ΙΝΣΤΙΤΟΥΤΟ ΤΟΥΡΙΣΤΙΚΩΝ ΕΡΕΥΝΩΝ ΚΑΙ ΠΡΟΒΛΕΨΕΩΝ
RESEARCH INSTITUTE FOR TOURISM

Measuring Staff Shortages and the Socioeconomic Impact in the Hotel Sector

Evidence from Greek Hotel Sector Surveys, 2021-2025

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2. *Panteion University*

The Scope of the Paper

Staff shortages in hotels are not only an HR issue.

They turn to be a constraint on operational capacity and on the sector's potential contribution to the economy.

1 Measure the gap

Required employees according to the hotel organizational chart minus actual employees.

2 Map its structure

Variation by year, star category, operation, size, region, department and occupation.

3 Estimate the impact

Use input-output multipliers to translate unfilled hotel staffing plans into lost output and jobs.

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Data, Measurement and Methodology

10,118
registered hotels in the 2025 sampling frame

450,565
registered rooms

620
completed hotel questionnaires

38
occupational specialties covered

MEASUREMENT

Staff shortage = required employees in the organizational chart - actual employees employed by the hotel.

FIELDWORK AND ESTIMATION

- Annual RIT surveys on behalf of the Hellenic Chamber of Hotels since 2021.
- CAWI data collection, stratified sampling by region, hotel category and size.
- Validation, imputation and three-tier weighting using official registry variables.

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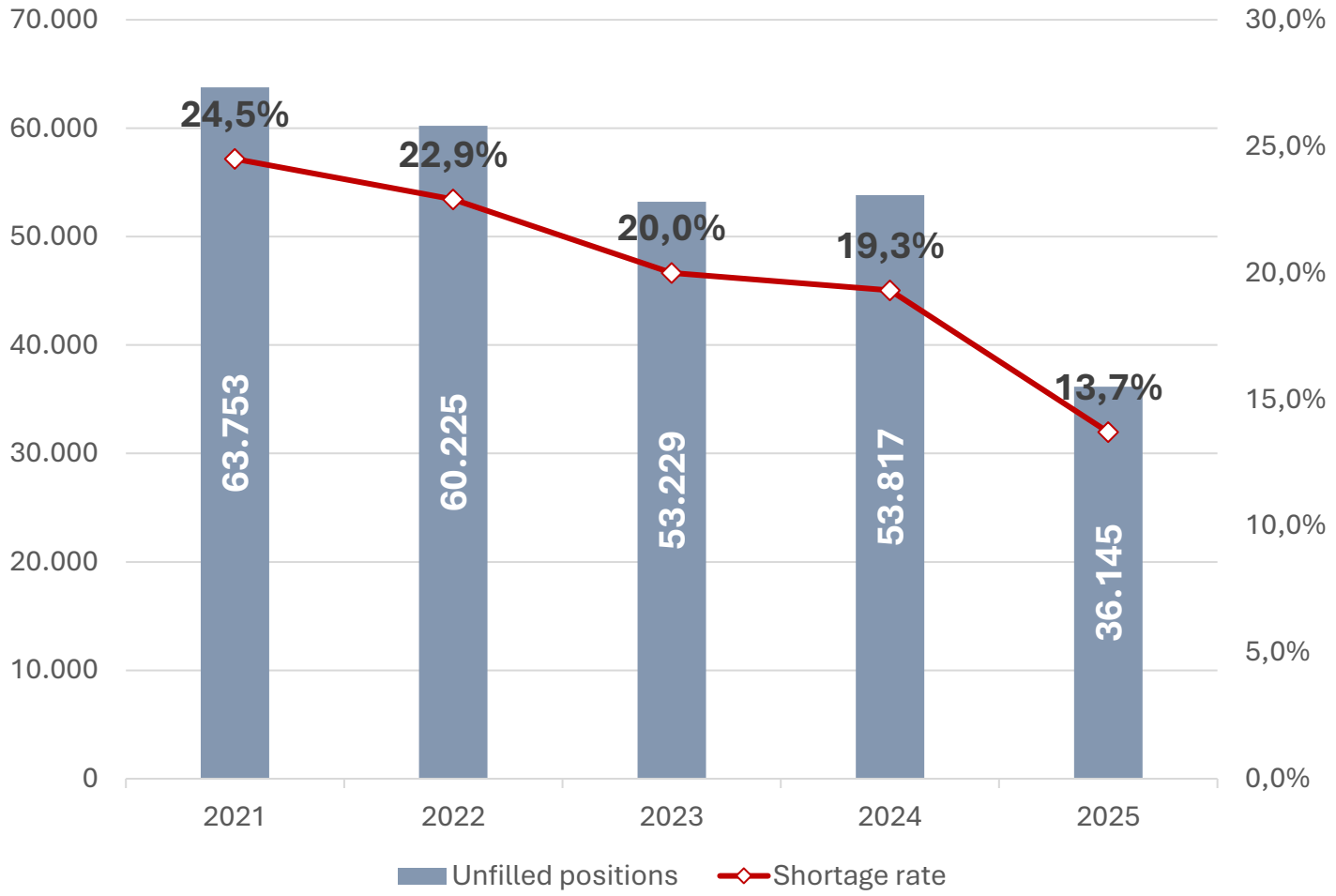
Overall shortage trend, 2021-2025



