (€ mn) 2017	Hotel Earnings (€ mn) 2022
Main	6,429	10,253
Lesser	1,135	3,275
Total Hotel Revenues	€ 7,565mn	€ 13,528mn

* Source: Hellenic Chamber of Hotels, PwC Analysis

Timeline

2017 — 2022: ***Impact in arrivals***

14.9mn tourists → **26.1mn** tourists

2017 — 2022: ***Impact in receipts***

€ 7.6bn in total hotel revenues → **€ 13.5bn** in total hotel revenues

+3.7mn tourists in lesser destinations

+ € 2.1bn in hotel revenues of lesser destinations

Policy 4

Expand and upgrade tourist product

- ***Spending on additional beds, upgrade & maintenance, and infrastructure can have a direct impact on GDP during the next five years***
- ***For Infrastructure investment, it is assumed that the amount invested during 2017-2022 will roughly reach € 11.2bn***

* Source: "Greek Economic Outlook", Centre of Planning and economic Research, vol. 24

New Investment (2017-2022)

Type of Investment	Amount (€ mn)	Multiplier*
Upgrade & Maintenance CapEx	5,115	N/A
Growth CapEx *(+24k additional beds)*	1,056	1,34
Infrastructure	11,200	
Total Investment	**€ 17,371mn**	

Direct Impact on GDP

- Expanding the total tourist product can have a direct impact on the economy
- More specifically, new investments in hotel supply and infrastructure act multiplicatively towards GDP growth
- A total of € 17.3bn in new tourism investment can add a total of € 21.5bn in GDP, spread over five years
- This is translated to an additional 2.5% p.a. in GDP growth

Timeline

2017

2022

Impact of new investments on GDP 2017-2022

17.4bn of new investment

€ 21.5bn total direct impact on GDP

+ 2.5% p.a. direct impact on GDP until 2022

The next day of Greek Tourism

The next day will be good but it can be better

- Tourism is, and will remain, a big economic force in Greece. By and large, it is globally competitive and its performance is improving
- The sector's economics are fundamentally divided by destination
- Despite the systematic growth of tourist arrivals, the investment required for the period 2018-2022 is modest and stands at about € 6bn
- Overall, the Greek tourism does not face significant risks, going forward
- Four public policies will facilitate the implementation of the business strategies and will add value to the economy:
  - Attract high income tourists (**+ € 6.9bn tourist receipts**)
  - Introduce complementary products (**+ € 2.6bn tourist receipts**)
  - Expand demand to lesser destinations (**+ € 2.1bn hotel earnings of lesser destinations**)
  - Upgrade the tourist product overall (**+ € 4.3bn p.a. direct impact on GDP**)
- There is a need for a **public-private partnership** which will enhance the contribution of tourism

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Appendix

7

Competitiveness is defined in terms of sustained growth, high capital returns and financial robustness

Key variables

We have defined three key variables in order to assess the financial competitiveness and the prevalence of distressed hotels of our sample

1. **Growth**: Compounded Annual Growth Rate (CAGR) of Revenue for the years 2008-2015
2. **Profitability**: Return on Capital Employed (ROCE) for 2015
3. **Debt sustainability**: Net Debt/EBITDA for 2015

Value Ranges

Hotels have been classified to Star, Grey and Zombie Groups according to the below value ranges

Star	Grey	Zombie
More than 7%	Between 0% and 7%	Less than 0%
More than 8%	Between 0% and 8%	Less than 0% or CE<0
Less than 1.5x or Net Debt < 0	Between 1.5x and 6.5x	More than 6.5x or EBITDA < 0

Sample size: 1,258 hotels with revenues in excess of € 1mn

Each hotel is assigned a competitiveness index by combining its performance against the three criteria

Variable Combination

- Depending on its performance in each criterion, every hotel receives a tag (High, Medium, Low) and as a result 27 different categories are formed
- The combination of these tags produces a competitiveness index (e.g. HML: 3*2*1 = 6) for each company taking values from 27 (HHH) to 1 (LLL)
- Based on their respective competitiveness index, companies are grouped under three classifications

Competitiveness Classification

Competitiveness Index	Categories	Classification
27	HHH	**Stars** High Competitiveness
18	HHM, HMH, MHH	
12	HMM, MMH, MHM	
9	HHL, LHH, HLH	**Grey** Medium Competitiveness
8	MMM	
6	HLM, MLH, HML, MHL, LMH, LHM	
4	MLM, MML, LMM	
3	HLL, LLH, LHL	**Zombies** Low Competitiveness
2	MLL, LLM, LML	
1	LLL	

Hotel funding needs comprise new builds, upgrading and heavy maintenance

Growth CAPEX
(New hotels)

