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## Tourism as a Development Tool: Evolving Global Trends and Emerging Options\*

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Spurred on by rising disposable incomes (in Pacific Asia primarily), emergence of aggressive, low-cost airlines, new source markets (India and China) etc., tourism is fast emerging as one of the world's largest and rapidly growing industries. Statistics from the last two decades indicate that the Asia Pacific destinations constitute the fastest growing tourism region in the world. Today, their tourist arrivals and receipts are almost twice the rates recorded in the traditional destinations of Western Europe and the Americas. This has led some to conclude that the Asia Pacific region has been gaining market shares at the expense of the North. This paper will disagree with this notion and argue that the boom in East Asian tourist traffic is primarily a local phenomenon. Strong economic performance is the reason for a newly wealthy, Asian middle class, taking to the skies in record numbers, thereby fuelling the regional tourist trade. Our examination and testing of data over the period 1995-2008 provides strong evidence of an inverted or parabolic shape, defining the relationship between per capita GDP and tourism receipts growth. This suggests that tourism revenues grow rapidly in countries with modest GDP growth; however for high income destinations (Western Europe, Canada and the U.S.A), tourist growth moderates. This implies that all countries, developed and developing are able to share in the growth of the global tourist trade. **JEL Code: R11**.

#### Introduction

As countries dismantle barriers to foreign arrivals, tourist travel has been soaring and the industry is already the world's largest employer (231 million employees), generating approximately 10.4 percent of the global GDP. If present trends persist, tourism related businesses will employ about 269.5 million by the year 2015 (World Tourism Travel Council; 2006). Such euphorically bullish predictions have made tourism the latest cause célébre in destination countries; a "new form of sugar" as some Asian journalists once described this latest development tool. However, as the global tourist traffic grows at a healthy and sustained pace, the figures also exhibit a sharp regional variation or disparity. The records indicate that

tourist receipts have risen much faster in the Asia-Pacific region over the last two decades - almost twice the numbers recorded in the traditional destinations of Europe and the Americas. This has led many to conclude that the Asia Pacific region has been gaining market shares at the expense of destinations in the North.

This paper will disagree with this view, arguing that the Asia-Pacific tourist boom is primarily a local phenomenon. It is fueled by a new class of Asian visitors – young, newly affluent and budget conscious – who are taking to recreational travel in record numbers. While European and American destinations are unaffordable for most at this time, the prosperous regional economies are a second best option, catering adequately to their preferences and lifestyles. Regional tourism marketers have long recognized the huge travel propensity of this group and targeted them directly by launching themed campaigns and marketing segmentation strategies<sup>2</sup>. The result: the emergence of a variety of highly competitive destination clusters in the Asia-Pacific region, each striving to build and promote its distinctive brand. New opportunities in ecotourism, medical tourism, golf excursions, dive travel etc., are constantly emerging, as the various destinations try to customize their products to suit diverse client needs and preferences. Through creative and innovative product differentiation strategies, they are not only creating diverse destination products but enriching the visitor experience as well. Hence, as the region's overall economic transformation gathers further momentum, so too will the travel propensity of Asians. Millions more will take to the skies and as such the Asia-Pacific region can expect to maintain high tourist volumes, well into the next century.

Our discussion is organized as follows. In the next section we briefly review the role of tourism as a development tool in the destination countries. This will be followed by an empirical test of the hypothesis that tourism growth in the newer destinations is happening at the expense of traditional holiday destinations of Europe and the Americas. The final sections will analyze the findings as well as provide a concluding assessment.

#### **Tourism: The New Development Tool**

In development circles, tourism is commonly referred to as a strategic export industry. Among its more obvious effects, the following are usually cited: generating new employment opportunities, multiplier effects of tourist expenditures, the linkage effects of the tourist industry when most inputs (materials, products and services) are purchased in the destination country etc. We will argue that in order to comprehend tourism's true developmental impact, one must first focus on the industry's essential characteristics. Tourism is unique in global commerce because it "moves people to the product rather than transporting the product to the people" (McLaren, 2003). Unlike foreign aid, it requires no costly

The Asia-Pacific region increased its share of the global market from 15.3 percent in 1995 to 19.2 percent in 2005. By contrast, Europe and the Americas saw their global shares shrink from 58.3 percent to 54.8 percent and from 20.2 percent to 16.6 percent respectively (ESCAP; 2007).

