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**How Fast are Small Tourist
Countries Growing?
The 1980-2003 Evidence**

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How Fast are Small Tourist Countries Growing? The 1980-2003 Evidence

Summary

We analyze the empirical relationship between growth, country size and tourism specialization by using a dataset covering the period 1980-2003. We find that tourism countries grow significantly faster than all the other sub-groups considered in our analysis. Tourism appears to be an independent determining factor for growth, and the reason for that is neither because they are poorer than the average, nor because they are very open to trade. Another finding of our paper is that small states are fast-growing only when they are highly specialized in tourism. In contrast with some previous conclusions in the literature, smallness *per se* is not good for growth.

Keywords: Small States, Growth, Tourism, Cross Country Comparisons

JEL Classification: F43, O57

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The importance of tourism as a key factor for economic development has been repeatedly stressed in the last few years, both by international institutions and academicians. In the meantime, tourism has become the largest voice in international trade. Namely, world international tourist receipts amounted to 622.7 billion dollars in 2004, scoring an impressive increase with respect to 106.5 billion dollars in 1980 and 273.2 in 1990, with an average 7.1% yearly rate of growth in current terms between 1980 and 2004. These figures represented 6% of overall international exports in 2003 (WTO, 2005). It is also known that tourism is generally associated with higher than average income levels.²

Surprisingly, this outstanding performance at a worldwide level has not induced – to our knowledge – systematic, cross-country empirical analysis of the growth effects of tourism specialization. In this respect, this paper sets itself two objectives. First, we wish to assess the growth performance of tourism countries *vis à vis* a series of well defined “benchmark” country groups. Assessing this performance is especially important for developing countries given that, in a number of cases, tourism is considered an available option in countries where large and persistent productivity gaps exist in other, more technological and less resource-based sectors.³ Second, since tourism countries tend quite often to be “small” (see below),⁴ we want to deepen our understanding of the effective role of tourism specialization on the economic performance of small countries.

Regarding the economic performance of small countries, a few empirical contributes are worth mentioning. Easterly and Kraay (2000) conclude that smallness is not an economic disadvantage for a country. According to their findings, smaller countries are not poorer than average neither grow less. Similar encouraging results are provided by Armstrong and Read

(1995) and Armstrong *et al.* (1998). These results seem to challenge other, more pessimistic views, especially from endogenous growth literature, where scale effects often play a role in the determination of an economy's growth rate (Grossman and Helpman, 1991; Aghion and Howitt, 1998).

As for the specific case of small countries specialized in tourism, an additional worry is associated with a standard result of two-sector models of endogenous growth. In these models, being specialized in a low-technology sector (such as tourism, perhaps) is often the source of an adverse effect upon the economy's long run growth rate. In other words, smallness and specialization in tourism are suspected of being a rather unfortunate combination from the viewpoint of long run growth (e.g. Lanza and Pigliaru, 2000a).

As for the empirical evidence on the effects of tourism specialization, most available results report evidence on level of income rather than on growth performances. In particular, tourism is generally associated with higher than average income levels in the growing stream of literature on small and island countries' economic performance.⁵

To complement these findings from a dynamic viewpoint, in this paper we assess whether tourism is a good growth determining factor looking at the cross-country evidence. By using a dataset on 143 countries, we find that, in the period 1980-2003, tourism specialization does affect small states' growth positively. This confirms the results by Brau, Lanza and Pigliaru (2005), which were based on the smaller period 1980-1995. This closer investigation of the role of tourism specialization also partially amends some previous optimistic results on the growth performance of small countries (e.g. Easterly and Kraay, 2000). Small size is far from being a disadvantage if tourism is a key sector of the economy.

Data and main definitions

Similarly to Brau *et al.* (2005) and Easterly and Kraay (2000), we define “small countries” as countries with an average population of less than one million during 1960-2003.⁶ Our main source of the set of economic data employed are the Penn World Tables, version 6.2. To investigate the role of tourism specialization, we match these data with the information on tourism receipts from the 2004 and 2006 edition of the World Bank “World Development Indicators”. The period covered is 1980-2003, and 143 countries for which information on tourism receipts is available are included, with a sub-set of 29 small countries.

