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## Greek Hotel Employees' Education Level and Company Performance

- According to Eurobank EFG's summer 2006 hotel survey, 40% of the workers in the hotel industry hold a higher education (HE) degree.
- Workers in 4 and 5 star hotel units account for half the sector's labor force and of those, more than 50% are HE graduates.
- New hotels (post 2000) employ more HE degree holders than older establishments.
- Hotels that employ more HE degree holders exhibit higher turnovers and lower operational costs (as a percentage of turnover).
- Econometric estimations suggest that workforce education is a statistically significant factor in explaining variations in turnover and operational profits, and has a positive contribution.

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By Costas E. Vorlow

## Synopsis

### 1. Greece and the Tourism sector

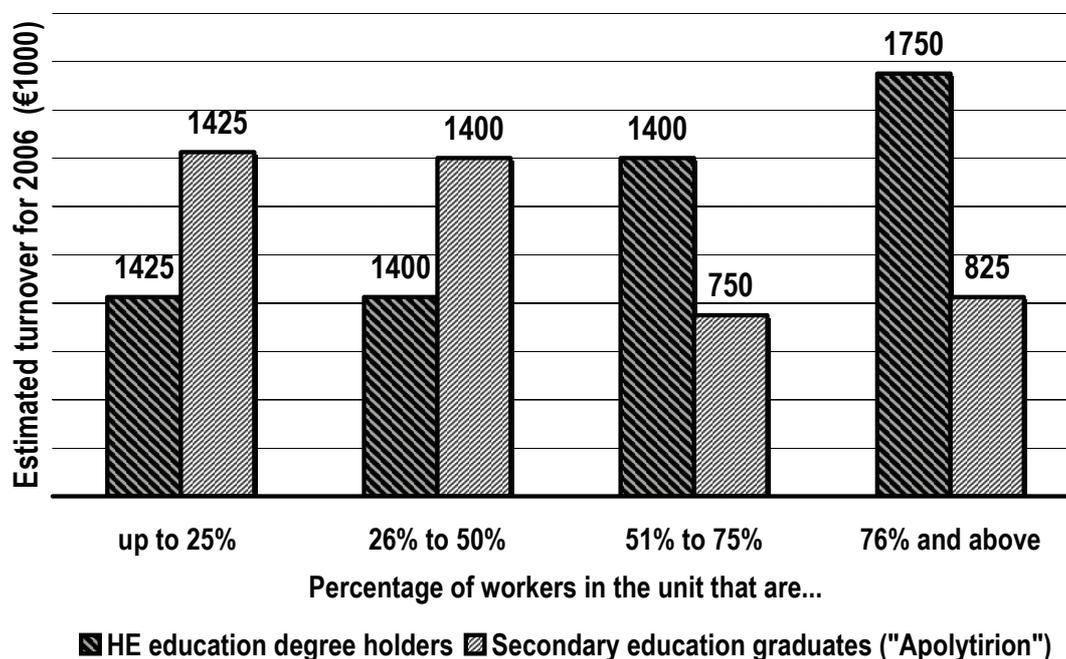
The Tourism Industry is one of the cornerstones in Greek economy, perhaps "the" cornerstone, being a source of income for one out of six Greeks. After a shaky start at the beginning of the decade, especially following the Athens Olympics in 2004, it has been moving from strength to strength. According to the latest data by Eurostat, travel receipts in 2005 were in total €11.037 billion. This corresponds roughly to 4.8% of the revised Greek GDP for 2005 (or 6.1% in the old GDP figures) and represents a 4.7% increase from 2004. In 2005, "nights spent" (stays) at hotels were up by 7.1% (Eurostat reports 55.3 mil. total nights of which 40.7 mil. nights by foreigners, i.e., 73.7%). The data place Greece in the 7<sup>th</sup> position among other EU25 countries in terms of nights spent by foreigners. However, the 2005 tourist arrival numbers released by Eurostat are still 10% lower than the 2000 ones. It remains to be seen whether Greek tourism could reach (again and fairly soon) the record high tourist inflow of the past.

It is no secret that there are several issues concerning Greece's economic competitiveness. According to the latest report by the World Tourism Organisation (WTO), Greece holds the 24<sup>th</sup> position among 124 other countries in terms of the Travel and Tourism Competitiveness Index (with a score of 4.99). This ranks her after other smaller countries in the region, such as Cyprus and Portugal and just above Malta. While this can be

regarded as a good ranking for Greece's tourism industry, there is no room for complacency as several risk factors, systematic and non, could impede its smooth performance and growth. In addition, neighbouring countries such as Croatia, Bulgaria and Romania, are investing increasingly on tourism and Greece should expect fierce competition in years to come. These countries have plenty of spare capacity (empty beds during Greece's peak season), proximity to central and west European countries (main sources of tourists) and ability to offer a similar service at very competitive prices, year round.