Thailand started the trend with its "Visit Thailand Year 1987" to celebrate the King's 60<sup>th</sup> birthday. The campaign was a success as visitor arrivals increased by an astounding 24 percent in 1987 (Corben 1996). Since then many others have emulated the Thais – China with its "Visit China Year 1997" coinciding with the return of Hong Kong to Chinese rule; Korea launched its "Discover Korea: A Different Asia "campaign in 1994 and tourism receipts jumped by 46.6 percent (Price 1995); Malaysia's sought to showcase eight different destinations within the country with the slogan: "Malaysia: Fascinating Destinations".

government bureaucracy to administer; nor is there any opportunity for the money to be siphoned off by corrupt politicians or government officials. With revenues flowing directly to store owners, travel agencies, restaurants and locally owned hotels, the economic impact is immediate and far-reaching. It triggers a bottom-up approach to development; an approach that fits in with a communitarian 'third way' approach – rich tourists helping out hard working locals and thereby fostering the principles of caring and self-help.<sup>3</sup> In the past, tourism policy has focused mostly on international promotion, attracting foreign investments in major hotel and resort development etc. The shift from top-down to bottom-up approaches to tourism development places the focus on livelihood opportunities for local people; empowers them by granting them a degree of control as hosts. Herein lies its true effectiveness (Goodwin 1998).

Tourism revenue is also a more welcome source of capital inflow because unlike tied aid, it is not bound by conditions that erode foreign aid's true value and effectiveness; nor is it held hostage by onerous conditions that multilateral agencies (e.g., the World Bank, the IMF) commonly impose when advancing credit. In other words, tourist dollars can be viewed as a free lunch. While other sources of capital often come with formidable costs, be it interest payments or conditional aid or both, tourist revenue is free of such liabilities and herein lies its ability to profoundly affect the destination economies.

#### **Data Analysis and Discussion**

The importance of tourism receipts is illustrated in Table 1. The top fifteen countries by six measures are reported. The measures are the averages over the period 1995 -2008 of tourist arrivals, tourist arrivals as a share of destination population, tourist receipts as a share of exports, GDP, aid and foreign direct investment. While France is the leader in gross tourist arrivals over the fourteen years, tourism is clearly much more important for smaller countries, both in terms of arrivals as a share of population, and tourism receipts as a share of GDP<sup>4</sup>.

We are more interested in regional changes to tourist flows. Table **Error! Reference source not found.** illustrates the average annual growth rate of tourism receipts and tourist arrivals for the ten regions examined.<sup>5</sup> Tourist arrival growth has been greatest in the Middle East & North Africa while tourism receipts have grown most for East Asia, followed closely by Sub-Saharan Africa.

We test the hypothesis that growth in tourism in the newer destinations is at the expense of tourism in the old or traditional destinations of Europe and Latin America. We estimate a regression in the form of:

Tourism's impact is the strongest in the island states of Fiji, Tonga and Vanauatu. In 2006, tourism accounted for 43.5 percent of Fiji's total export earnings and one third of its GDP. Tonga and Vanauatu are dependent on tourism for half or more of their export earnings (ESCAP, 2007).

Some call this "trickle-up economics". Whereas foreign aid flows through bureaucrat agencies and non-governmental organizations, tourist dollars are spent directly on restaurants, gift shops etc. After meeting business costs, the residual can be re-invested in the business or even elsewhere. A cultural phenomenon may also be aiding the trickle-up strategy: in most Asian societies, he who travels abroad is expected to bring back gifts for friends and relatives that reflect the specialty of the place visited. This is one reason why roadside stalls do brisk business in Thailand, Malaysia, India and other countries. Here tourism brings wealthy visitors in direct contact with poorer, marginal groups in the destination countries, providing opportunities for employment and wealth redistribution.