The degree of tourism specialization is defined as the average ratio of international tourist receipts to GDP. By considering an average degree of tourism specialization (DTS) greater than 10% over the period 1980-2003, 17 countries come into this category, of which 14 meet our definition of small state. The only “large” tourism countries are Jordan, Jamaica and Dominican Republic. Overall, the sub-sample of 29 small countries can be split into two almost identical parts: 14 countries (henceforth STC) above the 10% threshold, and 15 below.

Table 1. List of small countries according to the degree of tourist specialization

<i>Tourist countries (DTS > 10)</i>	Index of tourism specialization	<i>Non-tourist countries (DTS < 10)</i>	Index of tourism specialization
Maldives	43.0	Belize	9.8
Bahamas, The	39.5	Mauritius	9.3
St. Lucia	39.1	Gambia, The	8.0
Bermuda	31.7	Guyana	8.0
St. Kitts and Nevis	30.3	Luxembourg	5.4
Barbados	28.6	Bahrain	4.7
Seychelles	24.6	Cape Verde	4.4
Vanuatu**	22.8	Comoros	4.3
St. Vincent and the Grenadines	22.1	Botswana	3.3
Grenada	19.7	Solomon Islands	3.0
Malta	19.4	Swaziland	3.0
Cyprus	18.3	Iceland	2.1
Fiji *	13.5	Suriname	1.7
Samoa	11.3	Djibouti	1.2
		Gabon	0.2

Empirical evidence

We consider the growth performance of STCs, relative to the performance of a number of sub-sets of countries, namely OECD, Oil, Small and LDCs.

The general picture for the period 1980-2003 is one of relatively slow growth. As can be seen on Table 2, the average annual growth rate in the OECD group is 1.9% per year. The average growth rate of the whole sample is lower (1.0%), an outcome mainly due to the poor performance of the Oil (14 countries, growing on average at -0.6% per year) and LDC groups (37 countries, growing at 0.0% per year).

The small countries group (SCs) grows slightly faster than the average country in the sample, but a bit slower than the average OECD. However, when we isolate the performance of STCs, we see that tourism specialization is clearly beneficial for growth (this result is irrespective of whether the proportion of 10% or 20% of tourism receipts on GDP is adopted). Tourism specialization seems to be key to understanding why small countries are not at a disadvantage compared to more industrialised ones, and raises doubts about the optimistic interpretation of the results by E-K (2000) and Armstrong *et al.* (1998), according to whom small size is not in itself detrimental to growth.

Table 2: *GDP growth rates by group of countries*

Country group	Real per capita GDP growth 1980-2003 (%)	No. countries
OECD	1.91	22
Oil	-0.64	14
Small	1.70	29
Small Tour. >20%	2.34	9
Small Tour. >10%	2.23	14
Small <10%	1.20	15
LDCs	0.06	37
All	1.00	143

Let us now test these results with some econometric analysis. In particular, the determinants of the average annual real per capita GDP growth rate are investigated through a series of cross-sectional least square regressions, which aim to discover whether or not the high growth performance of STCs is attributable to tourism specialization *per se*.

We first test whether it is possible to detect significant advantages or disadvantages for SCs and STCs by adopting the full set of continental and geographical dummies used in Easterly and Kraay (2000) and Easterly (2001),⁷ as well as dummies for Oil, OECD and LDC countries. Results in Table 3 strongly support our previous findings. The above-average growth performance of the SCs as a group (regression (1)) crucially depends of the performance of STCs. Once the SC group is split in two, STCs outperform the remaining countries (regression (2)). In regression (3) we change the demarcation value of tourism specialization from 10% to 20%. The STC dummy stays significant in both regressions.

