

# EMPLOYMENT EFFECTS OF TOURISM

EGON SMERAL

# EMPLOYMENT EFFECTS OF TOURISM

EGON SMERAL

WIFO Working Papers No. 100

May 1998

# EMPLOYMENT EFFECTS OF TOURISM

REPORT FOR THE 33<sup>RD</sup> TRC-MEETING, BRIONI, MAY 1998.

EGON SMERAL

## Introduction

In most European countries, the tourism industry constitutes an important source of income and employment. Europe is the top destination in world tourism. At present around 60% of the worldwide tourist arrivals from abroad and 50% of the international tourism receipts are concentrated in Europe (table 1). Europeans spend 52% of the international tourism expenditures. The share of European tourism exports in Gross Domestic Product (GDP) amounts to around 2%, indicating that the European tourism industry is on average more dependent on international tourism than that of most other countries in the world. The world average is ½ percentage point lower than the European average (table 2).

*Table 1: The Structure of arrivals in international tourism in %*

	1980	1996
<i>World</i>	<i>100.00</i>	<i>100.00</i>
<i>Africa</i>	<i>2.56</i>	<i>3.29</i>
East Africa	0.44	0.73
Central Africa	0.07	0.05
North Africa	1.39	1.20
South Africa	0.39	1.03
West Africa	0.28	0.27
<i>America</i>	<i>21.43</i>	<i>19.51</i>
Caribbean	2.36	2.46
Central America	0.51	0.45
North America	16.53	14.16
South America	2.03	2.43
<i>East Asia/Pacific</i>	<i>7.31</i>	<i>15.21</i>
Northeast Asia	3.60	8.54
Southeast Asia	2.90	5.20
Australasia	0.48	0.96
Melanesia	0.12	0.09
Micronesia	0.15	0.37
Polynesia	0.07	0.06
<i>Europe</i>	<i>65.80</i>	<i>58.68</i>
Central/Eastern Europe	12.58	13.23
Northern Europe	6.26	6.58
Southern Europe	21.18	16.96
Western Europe	24.95	19.88
Eastern Mediterranean countries	0.83	2.03
<i>Middle East</i>	<i>2.09</i>	<i>2.56</i>
<i>South Asia</i>	<i>0.80</i>	<i>0.75</i>

Table 2: Tourism exports as a percentage of GDP

	1980	1990	1996
OECD-Europe	1.57	1.85	2.02
Austria	8.02	8.10	6.09
Belgium	1.45	1.80	2.26
Denmark	1.81	2.59	1.96
Germany	0.62	0.91	0.75
Finland	1.33	0.87	1.23
France	1.24	1.70	1.84
Greece	3.56	3.12	3.62
Great Britain	1.28	1.43	1.72
Ireland	2.88	3.20	3.49
Iceland	0.67	2.23	2.38
Italy	1.99	1.50	2.47
Netherlands	1.31	1.46	1.65
Norway	1.20	1.36	1.50
Portugal	4.00	5.27	4.61
Sweden	0.77	1.27	1.47
Switzerland	2.95	3.24	3.04
Spain	3.29	3.78	4.76
Turkey	0.47	2.14	3.11
Oceania	0.78	1.56	2.52
Australia	0.75	1.44	2.32
New Zealand	0.99	2.37	3.74
North America	0.51	0.91	1.12
Canada	0.94	1.09	1.47
USA	0.38	0.84	1.05
Mexico	1.76	2.23	1.01

European countries such as Austria (6.1%), Spain (4.8%), Portugal (4.6%), Greece (3.6%), Ireland (3.5%), Turkey (3.1%) and Switzerland (3%) and have significantly higher export shares in GDP than the European average.

Tourism in the European countries is dominated by small and medium-sized enterprises (SMEs). According to EUROSTAT, 96% of the 1.3 million hotels and restaurants in the EU are small firms with less than 9 employees.

The consequences of globalization have hit the typical European SMEs very strongly, so that their ability to boost employment has come under pressure.

## The importance of tourism for employment

At present Europe suffers from a relatively high unemployment rate. In 1997 the unemployment rate in the European Union reached 10.8%. The available forecasts do not predict a significant decrease in the unemployment figures in the next few years. Within this perspective tourism can be seen as an important instrument in means of alleviating employment problems.

Tourism is a powerhouse in terms of generating employment – especially for young people. It ranks as one of the major sources of jobs in most OECD and non-OECD member countries. In the European Union the share of tourism employment in total employment amounts to 6% on average.

The statistics currently at our disposal do not allow us to analyze the whole tourism sector with all its direct and indirect effects on income and employment creation, nor to make a cross-country comparison. But if we focus on the hotel and restaurant industry – the core sector of tourism – current statistics provide useful figures for an analysis of volumes, trends and structures.