The World Bank's regional divisions are used, but with East Asia & Pacific divided into three: East Asia, Pacific Islands, and Australia & New Zealand.

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tourism growth _{i,t} = \mathfrak{D} + \mathcal{Q} \ln tourism_{i,t-1} + \mathcal{D} GDP growth _{i,t} + \mathfrak{D} \ln population_{i,t} + \mathfrak{D} \ln population_{i,t} + \mathfrak{D} region_{i+\varepsilon i,t}
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where i subscripts country and t subscripts time.

The lagged tourism variable captures convergence, which in tourism might be expected due to lagging capacity, overcrowding, etc. The test of our hypothesis is a test of the dummy variables. If growth in newer tourist destinations is coming at the expense of tourism to the traditional destinations, then there would be an unexplained (by the covariates) decline in tourism growth captured in differences in the estimated coefficients on the regional dummy variables.

There are two different measures of tourism used as the dependent variable: tourist arrivals divided by receiving country's population, and tourism expenditures as a share of GDP.<sup>6</sup> Growth is calculated as the log difference in the annual value of the time series. For real GDP per capita, GDP is adjusted to be net of tourist receipts. The regional dummy variables are the World Bank region classification, with one adjustment. East Asia & Pacific has been subdivided into three regions, with Pacific Islands and Australia/New Zealand broken out separately. In our regressions, North America (Mexico is included with Latin America & Caribbean) is the base, excluded region.

The data are in the form of an unbalanced panel, with a maximum of fourteen years for each country covering the period 1995-2008, ninety-two countries with a usable series of tourist arrivals, and ninety-three countries with tourism expenditure data. There are several variants of the basic regression above, modifying assumptions of the error structure. The model Pooled is an OLS regression, but with standard errors adjusted for clustering by country. The model includes dummy indicator variables by region but otherwise does not incorporate the panel structure of the data. The fixed effects regression is presented as a measure of robustness as it allows for variation by country rather than region. We assume that the error term  $\varepsilon i$ ,  $t = \Box i + \Box i$ , t, where  $\Box i$  captures the fixed effect defined as country-specific rather than region specific, and the  $\Box i$ , t are independently and identically distributed In the fixed effects regression, no conclusions can be drawn in comparing different regions. The last model is a GLS regression with panel-corrected standard errors, which incorporates potential autocorrelation in individual time series, and contemporaneous correlation across the panel.

#### **The Empirical Findings**

Table 3 reports the regression results for growth in per capita tourist arrivals as the dependent variable. Each model is presented separately including growth in per capita GDP and its square as covariates in one specification, and the level log per capita GDP and its square as covariates in the second specification.

The convergence effect is measured by the coefficient on the lagged tourist arrivals per capita. All are negative in all specifications, but significant only for the fixed effects regression. The coefficients on growth in per capita GDP are significant and positive in all specifications whereas the coefficients on the

Data downloaded from WDI Online, June 2010.

level of per capita GDP are significant only for the fixed effects model. The coefficients on the squared terms are generally not significant suggesting no evidence for any strong non-linear effect of income on growth in tourism. Generally income growth can explain growth in tourist arrivals, but the level of income alone does not. So rich or poor, all countries appear to be sharing in the growth of world tourism.

The coefficients on the exchange rate are negative and significant in almost all specifications. This confirms that tourist arrivals, like any other exported good, are sensitive to the exchange rate.

The coefficients on the dummy variables are interpreted as the growth in tourist arrivals relative to North American arrivals, the excluded case. In regressions 2 and 6, the East Asia, Eastern Europe & Central Asia, Middle East & North Africa, and Western Europe dummy variable coefficients are all positive and significant. In regression 1 which includes the level of per capita GDP rather than growth, the Western Europe dummy variable coefficient is not significant, though it is significant in regression 5.