Table 3: *Growth effects of tourism specialization: dummy regression analysis*

Dependent variable: Average annual real per capita GDP growth, 1980-2003			
Dummies	(1)	(2)	(3)
OECD	-0.0033 (-0.70)	-0.0028 (-0.57)	-0.0060 (-0.19)
OIL	-0.0179 (-3.25)***	-0.0176 (-3.19)***	-0.0179 (-3.33)***
LDC	-0.0135 (-3.09)***	-0.0136 (-3.08)***	-0.0138 (-3.12)***
SC	0.0094 (2.40)**		
STC >10%		0.0113 (2.20)**	
SC <10%		0.0078 (1.45)	
STC >20%			0.0137 (2.34)**
No. of obs	143	143	143
R ²	0.340	0.341	0.331

All regressions include a full set of regional dummies as defined in Easterly (2001).
Figures in brackets are t-statistics (standard errors are White-corrected).

* Significant at 10% ** Significant at 5% *** Significant at 1%

In Table 4 we test whether tourism specialization remains a growth-enhancing determinant after a number of traditional growth factors are considered. For instance, STCs might be on a faster growth path simply because they are poorer than average – a mechanism predicted by the traditional Solovian growth model. To control for this type of possibilities, we adopt an approach *à la* Mankiw, Romer and Weil (1992) to the analysis of cross-country growth differentials.

Regressions (2) and (3) show that the STC dummy stays significant even after other factors, - the initial level of per-capita GDP and an index of openness - are considered. In regressions (4), the index of tourism specialization is inserted, and the coefficient is significant at the 1%. The estimated value implies that an increase of 10% in the ratio of tourism receipts to GDP is associated with an increase of 0.5% in the annual growth rate of per-capita GDP.

Finally, in regression (5) we interact the index of openness with the STC>10% dummy. The significance and the large value of the related coefficient indicate that being specialized in tourism generates a premium on growth over the average positive effect of openness.

An additional way to test whether factors other than tourism specialization are the source of the positive performance of STCs is to consider how different STCs are from the other countries in terms of a few growth determinants. A simple way to do this exercise is to carry out dummy regressions with respect to the dependent variable of interest. The results are in the last 3 columns of Table 4.

Table 4: Growth effects of tourism specialization - II

<i>Country dummies and variables</i>	<i>Dependent variable</i>							
	Per-capita real GDP, aver 1980-03 (1)	Per-capita real GDP, aver 1980-03 (2)	Per-capita real GDP, aver 1980-03 (3)	Per-capita real GDP, aver 1980-03 (4)	Per-capita real GDP, aver 1980-03 (5)	Log real per-capita GDP, aver 1980-03 (6)	Share of trade in GDP, aver 1980-03 (7)	Log invest/GDP, aver 1980-03 (8)
OECD	-0.0020 (0.34)	-0.0060 (1.14)	-0.0030 (0.52)	.00586 (1.10)	-0.0058 (1.10)	1.1783 (6.52)***	-0.5412 (-1.47)	0.129 (0.18)
OIL	-0.0141 (-2.67)***	-0.0120 (-2.24)**	-0.0125 (-2.30)**	-0.0102 (-1.89)*	-0.0118 (-2.18)**	0.5020 (2.05)**	0.0231 (0.14)	0.0913 (1.29)
LDC	-0.0155 (-2.89)***	-0.0167 (-3.11)***	-0.0169 (-3.16)***	-0.0164 (-3.09)***	-0.0167 (-3.09)***	-1.0940 (-8.28)***	-0.4596 (-2.80)***	-0.1836 (-2.85)***
Ln per-capita GDP 1980	-0.0054 (-1.90)*	-0.0064 (-2.28)**	-0.0066 (-2.29)**	-0.0067 (-2.34)**	-0.0066 (-2.27)**			
Share of trade in GDP 1980-95	0.0047 (2.53)***	0.0042 (2.54)***	0.0040 (2.38)**	0.0034 (1.89)*	0.0041 (2.43)**			
SC < 10%						0.5409 (3.57)***	0.7454 (2.93)***	0.1721 (2.46)**
STC > 10%		0.0111 (2.47)**				0.7281 (4.10)***	0.5763 (2.52)***	0.2277 (2.06)**
STC > 20%			0.0143 (2.73)***					
Average share of tourism receipts in GDP 1980-95				0.0535 (3.18)***				
Share of trade x STC > 10%					0.0462 (3.15)***			
No. of obs.	142	142	142	141	141	143	142	139
R ²	0.343	0.367	0.370	0.371	0.369	0.780	0.234	0.333