36,145

unfilled positions in 2025

13.7%

shortage rate in 2025

2025 marks **a clear de-escalation**, partly due to hotel's reforming of their staffing needs and party to the increase in the actual number of employees.

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Hiring Employees from third Countries outside EU, 2025

Hoteliers partially covered their staffing needs in 2025 by recruiting employees from third countries outside EU.

This was enabled by an official mechanism of the Ministry of Migration and Asylum that allowed a business to legally invite workers from countries outside EU, in which hotels were officially included in March 2023 (Joint Ministerial Decision 24424/2023).

14%
of hoteliers applied

→

Requesting around **11.9** thousand workers

→

To eventually hire **9.5** thousand

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Staff shortages in absolute numbers and rates by hotel category, 2021–2025

Category		2021	2022	2023	2024	2025
1*	Absolute Value	1.077	3.006	2.172	3.722	708
	Percentage	12,6%	25,7%	20,7%	27,0%	9,10%
2*	Absolute Value	16.366	13.835	9.056	15.007	7.878
	Percentage	29,5%	31,3%	23,0%	31,7%	20,2%
3*	Absolute Value	15.187	15.361	14.753	11.906	10.761
	Percentage	26,6%	27,8%	24,3%	22,1%	18,9%
4*	Absolute Value	15.519	16.381	16.283	13.583	9.815
	Percentage	22,4%	22,3%	21,0%	16,5%	12,8%
5*	Absolute Value	15.604	11.643	10.966	9.599	6.984
	Percentage	22,5%	14,9%	14,1%	11,8%	8,50%

- **Absolute number** of shortages captures the **scale** of the problem.
- **Shortage rates** show the **intensity** of the problem.

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Two occupational shortage patterns, 2025

Regarding inter-departmental occupations...

High-volume occupations

Large absolute gaps in the core of everyday hotel operations.

Department	Occupation	Number
F&B	Waiters	2,761
	Assistant waiters	2,189
	Bartenders	1,598
Housekeeping	Chambermaids	4,169
Kitchen	Cooks	3,278
	Kitchen attendants	1,478

High-intensity specialties

Smaller pools, but significantly higher shortage rates.

Department	Occupation	%
F&B	Sommelier	25.8%
Housekeeping	Housekeeping Directors	19.7%
	Laundry Attendants	17.1%
Reception	Concierge	30.0%
	Guest Relations	24.8%
Administrative Services	Marketing Managers	34.3%
Maintenance & Facilities	Gardener	27.0%
	Assistant Gardener	26.8%

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What the statistical tests add (1)

Statistical tests were performed to examine whether shortage rates at national level significantly differ:

- between year-round and seasonal hotels
- by hotel category
- by department and
- by occupation

Two-proportion pooled tests were applied at 5% significant level.