The hotel and restaurant industry of the European Union employed 4,6 million people in 1995 (excluding Greece, former East Germany and the UK)<sup>1</sup>. This is approximately 4% of the total workforce (employed and self employed). Around 60% of the workforce in the hotel and restaurant industry is concentrated in Spain, France and Italy (table 4).

*Table 3: The structure of the workforce in the hotel and restaurant industry in %*

	1985	1990	1995
Austria	4.4	4.3	4.2
Belgium	2.7	2.5	2.6
Luxembourg	0.3	0.2	0.3
Netherlands	2.8	3.0	3.4
Denmark	1.3	1.2	1.2
Spain	17.0	19.1	18.7 <sup>1)</sup>
Portugal	3.9 <sup>1)</sup>	3.9	3.9 <sup>1)</sup>
France	16.7	17.3	17.2
Ireland	1.0 <sup>1)</sup>	1.0 <sup>1)</sup>	1.0 <sup>1)</sup>
Italy	24.6	22.3	21.8
West Germany	21.3	21.2	22.6 <sup>1)</sup>
Finland	1.6	1.6	1.2
Sweden	2.4	2.4	1.9 <sup>1)</sup>
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>

<sup>1)</sup> Estimate.

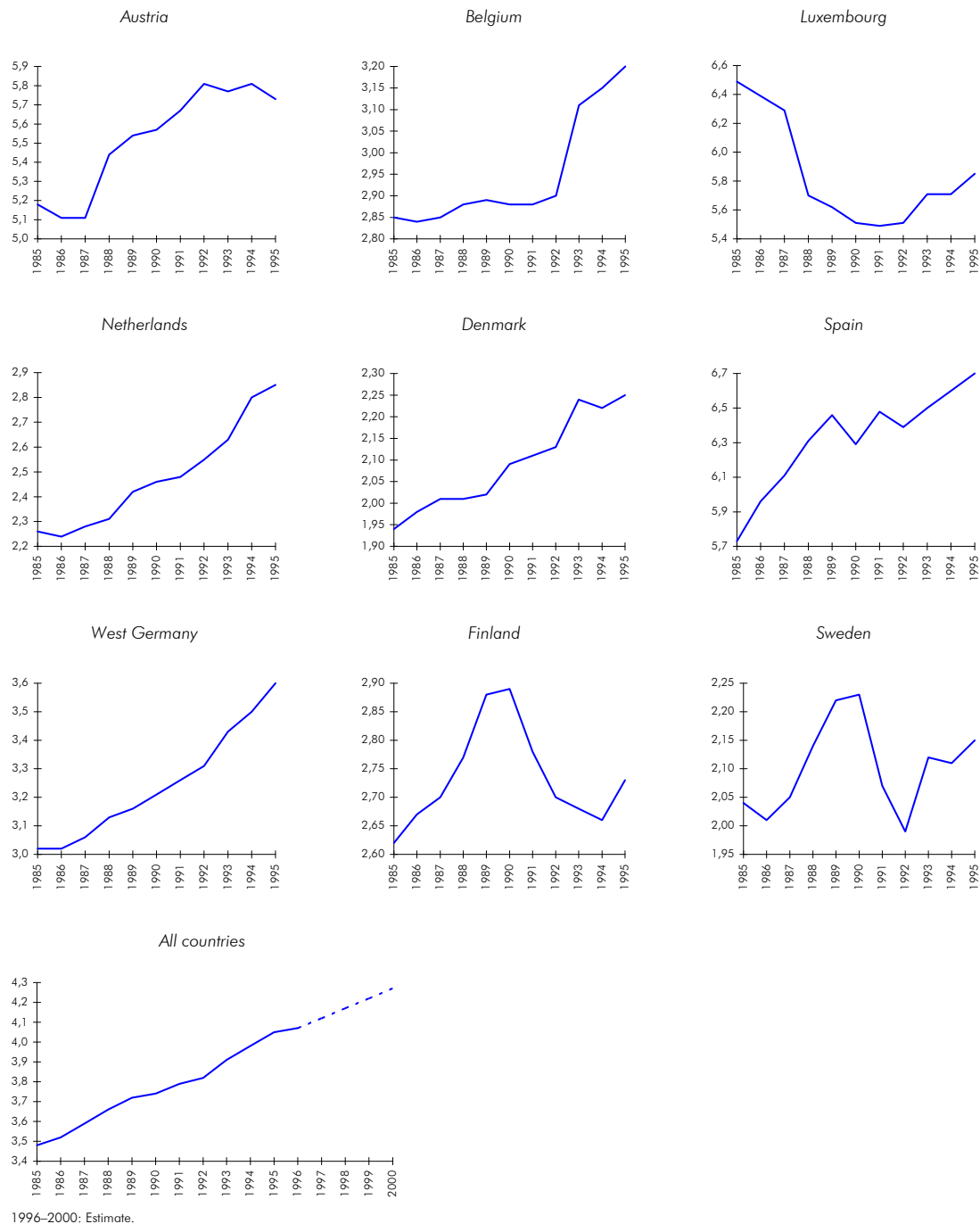
In the European Union in 1995<sup>2</sup> the value added of the hotels and restaurant industry amounted to approximately US\$ 194.1 billion or ECU 148.2 billion (excluding Greece, the UK and former East Germany)<sup>1</sup> or 3% of GDP, the higher employment reflects the relatively high labor intensity of the sector. According to EUROSTAT estimates, the share in value added contributed directly and indirectly by tourism in the European Union amounts to approximately 5½% of the aggregated GDP of the EU. Countries such as Italy, Austria, Portugal, Spain or Switzerland have a significantly higher value added share than the European average.