All regressions include a full set of regional dummies as defined in E-K. Omitted dummy for country group is "OTHER".

Figures in brackets are t-statistics (standard errors are White-corrected).

* Significant at 10% ** Significant at 5% *** Significant at 1%

From regression (6) we can see that the reason why STCs are growing faster is not that they are poorer than other small countries. In fact, the latter have a lower estimated coefficient, and the average per-capita GDP of STCs in the period amounted to 10,229 dollars (at 2000 prices), as compared to a sample mean of 8,222. Similarly, regression (7) rules out the possibility that the high growth performance may be accounted for by openness to trade. STC are certainly open to trade, but definitely less than the other small countries in the sample. The only positive difference of STC with respect to other small countries can be found with respect to saving/investment propensities, as shown by regression (8), but the difference seems too small to justify the growth differential.

On the whole, the positive performance of STCs relative to the other country groups is not captured by the traditional growth factors of M-R-W type models. Tourism specialization is an independent determinant.

Discussion and conclusions

The importance of tourism as a growth factor for small countries has often been highlighted, mainly with respect to its role in overcoming problems of insufficient demand size which tend to afflict small economies (Cf., Srinivisan, 1986; Briguglio, 1995; Armstrong *et al.*, 1998). To answer these questions, we have compared the relative growth performance of 29 “small countries” in a sample of 143 countries, during the 1980-2003 period.

We have seen that STCs grew significantly faster than all the other sub-groups considered (OECD, Oil, LDC, Small), and that this positive performance is not significantly accounted for by traditional growth factors, such as absolute convergence, or openness to trade. We have also seen that the degree of tourism specialization is strongly positively related to economic growth. On the whole, tourism specialization appears to be an independent determinant.

A corollary of our findings is that the role played by the tourism sector should not be ignored by the debate about whether smallness is harmful for growth. Indeed, half of the 29 countries classified as microstate are heavily dependent on tourism. Once this distinction is adopted, it can be seen that STCs perform much better than the remaining small countries. Therefore, in contrast with previous results in the literature, we suggest more prudent conclusions. Smallness *per se* can be good for growth as long as it is combined with tourism specialization.

Of course, the simple “stylized facts” we have presented cannot tell us if the above-described performance is an isolated episode or are we dealing with something of a more persistent nature. Understanding the mechanisms behind this phenomenon is important, especially from the viewpoint of economic policy. Taken at face value, our results seem to justify a rather optimistic perception of the economic consequences of specializing in tourism. This is not necessarily always the case, however. We believe that various interpretations are possible at this stage. In the following, we sketch two alternative mechanisms that could account for the positive performance of STCs.

Let us start with a “pessimistic” hypothesis consistent with our evidence. The latter might be simply explained by a fast increase, during the period under analysis, of the rate of utilization of natural endowments used by the industry to attract tourists. If this is the case, the high-growth performance of STCs might be a temporary one and therefore unsustainable in the long run, as is well known from the literature on the so-called Butler’s lifecycle tourist product. Under this hypothesis, in the future tourism countries should not outperform the average country. Our findings, and the previous evidence on the same countries by Brau *et al.* (2005) for the periods 1960-80 and 1980-95, may only loosely support this hypothesis. By considering the most recent years, a slight decreasing trend of STC growth performance seems to be present, but still these countries outperform the other groups of countries considered.