The results **did not show statistical differences** in shortage rates:

- between **year-round** and **seasonal hotels** at national level (p=0.620), or across hotel categories and departments

Significant statistical differences appeared in a few individual occupations:

- **Year-round** hotels recorded **significantly** higher shortage rates for:
  - Marketing Managers (p=0.004)
  - Housekeeping Directors (p=0.026), and
  - Gardeners (p=0.003)
- **Seasonal** hotels recorded **significantly** higher shortage rates for:
  - Warehouse staff (p=0.027)

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What the statistical tests add (2)

In order to examine whether employment shortages differ significantly across the **four hotel size categories** – family (1-20 rooms), small (21-50 rooms), medium (51-100), and large (>101 rooms) – we performed **a chi-square test of proportions,** followed by **post-hoc pairwise test of proportions with Bonferroni correction** to identify which specific categories differed.

The chi-square test revealed **a statistically significance difference** in employment shortage rates across the four hotel size groups ($p<0.001$).

Pairwise comparisons with Bonferroni correction indicated that:

- Family hotels exhibited a **significantly higher shortage rate** compared to **medium** and **large** hotels (Bonferroni adjusted p-values 0.037 and 0.001, respectively).
- **No statistically significant differences** were found among the remaining pairs.

The chi-square test revealed **no statistically significance difference** in employment shortage rates across the nine geographic regions ($p=0.136$).

Pairwise comparisons with Bonferroni correction (36 comparisons, all adjusted p-values ≥ 0.15) confirmed **that no regional pair differed**.

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From unfilled positions to macroeconomic loss

Multiplier basis:
Each **€1m increase** in hotel-service demand generates
€1.55m in total output,
€0.84m in net output GDP and
29.8 full-time jobs.

Unfilled hotel staffing plans indicate idle productive capacity

36,145	€1.6bn	€2.5bn	48,723
unfilled hotel positions	potential hotel-service demand constrained	economy-wide output not generated	jobs supported across the economy

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Future demand requires concrete staffing capacity

Alternative hotel-demand scenarios and implied departmental labor requirements

Department	Scenario 1 €500m	Scenario 2 €1bn	Scenario 3 €1.5bn
F&B	2,464	4,928	7,392
Housekeeping	2,389	4,779	7,168
Kitchen	1,936	3,872	5,808
Reception	1,624	3,248	4,872
Admin. Services	1,180	2,360	3,540
Maintenance	1,120	2,240	3,360
General Manager	351	703	1,054
Total	**11,065**	**22,130**	**33,195**

22,130

additional workers needed under a €1bn hotel-demand increase

- F&B and Housekeeping absorb the largest additional labor needs.
- Kitchen and Reception follow closely because they are highly labor-intensive.
- Demand growth without workforce planning risks reproducing the same bottlenecks.

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Conclusions

- The shortage problem was persistently high during 2021-2024 and eased in 2025 due to reforming of hotels' organizational charts and to increasing of employment.
- Staff shortages are not uniform, as they vary over the years and by hotel class category, department and occupation.
- Statistical tests showed no statistically significant differences in shortage rates between year-round and seasonal hotels at national level, or across categories and departments.
- Differences appeared only in few occupations within year-round and seasonal hotels.
- Separate tests showed significant differences in shortage rates across the four hotel size groups.
- No significant differences were found across the nine geographical regions.
- Staff shortages have greater impact on positions directly related to guest service as well as on operation supporting positions.
- Staff shortages have broader macroeconomic implications. Job vacancies reveal idle productive capacity, limiting the potential contribution of the hotel sector to total production, employment and added value.