In most countries the employment share of the hotel and restaurant industry increased since the mid-eighties; on average the employment share rose by ¾ percentage point since 1985 (figure 1). That means that the hotel and restaurant industry created significantly more than a million working places in Europe since the mid-eighties. Until the year 2000 the creation of further 200,000 to 300,000 jobs should be possible.

<sup>1</sup> Figures not available.

<sup>2</sup> Latest figure available.

Figure 1: Employment of the hotel and restaurant industry as a percentage of total employment



## Some theoretical explanations

In general, technological progress has less impact at the tertiary level than in the primary or secondary level. This is particularly true for all sectors that are dominated by embodied services (production and consumption are spatially not separable) as in the tourism sector. In these branches there are fewer possibilities for productivity growth as in those industries which produce disembodied services (production and consumption are spatially separable; e.g. telecommunication). Certain parts of the tourism industry are able to benefit from the productivity impact of technological progress, particularly when they are able to incorporate electronic information and reservation systems as a main business tool.

The relative slow growth of labor productivity in the tourism industry is one of the main reasons why tourism has a positive image as an above the average employment generator, subject to a certain minimum development level in the destination area. The other outcome of low productivity growth is that prices of the tourism products increase more quickly in the long term than the consumer price level in general.

In most countries the value added share of the hotel and restaurant industry in GDP tends to increase at current prices and exchange rates as in many countries the relative price of the sector (sectoral deflator/GDP deflator) shows an upward trend (table 3).

Table 4: Value added as a percentage of GDP

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Austria	3.92	4.00	3.97	3.92	3.95	3.86	3.88	3.95	4.06	4.02	3.97
Belgium	2.57	2.59	2.63	2.65	2.70	2.81	2.91	3.15	3.11	3.14	3.16
Luxembourg	2.27	2.22	2.43	2.41	2.40	2.52	2.58	2.65	2.66	2.52	2.50
Netherlands	1.53	1.53	1.60	1.61	1.72	1.76	1.80	1.85	1.96	1.94	1.92
Denmark	1.15	1.18	1.16	1.16	1.16	1.15	1.14	1.18	1.25	1.31	1.29
Spain <sup>1)</sup>	5.97	5.98	6.27	6.49	6.74	6.79	7.14	7.47	7.70	.	8.50
Portugal <sup>1)</sup>	.	3.20	3.43	3.42	3.43	3.76	4.42	4.40	4.55	.	4.70
France	2.33	2.37	2.48	2.53	2.66	2.76	2.82	2.89	2.96	2.94	2.93
Ireland <sup>1)</sup>	.	2.09	2.12	2.02	1.95	2.04	2.18	2.25	2.30	2.33	2.80
Italy	3.05	3.04	3.09	3.07	3.05	3.06	3.03	3.09	3.16	3.20	3.30
West Germany <sup>1)</sup>	1.21	1.24	1.28	1.27	1.30	1.32	1.29	1.28	1.29	.	1.40
Finland	1.70	1.73	1.77	1.80	1.75	1.78	1.75	1.63	1.51	1.50	1.47
Sweden <sup>1)</sup>	1.21	1.25	1.34	1.38	1.44	1.28	1.28	1.30	1.26	1.17	1.30

<sup>1)</sup> 1995: Estimate.