An alternative and far less pessimistic hypothesis is based on a more complex mechanism, described in a series of papers by Lanza and Pigliaru (1994; 2000a, 2000b), where Lucas’s (1988) two-sector endogenous growth model has been adapted to assess the long run effects of tourism specialization. In this approach, small countries with relatively large endowments

of suitable natural resources specialize in tourism. As constant (endogenous) growth takes place in the world economy, the tourism services become scarcer relative to the supply of goods produced by sectors where productivity grows faster.⁸

In this setting, the high performance of STCs requires that tourism services and other goods are not close substitute in the consumer's preferences. When this condition is met, the terms of trade effect plays constantly in favor of tourism countries. If this effect is strong enough, STCs can grow faster than the average country. Notice that the latter is a long run outcome: sustainable growth in the tourism sector can be achieved because the mechanism at work is mainly based on a terms-of-trade effect rather than on a resource-consuming output expansion.

To obtain reliable policy implication for developing countries, future research should concentrate on identifying the relative importance of these two different mechanisms in explaining the positive performance of STCs. This aim can be pursued with the help of both structural econometric modeling of the role of tourism in economic growth, and possibly more detailed cross-country dataset than the one from which we have derived our results.

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Appendix:

The dataset used in this paper:

It consists of 143 countries for which data on tourist receipts and at least 10 years of annual data on per capita GDP adjusted for differences in purchasing power parity are available.

The two main sources of data for our dataset are the Penn World Tables, version 6.2, and series formw the World Development Indicators

Variables:

1. **Real per capita GDP Levels** (International Prices, base year 1985): Source: Penn World Tables

2. **Real per capita GDP growth Rate:** logs of first available year and last year as below:

$$\ln\left(\frac{GDP_{t1}}{GDP_{t0}}\right) / T$$

3. **Average Tourism Specialization:**

$$\left(\frac{\text{International Tourism receipts}}{\text{GDP at market prices}} \right)$$

Source for both series (World Bank Development Indicators, current US\$)

International tourism receipts are defined as: “expenditures by international inbound visitors, including payments to national carriers for international transport. These receipts should include any other prepayments made for goods or services received in the destination country. They may also include receipts from same-day visitors, except in cases where these are so important as to justify a separate classification.

4. **Average Share of Trade:**

$$\left(\frac{\text{Imports} + \text{Exports}}{\text{GDP at market prices}} \right)$$

Source for both series (World Bank Development Indicators, current US\$)

5. **Average Investments to GDP:** Source: Penn World Tables, version 6.2.

A set of different dummies has been also considered:

a) According to population

29 are Small Countries (average population during 1960-2003 <1 million)

b) According to Tourism specialization

10 are Tourism Countries with a specialization $\geq 20\%$. (For a complete definition of specialization see below).

17 are Tourism Countries with a specialization $\geq 10\%$

3 countries among this group are not small (Jamaica, Dominican Republic and Jordan)

c) According to Tourism specialization and Population

19 are Small not Tourism (specialization $\leq 20\%$)

15 are Small not Tourism (specialization $\leq 10\%$)

c) Other relevant dummies:

37 Less Developed Countries (of these, 6 Small not Tour and 2 Small Tourism); 22 OECD; 14 Oil

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² See Read (2004) for a survey.

³ See Sinclair (1998).

⁴ On the relationship between smallness and tourism specialization, see Liu and Jenkins (1996), and Candela and Cellini (1997).

⁵ See Read (2004) for a recent survey.

⁶ This is clearly an *ad hoc* threshold. Armstrong *et al.* (1998) use a threshold of 3 million inhabitants. In other cases, a valued of 1,5 million is adopted. More on this issue in Srinivisan (1986); Armstrong and Read (1998).

⁷ The continental dummies included in E-K are sub-Saharan Africa, Asia, Europe and Central Asia, Middle East and North Africa, the Americas.

⁸ Models such as Feenstra (1996) are also compatible with this approach. See also Valente (2005).

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