- Growth Capex refers to new beds that have been forecasted to be built at destinations estimated to show signs of undercapacity in the next 5 years (additional bed needs)
- The construction cost for each additional bed projected has been calculated* according to its star rating category

Additional bed needs ✕ Cost of construction per type of bed

Upgrade CAPEX
(Existing hotels)

- Existing hotel units need to update their assets (ie. room restructuring, low scale construction works) around every 5 years
- We have assumed that around 20% of the existing hotel base is already in need of major upgrade **(backlog)**
- Every year an additional 20% will need invest into the upgrade of its existing assets **(recurring)**

20% of sample's beds ✕ Cost of refurbishment per type of bed

Maintenance CAPEX
(Existing hotels)

- Existing hotels need an annual routine maintenance (minor works) that are crucial to preserve and extend the life of accommodation facilities giving them a competitive advantage
- The annual maintenance CAPEX for the next five years is assumed around 2% of hotel's revenue

Sample Revenue ✕ 2%

Total Funding needs

The total funding needs sum up the estimated needs of the sample's hotels for the next 5 years with the needs for building new hotels in the destinations that will have capacity issues due to high occupancy rates in peak month (August)

Growth CAPEX + Upgrade CAPEX + Maintenance CAPEX

* *"Evaluation Guideline for the inclusion of investment projects in the funding regimes "General Business" and "New Independent SMEs"* (2017), Ministry of Development
** "Study for the Upgrade of Old Hotel Units" (2006), Hellenic Hoteliers Foundation

Methodology of Growth CAPEX for building new hotel beds

In order to calculate the CAPEX needs for the **construction of additional beds needed** we consider data from official public sources*

1. Overnight visits (August) are assumed to maintain their positive trend in the next 5 years *(average forecasted trend**: 2.8%)*
2. Occupancy rate (August) targets of 85% are set for all destinations with the exception of Crete (90%)
3. When the current bed supply of each periphery is not able to accommodate future tourist demand, then the percentage of additional beds per destination has been estimated (for the total population)
4. Additional beds needed have been adjusted for each destination and star rating category in order to reflect our sample
5. Growth CAPEX has been estimated by using the average cost per bed (Ministry of Development*) for the additional beds that need to be built in the constrained destinations for the next 5 years

*Source: "*Evaluation Guideline for the inclusion of investment projects in the funding regimes "General Business" and "New Independent SMEs*" (2017), Ministry of Development

** PwC analysis

Calculations	Additional beds needed			Average cost per bed* (in €)	Growth CAPEX (in €Mn)		
Star Rating	Crete	South Aegean	Ionian Islands		Crete	South Aegean	Ionian Islands
5*	7.994	694	457	48,000	384	33	22
4*	8.397	852	1.214	43,000	361	37	52
3*	2.501	152	486	40,000	100	6	19
2*	1.157	48	163	29,000	34	1	5
1*	94	2	0	20,000	2	0.3	0
Total	**20.143**	**1,747**	**2,320**	**-**	**881**	**77**	**98**
Grand Total	**24,211**				**1,056**		

Regression Coefficients by destination, star rating and hotel size (dummy variables)

$\ln(EBITDA/Bed) = \alpha + \beta_1 Destination_i + \beta_2 Star\ Rating_i + \beta_3 Hotel\ Size_i$*										
Regression Coefficients	**5***		**4***		**3***		**2***		**1***	
	300+	**300-**	**300+**	**300-**	**300+**	**300-**	**300+**	**300-**	**300+**	**300-**
Main Destinations										
South Aegean	8,07	8,43	7,49	7,86	7,23	7,60	7,35	7,72	7,08	7,45
Attica	7,93	8,30	7,36	7,73	7,10	7,46	7,22	7,59	6,95	7,31
Crete	7,80	8,16	7,22	7,59	6,96	7,33	7,08	7,45	6,81	7,18
Ionian Islands	7,75	8,11	7,17	7,54	6,91	7,28	7,03	7,40	6,76	7,13
Central Macedonia	7,34	7,71	6,77	7,14	6,51	6,88	6,63	7,00	6,36	6,73
Lesser Destinations										
Thessaly	7,78	8,15	7,21	7,58	6,95	7,31	7,07	7,44	6,80	7,16
Western Macedonia	7,61	7,97	7,03	7,40	6,77	7,14	6,89	7,26	6,62	6,99
Western Greece	7,27	7,64	6,70	7,07	6,44	6,80	6,56	6,93	6,29	6,65
Peloponnese	7,17	7,54	6,60	6,96	6,33	6,70	6,46	6,82	6,18	6,55
Epirus	7,17	7,54	6,59	6,96	6,33	6,70	6,46	6,82	6,18	6,55
East Macedonia and Thrace	7,06	7,42	6,48	6,85	6,22	6,59	6,34	6,71	6,07	6,44
Central Greece	6,87	7,23	6,29	6,66	6,03	6,40	6,15	6,52	5,88	6,25
North Aegean	6,69	7,06	6,12	6,49	5,86	6,22	5,98	6,35	5,71	6,07
Adjusted R^2=97%										