Thank you for your attention

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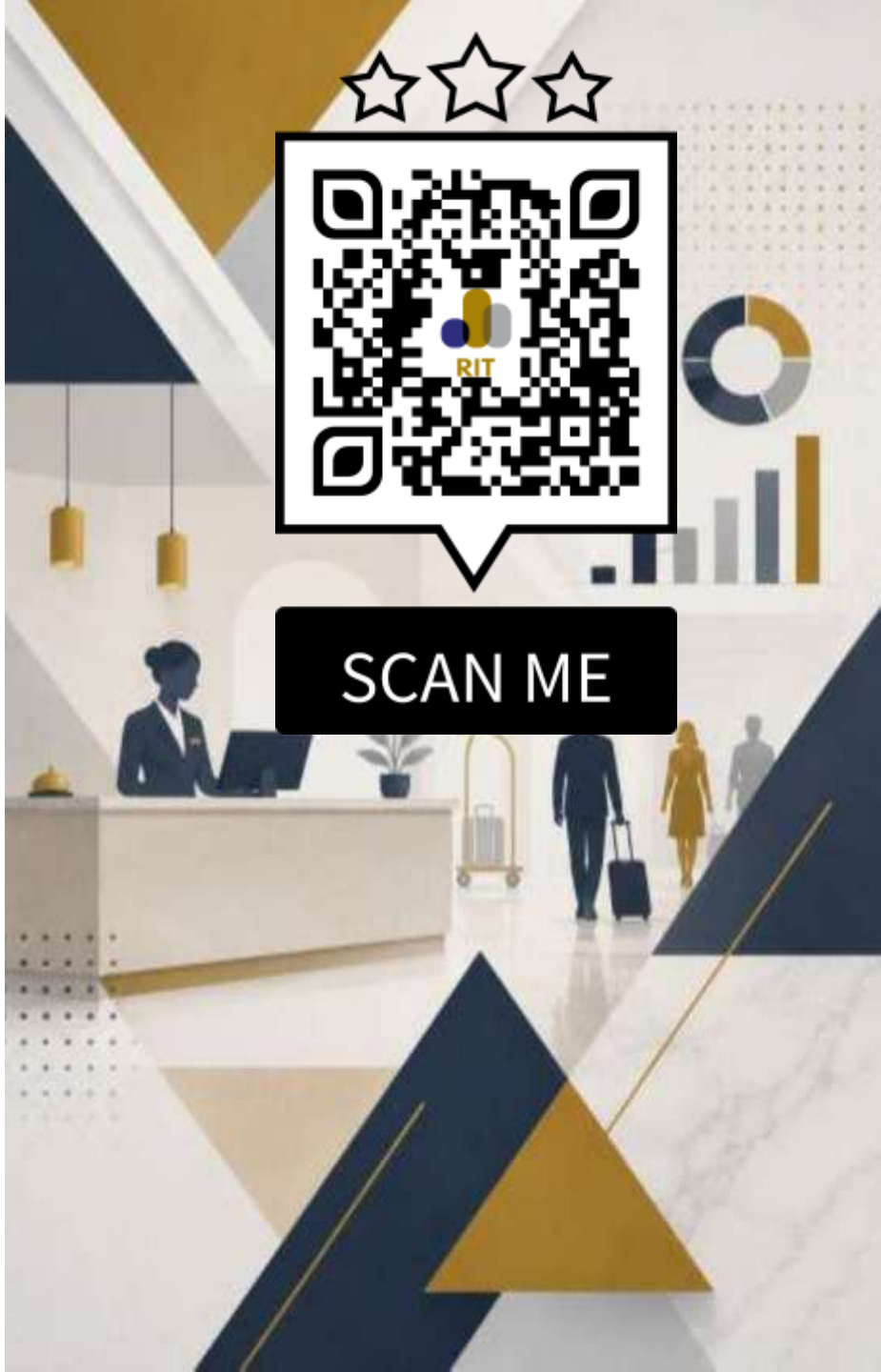

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