Growth in tourist arrivals appears greatest for East Asia, Eastern Europe & Central Asia as well as for Middle East & North Africa. This tourist growth does not come at the expense of tourist arrivals to Western Europe. Focusing on regression 6, while the coefficients on the Eastern Europe & Central Asia, and the Middle East & North Africa indicator variables are larger than the coefficient on Western Europe, neither are statistically significantly greater. Growth in tourism to East Asia may be modestly greater than it is to Western Europe, validating our presumption that affordable East Asian destinations get chosen by other Asian travellers. There are no regions with an obvious relative lag in growth, though South Asia might come closest even if none of the coefficients on the regional dummy variable in any of the specifications are significant. So while tourism growth in East Asia, Eastern Europe and the Middle East is greater than to North America, we cannot conclude that tourism to these regions has grown more rapidly than to Western Europe.

The results for regressions explaining growth in tourist receipts rather than arrivals are generally similar with a few differences to be noted. The results are reported in Table 4. The dependent variable is growth in tourist receipts share of GDP. Again, two general specifications are reported, one including log GDP per capita in levels and one with growth in GDP per capita. The three models: pooled, fixed effects and GLS panel-corrected are reported.

The lagged tourism receipts share coefficients are negative and statistically significant in all estimates. So while the convergence effect was not strong in explaining tourist arrivals, it is strong when explaining tourist receipts. As in the tourist arrivals regressions, coefficient on log per capita GDP in levels are not significant while coefficients on the growth in per capita GDP are generally significant. Tourist receipts growth are a non-linear function of income growth. The coefficients on the squared per capita GDP growth terms are significant and positive and the sign on the coefficient of the per capita GDP growth terms are negative. This indicates a non-linear, quadratic relationship between per capita GDP growth and tourism receipts growth.

Coefficients on population and on the exchange rate are negative, but not always significant. The coefficient of the exchange rate in the regressions on tourist arrival growth, in contrast, were negative and significant. In the regressions on tourist receipts, it seems that the exchange rate does not have an effect.

This may be due more to the impact of exchange rate changes on GDP rather than on tourist earnings per se. An exchange rate appreciation will tend to reduce GDP due to falling exports thus leaving the ratio of tourist receipts to GDP relatively unchanged.

Focusing on regression 6, the regions displaying relative growth in tourist earnings not accounted for by changes in the covariates are East Asia and Eastern Europe & Central Asia. The other regions which showed robust growth in tourist arrivals: Middle East & North Africa, and Western Europe, do not appear to differ from the rest of the world's regions in terms of tourism receipts. A simple interpretation is that while tourist arrivals to the Middle East & North Africa has increased, spending by tourists on average is modest in comparison. This may be a function of the countries of origin of the tourists. This pattern is also true of tourism to Western Europe. It is not clear from these data what might be driving this latter effect. One possible explanation is that the increase in tourist arrivals to Western Europe is dominated by Eastern Europeans of relatively modest means. Consequently, it is not surprising that the growth in tourist earnings in Western Europe has not kept pace with the growth of tourist arrivals. An alternative interpretation is that most East European visitors are in reality economic migrants looking for gainful employment in the more affluent EU member countries. EU regulations make it legal for them to look for employment anywhere on the European continent. As such, East European visitors are tourists in name only; economic migrants in reality.

Finally, it appears that tourist earnings growth lags the base case of North America for South Asia and for Sub-Saharan Africa. While neither region had identifiably lower tourist arrivals, they do have lower earnings. The coefficients values are virtually the same for the two regions, but in specifications 2 and 6, the coefficient on the Sub-Saharan Africa dummy variable are not significant. That would suggest that once growth rate of per capita GDP are included, Sub-Saharan Africa probably does not differ from the base case. South Asia, might, however, as three of the four cases have significant and negative coefficients on the South Asia dummy variable.