Baumol developed a two-sector growth model with different productivity growth rates in each sector, on a simple level giving some insight about the development of the employment in the service industry (Baumol, 1967; Fuchs, 1968). However, the technological revolution of the last decades and the different sectoral impacts of technological progress allow us to use the original model only in the case of the production of embodied services (i.e. tourism, transport, health): the former model was formulated for the whole service sector. Here a modified version:

$$l = (a-1)p + (p-ps)(1+b) + t$$

$l$  = growth rate of the employment share of the embodied service production in total (minus agriculture)

$a$  = income elasticity of the demand for embodied services

$b$  = price elasticity of the demand for embodied services

$p$  = growth rate of the labor productivities in the industrial production and the production of disembodied services

$ps$  = growth rate of the labor productivity in the production of embodied services

$t$  = growth rate of the demand for embodied services, exogeneously determined

The first part of the employment share equation  $(a-1)p$  could be explained as follows: in the model the wages and the labor productivity  $p$  have the same growth rate. This means that the average wages increase also at the rate  $p$ . The increase in income causes an increase in the demand for embodied services measured by  $ap$ . The employment share increases (cet. par.) only when the demand elasticity is bigger than 1.

The second component of the employment share equation  $(p-ps)(1+b)$  explains that – if the growth rates of the labor productivities in the industrial sector and in the production of disembodied services are bigger than in the embodied service sector – embodied services will become more expensive than industrial goods and disembodied services. The employment share of the embodied service sector will (cet. par.) only increase if the own price elasticity is lower than 1. In those cases where the price elasticity of the demand for embodied services is bigger than 1, the employment share will (cet. par.) decrease.

The last component of the employment share equation  $t$  measures the exogeneously determined demand increase brought on by economic growth and structural changes (i.e., fashion trends, tastes, etc.) The tourism relevant given man-made and/or non-man-made competitive advantages might be reflected in the various income and price elasticities.

In total, given the productivity gap and the exogeneously determined demand for embodied services, the final direction of the development of the employment share will be dependent on the relative size of the elasticities.

## Summary

In most European countries, the tourism industry constitutes an important source of income and employment. Europe is the top destination in world tourism.

Tourism demand as an important income and employment generator, directly and indirectly effects many different branches and services. The most important are hotels, restaurants, retail trade,



transport, sports, entertainment, culture, travel agents, tour operators, guides, and several personal services. These branches need inputs from other branches such as the construction industry, agriculture, the food and beverage industry, the clothing and machinery industry, and from professions such as consultants, lawyers, tax accountants, so that the value added created directly in the first round increases with the degree of specialization and decreases with the size of the various import quotas.

Tourism is a powerhouse in terms of generating employment, especially for young people. It ranks as one of the major sources of jobs in most OECD and non-OECD member countries. In the European Union the average share of tourism in total employment amounts to 6%.

There are many reasons why tourism development has an important role in fighting the current unemployment problem: Most importantly, tourism is a labor intensive activity with low rationalization possibilities, requiring a wide range of skills.

Not considered are the given man-made and/or non-man-made competitive advantages as well as the various income and price elasticities and changes in the productivity gaps between tourism and the other sectors of the economy: in the case of a lower productivity increase in tourism than in the other sectors of the economy, the employment share of tourism might increase or decrease depending on the relative size of the income and price elasticities and the growth rate of tourism demand (exogeneously determined). That means, for instance, if we focus on a situation with stagnating demand and a price elasticity which is higher than the income elasticity, the employment share of tourism might fall. A significant innovative improvement of tourism facilities which attract new customers might stop the negative trend and raise the employment share.

## References

- Alcouffe, A., Coulomb, F., Small and Medium-Sized Businesses in European Tourist Sectors, Toulouse-Paris, OECD, 1993.
- Baumol, W., "Macroeconomics of Unbalanced Growth", American Economic Review, 1967, 57, pp. 415-429.
- Fuchs, V., The Service Economy, NBER, N.Y., 1968.
- Keller, P., Anforderungen an die Tourismuspolitik in hochentwickelten Ländern, In Alpine Tourism, Sustainability: Reconsidered and Redesigned, Vol. 1, Ed. Weiermair, K., Innsbruck, 1996, pp. 324-333.
- Keller, P., Smeral, E., Verstärkter internationaler Wettbewerb: Neue Herausforderungen an die Tourismuspolitik der europäischen Länder, Basisbericht, CEU-ETC-Seminar, Salzburg, 1997.
- OECD, Globalization and Small and Medium Enterprises (SMEs), Vol. 1, Synthesis Report, Paris, 1997.
- Sheldon, P., Destination Information Systems, Annals of Tourism Research, 1993, 20, pp. 633-649.
- Smeral, E., Forecast of Tourism Demand and Perspectives for Employment until the year 2005: A Cross Country Scenario, In Seminar on Perspectives and Challenges of Employment in the Tourism Industry, Ed. OECD, Vienna, Austria, 1996.