Investment Strategies Methodology

Strategy A : *Add capacity at main destinations*

- The investment cost of the new hotels to be built at main destinations is calculated by taking the GBV for each bed and subtracting any debt that is associated to it

$$Cost\ of\ Construction\ (New\ hotels)/Bed_{Main} = GBV/Bed_{Main} - Net\ Debt/Bed_{Main}$$

- The investment cost of added capacity at main destinations is set equal to 70% of GBV as it is assumed that hotels are going to use already existing shared spaces

$$Cost\ of\ Construction\ (Add\ Capacity)/Bed_{Main} = 0.7 * GBV/Bed_{Main} - Net\ Debt/Bed_{Main}$$

- Equity Values are calculated using the same average multiple for all hotels at main destinations* (12.96x) minus Net Debt/bed:

$$Equity\ Value/Bed_{Main} = (EBITDA/Bed_{Main} * 12.96) - Net\ Debt/Bed_{Main}$$

- The value ratio of adding new hotels and capacity at main destinations is given by:

$$Value\ Ratio_{New\ Hotels} = \frac{Equity\ Value/Bed_{Main}}{Cost\ of\ Construction\ (New\ Hotels)/Bed_{Main}}$$

$$Value\ Ratio_{Add\ Capacity} = \frac{Equity\ Value/Bed_{Main}}{Cost\ of\ Construction (Add\ Capacity)/Bed_{Main}}$$

Strategy B : *Acquire and upgrade hotel units to the next class*

- Data on the current profitability (EBITDA/bed) of hotels of a certain star category (i.e. 4*) is employed and their future profit is set equal to the EBITDA of their target star category (i.e. 5*)

$$New\ EBITDA/Bed_{4^* \to 5^*} = EBITDA/Bed_{5^*}$$

- Current and New Equity Values for lesser destinations are calculated using the same average multiple for all hotels (6.48x) minus Net Debt/bed:

$$Equity\ Value/Bed_{4^*\ Lesser} = (EBITDA/Bed_{4^*\ Lesser} * 6.48) - Net\ Debt/Bed_{4^*\ Lesser}$$

$$New\ Equity\ Value/Bed_{4^* \to 5^*\ Lesser} = (New\ EBITDA/Bed_{4^* \to 5^*\ Lesser} * 6.48) - Net\ Debt/Bed_{5^*\ Lesser}$$

- Current and New Equity Values for main destinations are calculated using the same average multiple for all hotels (12.96x) minus Net Debt/bed:

$$Equity\ Value/Bed_{4^*\ Main} = (EBITDA/Bed_{4^*\ Main} * 12.96) - Net\ Debt/Bed_{4^*\ Main}$$

$$New\ Equity\ Value/Bed_{4^* \to 5^*\ Main} = (New\ EBITDA/Bed_{4^* \to 5^*\ Main} * 12.96) - Net\ Debt/Bed_{5^*\ Main}$$

- The value ratio of upgrading hotel units to the next class is acquired by:

$$Value\ Ratio\ 4^* \to 5^* = \frac{New\ Equity\ Value/Bed\ 4^* \to 5^*}{Equity\ Value/Bed\ 4^*}$$

Strategy C : *Develop lesser destinations*

- Data on the current profitability (EBITDA/bed) of hotels in lesser destinations is employed and their future profit is set equal to 80% of the EBITDA/bed of the respective hotel at a main destination

$$New\ EBITDA/Bed_{Lesser} = 0.8 * EBITDA/Bed_{Main}$$

- Equity Values are calculated using the same average multiple for all hotels at lesser destinations (6.48x) minus Net Debt/bed of lesser:

$$Equity\ Value/Bed_{Lesser} = (EBITDA/Bed_{Lesser} * 6.48) - Net\ Debt/Bed_{Lesser}$$

- New Equity Values are calculated using 80% of the average multiple for all hotels at main destinations (12.96) minus Net Debt/bed of main:

$$New\ Equity\ Value/Bed_{Lesser} = (New\ EBITDA/Bed_{Lesser} * 12.96 * 0.8) - Net\ Debt/Bed_{Main}$$

- The value ratio of developing lesser destinations is acquired by:

$$Value\ Ratio_{Lesser \to Main} = \frac{New\ Equity\ Value/Bed_{Lesser}}{Equity\ Value/Bed_{Lesser}}$$

* European Avg. EV Multiple: 13.0x
Discounted EV multiple for Greece : 9.72x
Imputed multiple of main destinations: 12.96x
Imputed multiple of lesser destinations: 6.48x