#### **Summary and Conclusions**

The findings above point to some interesting trends in the global tourist trade. To recount a few:

- 1. While the newer destinations in Asia, Africa and Eastern Europe are helping to transform tourism into one of the world's largest and fastest growing industries, our results indicate that growth in their tourist traffic is not coming at the expense of either Europe or the Americas. The latter are experiencing growth as well, albeit at a slower pace.
- 2. We made use of convergence regression to test whether growth in tourist arrivals this year depends on the level of arrivals in the previous year. In a standard growth convergence regression, per capita income this year is negatively correlated to per capita incomes in the past, as poorer countries catch up and converge with richer countries. For this paper, our expectation was that the more arrivals there were in the past year, the lower will be the growth in the current year (fear of congestion being one of several potential reasons). Our results confirm the existence of such an effect.
- 3. Our results provide strong evidence of an inverted or parabolic shape defining the relationship between per capita GDP and tourism receipts growth. This implies that tourist receipts grow in

countries with modest GDP growth; however for high growth economies, tourist growth moderates. This suggests that all countries, developed and developing, are able to share in the growth of the global tourist trade.

#### Reference

Corben, Ron (1996, January) 'Optimistic Outlook', Asia Travel Trade.

Economic and Social Commission for Asia and the Pacific (ESCAP; 2007, March)

'Regional Study on the Role of Tourism in Socio-Economic Development', 66 Session, Almaty, Kazakhstan.

Goodwin, H (1998) 'Sustainable Tourism and Poverty Elimination', <a href="http://www.haroldgoodwin.info/resources/dfidpaper.pdf">http://www.haroldgoodwin.info/resources/dfidpaper.pdf</a>

McLaren, D (2003) 'Rethinking Tourism and Ecotravel', Kumarian Press, June, 2003.

World Travel & Tourism Council (2006) 'WTTC Research', http://www.wttc.org/eng

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Table 1: Annual tourist arrivals, receipts, top fifteen countries