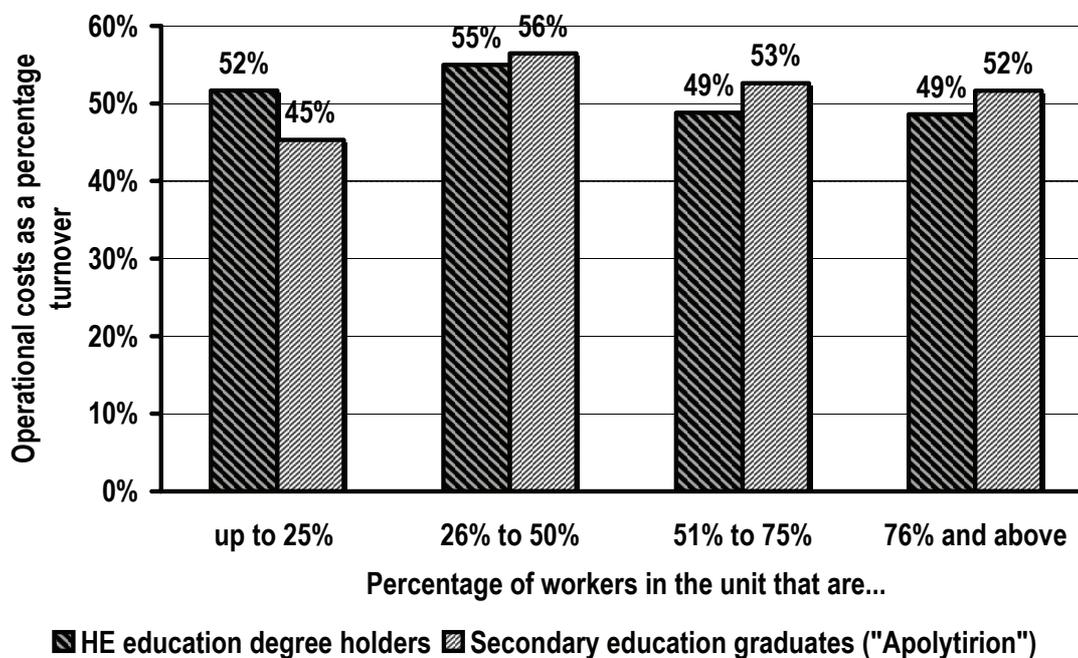
Greek tourism industry's competitiveness can be benefited by the improvement of services at hotels and similar establishments. This does not necessarily imply spending heavily on infrastructure. An equally efficient way to achieve an increase in competitiveness would be improving the services by ameliorating the training (and hence the education level) of the sector's workforce. This would eventually ensure the presence of a well skilled and more efficient employee base and higher quality of services offered to the clientele. Moreover, a well educated and highly trained management would be faster in adopting new strategies and technologies. Last but not least, an able and well trained workforce allows for a more efficient monitoring of quality control issues and adoption of good practices.

**Figure 1**  
**Mean turnover levels**



Source: Eurobank Research

**Figure 2**  
**Operational costs as a percentage turnover**



Source: Eurobank Research

## 2. The survey results

Eurobank EFG conducted a country-wide survey in the summer of 2006, on more than 400 hotel units. The questionnaire answered by hotel executives was extensive. It contained 89 questions in total, related to financial, marketing, management, labour, infrastructure, strategy, investment and Tour Operator issues. The current report, analysing responses from the questionnaire, focuses on the effect a highly trained and skilled workforce has on the performance of a hotel unit. We measure this in terms of turnover levels, operating profits and costs (the last two as percentages of turnover). As a quantitative proxy of the education level we use the percentage of workers (as a share within the total workforce) in the unit with a HE degree.

According to Eurobank EFG's hotel sector survey, roughly 40% of the employees is a HE degree holder.<sup>1</sup> This is slightly above the share of HE degree holders in the economy as a total (34,5%), which can be regarded as a positive sign for the Greek tourism industry. Most HE graduates are concentrated in 4 and 5 star hotels. These units employ half of the workers in the sector, despite forming just the 12% of it.

Figure 1 shows clearly that there is a positive correlation between the percentage of HE graduates in a hotel's workforce and its mean turnover levels. Especially when graduates constitute the majority (far right columns of Figure 1), the hotel unit's performance more than doubles in terms of turnover (€1,7 million against €875 thousand). On the contrary, units manned mostly with secondary education graduates, exhibit substantially lower turnovers. This holds true for almost all hotel units, though is more evident in 4 and 5 star establishments.

<sup>1</sup> This percentage includes technical education and private university degree holders, i.e., all employees that have continued their studies after graduating secondary school (High School & Lyceum).

These are usually larger companies, which are more able or need to employ more personnel and can, thus, enjoy higher economies of scale and turnovers. Moreover, companies that employ more HE graduates do not exhibit higher operational costs (as a percentage of turnover, Figure 2). In fact, this percentage is slightly lower as seen in Figure 2.

## 3. Econometric estimations

Econometric estimations support the picture described in the above paragraphs. Extensive statistical analysis suggests that among other explanatory variables<sup>2</sup>, the contribution of a highly educated workforce to the company's performance is statistically significant and highly important. More specifically, for every 1 pct point of increase in the share of HE degree holders within a unit's workforce, turnover per bed increases by 0,63 pct points. Other factors such as a unit's size and advertising campaigns are also statistically significant and highly important. Workforce education has a positive impact on profitability as well. A 1 pct point increase in the workforce share of employees with a HE education degree, corresponds to a 0,39 pct points increase in operational profits.

The only insignificant factor to hotel turnover variations appears to be a hotel unit's age. This may imply that older units' performance is not penalized due to age. Older hotels though, may be in need of substantial spending on repairs and upgrades, which, if not carried out, could affect their competitiveness and performance (turnover). Moreover, the lack of the importance of "experience" (to the extent this is "captured" by the age variable) is somewhat puzzling and warrants further investigation.

## 4. Conclusions

The education of hotel employees is a very important quality factor that contributes greatly to a company's

<sup>2</sup> These include the unit's age in years, workers per bed, seasonal staff as a pct of workforce, staff that was also employed in the previous year as a pct of workforce, spending on advertisement as a pct of 2005 turnover, and a proxy for advertisement quality.

performance, as this is expressed by turnover and operational profits. Our research, being the first of its kind in Greece, has demonstrated this and quantified its impact on the hotel industry. Understandably, it is not the only factor that has a positive effect though, in short, the training and education of workers, i.e., the quality of the human capital, is of paramount importance in a sector which is primarily labor intensive.

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