Tourist Arrivals (000)		Tourist Arrivals % of Po	pulation	Tourism Receipts % of Exports		
France	73,098	Andorra 3210.1%		Macao SAR, China	72.8%	
Spain	48,322	Macao SAR, China 1486.5%		Bahamas, The	70.9%	
United States	48,288	Monaco 857.		St. Lucia 68		
Italy	37,951	Cayman Islands 789.8%		Maldives	68.1%	
China	35,651	Guam 755.79		Antigua and Barbuda 61.0		
United Kingdom	24,971	Aruba	739.8%	Samoa 58.		
Mexico	20,436	Islands 733.6% Barbados		Barbados	56.5%	
Russian Federation	20,064	Bermuda	506.7%	French Polynesia	56.3%	
Germany	19,089	Bahamas, The	504.0%	Grenada	51.9%	
Austria	18,705	Virgin Islands (U.S.)	456.4%	Vanuatu	51.6%	
Canada	18,452	Netherlands Antilles	405.7%	St. Kitts and Nevis	49.0%	
Poland	16,291	Bahrain	404.8% Netherlands Antilles		48.8%	
				St. Vincent and the		
Turkey	13,550	Palau	370.1%	Grenadines	48.1%	
Greece	13,145	Antigua and Barbuda	301.5%	Comoros	48.0%	
Malaysia	12,419	Malta	295.4%	Cape Verde	47.8%	
Tourism Receipts % of GDP		Tourism Receipts - Aid Ratio		Tourism Receipts - Net FDI Ratio		
Tourism Receipts % of	of GDP	Tourism Receipts - A	d Ratio	Tourism Receipts - Net FD	l Ratio	
Macao SAR, China	of GDP 59.1%	Tourism Receipts - A Macao SAR, China	8810.63	Tourism Receipts - Net FD Netherlands Antilles	1 Ratio 312.41	
Macao SAR, China	59.1%	Macao SAR, China	8810.63	Netherlands Antilles	312.41	
Macao SAR, China Palau	59.1% 55.0%	Macao SAR, China Bermuda	8810.63 6643.09	Netherlands Antilles Mauritania	312.41 76.18	
Macao SAR, China Palau Maldives	59.1% 55.0% 53.8%	Macao SAR, China Bermuda Hong Kong SAR, China	8810.63 6643.09 1577.12	Netherlands Antilles Mauritania Barbados	312.41 76.18 33.14	
Macao SAR, China Palau Maldives Aruba	59.1% 55.0% 53.8% 45.4%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore	8810.63 6643.09 1577.12 1338.59	Netherlands Antilles Mauritania Barbados Maldives	312.41 76.18 33.14 30.32	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda	59.1% 55.0% 53.8% 45.4% 40.2%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The	8810.63 6643.09 1577.12 1338.59 357.97	Netherlands Antilles Mauritania Barbados Maldives Greece	312.41 76.18 33.14 30.32 28.49	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia	59.1% 55.0% 53.8% 45.4% 40.2% 37.4%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait	8810.63 6643.09 1577.12 1338.59 357.97 299.69	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya	312.41 76.18 33.14 30.32 28.49 28.23	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros	312.41 76.18 33.14 30.32 28.49 28.23 24.73	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands Seychelles	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3% 35.6%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates Cayman Islands	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25 225.30	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros Malaysia	312.41 76.18 33.14 30.32 28.49 28.23 24.73 20.35	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands Seychelles Bahamas, The	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3% 35.6% 32.1%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates Cayman Islands Brunei Darussalam	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25 225.30 219.78	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros Malaysia Hong Kong SAR, China	312.41 76.18 33.14 30.32 28.49 28.23 24.73 20.35 19.39	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands Seychelles Bahamas, The Barbados	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3% 35.6% 32.1% 30.5%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates Cayman Islands Brunei Darussalam Saudi Arabia	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25 225.30 219.78 201.65	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros Malaysia Hong Kong SAR, China Niger	312.41 76.18 33.14 30.32 28.49 28.23 24.73 20.35 19.39 17.56	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands Seychelles Bahamas, The Barbados Vanuatu St. Kitts and Nevis St. Vincent and the	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3% 35.6% 32.1% 30.5% 26.1% 23.5%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates Cayman Islands Brunei Darussalam Saudi Arabia Qatar Turkey	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25 225.30 219.78 201.65 183.68 171.24	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros Malaysia Hong Kong SAR, China Niger Samoa Iran, Islamic Republic	312.41 76.18 33.14 30.32 28.49 28.23 24.73 20.35 19.39 17.56 17.16 13.63	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands Seychelles Bahamas, The Barbados Vanuatu St. Kitts and Nevis St. Vincent and the Grenadines	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3% 35.6% 32.1% 30.5% 26.1% 23.5%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates Cayman Islands Brunei Darussalam Saudi Arabia Qatar	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25 225.30 219.78 201.65 183.68	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros Malaysia Hong Kong SAR, China Niger Samoa Iran, Islamic Republic	312.41 76.18 33.14 30.32 28.49 28.23 24.73 20.35 19.39 17.56 17.16 13.63	
Macao SAR, China Palau Maldives Aruba Antigua and Barbuda St. Lucia Cayman Islands Seychelles Bahamas, The Barbados Vanuatu St. Kitts and Nevis St. Vincent and the	59.1% 55.0% 53.8% 45.4% 40.2% 37.4% 36.3% 35.6% 32.1% 30.5% 26.1% 23.5%	Macao SAR, China Bermuda Hong Kong SAR, China Singapore Bahamas, The Kuwait United Arab Emirates Cayman Islands Brunei Darussalam Saudi Arabia Qatar Turkey	8810.63 6643.09 1577.12 1338.59 357.97 299.69 298.25 225.30 219.78 201.65 183.68 171.24	Netherlands Antilles Mauritania Barbados Maldives Greece Kenya Comoros Malaysia Hong Kong SAR, China Niger Samoa Iran, Islamic Republic	312.41 76.18 33.14 30.32 28.49 28.23 24.73 20.35 19.39 17.56 17.16 13.63	

Notes: Average values over 1995-2008. /'Source: WDI Online.

Table 2: Average Annual Growth of Tourism Receipts and Tourist Arrivals, by Region, 1995-2008

	Tourism Receipts	n	Tourist Arrivals	n
East Asia	9.2%	185	7.6%	198
Pacific	0.4%	128	2.3%	212
Australia & New Zealand	3.9%	28	1.3%	25
Eastern Europe and Central Asia	7.0%	292	7.9%	295
Latin America & Caribbean	2.6%	456	4.9%	513
Middle East & North Africa	8.1%	244	12.3%	258
South Asia	4.7%	104	4.9%	102
Sub-Saharan Africa	8.5%	536	7.9%	516
Europe	2.9%	349	3.6%	385
North America	2.4%	41	-0.6%	42

Notes: average annual growth rates using World Bank method of regression of In(Tourism) on time trend

Table 3: Tourism Convergence Regressions: Tourist Arrivals per Capita

	Pooled		Fixed Effects		Panel-corrected SE	
	[1]	[2]	[3]	[4]	[5]	[6]
lag $ln$ arrivals per cap	-0.0054 $[0.0109]$	-0.0080 [0.0099]	-0.2394*** [0.0194]	-0.1738*** [0.0159]	-0.00878 $[0.0094]$	-0.00923 [0.00668
ln per capita GDP	-0.0070 $[0.0108]$		0.3096*** [0.0510]		-0.00279 $[0.0150]$	
$(ln \text{ per capita GDP})^2$	0.0006 [0.0029]		$-0.0281^{**}$ [0.0131]		-0.0001646 $[0.00350]$	5
per capita GDP growth		0.7894*** [0.2326]		0.8586*** [0.1359]		0.7314* [0.1792]
(per capita GDP growth) <sup>2</sup>		-1.7015 [2.1686]		-0.6028 [1.4774]		-1.4920 [2.0059]
ln population	-0.0016 $[0.0069]$	-0.0015 $[0.0065]$	0.2178** [0.0920]	0.3257*** [0.0840]	-0.0031 [0.00458]	-0.0021 $[0.0044]$
ln real exchange rate	$-0.0924^{*}$ $[0.0507]$	-0.0723 $[0.0443]$	-0.1366*** $[0.0429]$	$-0.0690^{\circ}$ $[0.0400]$	-0.0905** $[0.0376]$	$-0.0748^{*}$ $[0.0382]$
East Asia	$0.0427^{*}$ [0.0225]	$0.0370^{*}$ $[0.0214]$			$0.0409^*$ $[0.0214]$	0.0361* [0.0156]
Pacific	0.0025 $[0.0451]$	0.0267 $[0.0419]$			-0.00158 $[0.0278]$	0.0225 $[0.0344]$
Australia/New Zealand	0.0122 $[0.0192]$	0.0146 [0.0188]			0.0091 $[0.0113]$	0.0132 $[0.0097]$
Eastern Europe & Central Asia	$0.0621^*$ [0.0323]	$0.0521^*$ [0.0268]			0.0604** [0.0254]	0.0503** [0.0216]
Latin America & Caribbean	0.0074 $[0.0339]$	0.0129 [0.0306]			0.0025 $[0.0194]$	$0.0100 \\ [0.0173]$
Middle East & North Africa	$0.0539^*$ [0.0278]	0.0557** [0.0241]			0.0502** [0.0208]	0.0537** [0.0184]
South Asia	-0.0024 $[0.0443]$	0.0063 $[0.0424]$			-0.0103 $[0.0380]$	0.00008 $[0.0341]$
Sub-Saharan Africa	0.0057 $[0.0458]$	0.0291 $[0.0434]$			0.0042 $[0.0264]$	0.0236 $[0.0273]$
Western Europe	0.0211 [0.0133]	$0.0223^{*}$ $[0.0117]$			$0.0204^{*}$ $[0.0109]$	0.0218* [0.0114]
constant	$0.4531^*$ [0.2351]	0.3258 [0.2115]	$-1.8976^{**}$ [0.8778]	$-2.8002^{***}$ [0.8148]	0.4516*** [0.1742]	$0.3435 \\ [0.1805]$
N	1086	1082	1086	1082	1086	1082

\*\*\* represents significance at the 1 percent level.

\*\* represents significance at the 5 percent level.

\* represents significance at the 10 percent level.

Notes: Standard errors are in brackets. Dependent variable is growth of tourist arrivals per capita.

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