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# INTERNATIONAL TOURISM, DEVELOPMENT AND BIODIVERSITY: FIRST EVIDENCE*

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**Key words:** tourism, economic growth, biodiversity conservation

**JEL-Classification:** F18, Q26

**Abstract:**

We analyse whether biodiversity can improve the economic growth of Least Developed Countries (LDCs) by increasing the receipts of tourism as one of the world biggest and fastest growing industries. The intention of our examination is to present an alternative utilization of biodiversity, rather than hunting or the agricultural use of habitats. Our hypothesis is that tourism may be an important chance for economic growth in developing countries. We assume that biodiversity is an important factor influencing the demand for tourism. In other words: a rich biodiversity provides a comparative advantage for most LDCs. Using by a simple growth-model, we conclude that only sustainable tourism shows a steady economic growth in the long run, which may result in an economic convergence from LDCs to Developed Countries.

The model is supported by an empirical analysis. We assess the determinants of trade in tourism and comparative advantage therein based on cross-country data of incidence and the rate of endangerment of birds, as the probably best explored taxonomic group. Other exogenous variables are GDP per capita, life expectancy (as determinates for safety and infrastructure), coastline, the distance to the equator and the number of UNESCO-World-Heritage sites. The main findings are that LDCs first seem to have a comparative advantage in (sustainable) tourism, that second incidence of birds has a positive impact on inbound tourism receipts per capita, and that third the rate of endangered to total birds is negatively influencing tourism receipts.

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## 1. Introduction

Since the beginning of the twentieth century it has been be observed that tourism is one of the most remarkable socio economic phenomena. While in the first half of the last century tourism was an activity for only a small group of often wealthy people, it has become a mass phenomenon after World-War II, particularly from the 1970s on. Now it can be considered that it is a vital dimension of global integration and trade activities. Although domestic tourism currently accounts for approximately 80% of all tourist activity (Neto 2003, p. 1), there is increasing interest in international tourism.

While domestic tourism basically involves a regional reallocation and redistribution of national income, the international one has now become the world's largest source of foreign exchange receipts and is therefore an essential part of global trade. According to the latest figures compiled by the World Tourism Organization, in 2003 international tourism receipts represented approximately 6 per cent of worldwide exports of goods and services (in US$). The share of tourism exports has increased to nearly 30 per cent by considering service exports exclusively (World Tourism Organization 2005).

In many countries, tourism is an important factor for economic development, as it stimulates new economic activity. In any destination tourists demand a number of goods and services: e.g. food, accommodation, transportation, entertainment and local handcrafts as souvenirs. To satisfy this demand, the current level of production needs to increase, mainly in Least Developed Countries. This provides much more positive effects on the economy beside an increase in production and income as the direct effect. Because the tourism sector is labour intensive this tends towards an increase in employment (Deloitte&Touch, iied and odi 1999; Neto 2003, p. 4ff; Nijkamp 1998, p. 4ff). Another indirect effect is that tourism may enforce the political leaders in both, the country of destination and the country of origin to establish good governance, approve more civil rights or open the country for international trade. These assumed effects are particularly relevant for LDCs, which often have high rates of unemployment, low levels of GDP per capita, "problematic" governments and difficulties in entering international trade.

Recent studies investigate empirically the effects tourism has on economic growth. For instance, Brau et al. (2003) analyse if specializing in tourism is appropriate for LDCs. To answer this question they have compared the relative growth performance of 14 "tourism countries" within a sample of 143 countries, observed during the period 1980-95. Using standard OLS cross-country growth regressions, they show that the tourism countries grow significantly faster than all the other sub-groups considered in their analysis (OECD, Oil, LDC, Small). Moreover, they find that other growth factors – low basic value of per capita GDP, high saving/investment propensities or high openness to trade – do not significantly contribute to the positive performance of the tourism countries. In other words, they find that tourism specialization is an independent determinant for economic growth (Brau et. al. 2003, p.11-17). Another empirical study supports and confirms this result. Eugenio-Martin et al. (2004) consider the relationship between tourism and economic growth with an analysis based on a panel data approach focusing on Latin American countries between 1985 and 1998. They estimate the relationship between economic growth and increase in the number of tourist arrivals per population conditional on main macroeconomic variables. The findings show that the tourism sector is adequate for the economic growth of medium or low-income countries, though not necessarily for developed countries (Eugenio-Martin et al. 2004, p. 5-11).

Because of these assumed positive effects tourism may have on economic development, the second question to answer is which determinants can promote the demand for tourism. Besides other explaining factors for tourism arrivals such as safety[1], price, educational level and infrastructure;[2] entertainment and sightseeing in a certain region or country should play a prominent role in the decision making process of tourists for a destination. Proxies for sightseeing and entertainment activities may be count by such "hard" factors like the number of beaches, bars, sport facilities, museums, memorial sites, the quantity and quality of accommodation

[1] Eilat and Einav (2004) show in three-dimensional panel data analysis about the determinants of international tourism, that the political risk is quite important for the choice of destination, while the price level only matters for tourism to developed countries**.**

[2] Eugenio-Martin et al. (2004) try to explain tourist arrivals conditional on GDP and other control variables such as safety, prices and educational level, and investment in infrastructure empirically. Their results provide evidence that low-income countries seem to need adequate levels of infrastructure, education and development to attract tourists, while medium-income countries need high levels of social development like health services and relatively high GDP per

facilities and the like. The focus of our examination is how biodiversity, as a direct factor for sightseeing activities (safaris etc.) and an indirect factor for "nice nature", influences the demand for tourism, as it is supposed in number of theoretical papers (e.g. Ashley and Elliott 2003, Creaco and Querini 2003; Muir-Leresche and Nelson 2000, Nijkamp 1998). There exist, of course, also negative impacts from economic growth[3] and especially tourism (e.g. Berno and Bricker 2001; Neto 2003; Nijkamp 1998) on biodiversity. Thus, it is necessary to estimate the value of biodiversity for the tourism demand, to understand the role biodiversity can play for the development of sustainable tourism and the role tourism plays for the development of biodiversity conservation[4].

Because it may be assumed that LDCs are relatively biodiversity rich, biodiversity can be an important factor of precondition sustainable development in LDCs by influencing the demand for tourism. In other words: a rich biodiversity provides a comparative advantage for most LDCs.

## 2. Theoretical Foundations

Consider a world formed of two small countries, country B (relative rich of biodiversity) and land C (relative rich of capital). Each country is characterized by a two sector economy which produces machines and tourism with two factors: capital ($C$) with the constant capital productivity rate $\bar{c}$ and biodiversity ($BD$) with the changing productivity rate $b$. While depreciated capital may be regenerated instantly by new investments, the production of Tourism requires an regenerative input, the natural resource $BD$ with the maximum endowment of $\overline{\overline{BD}}$[5] $\left(BD \leq \overline{\overline{BD}}\right)$**.** It takes time

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capita levels. Finally, the results show that the price of the destination, in terms of exchange rate and PPP is irrelevant for tourism growth.

3 For empirical assessments see Asufu-Adjaye (2003), Freytag, Vietze and Völkl (2006) as well as Naidoo and Adomowicz (2001).

4 Muir-Leresche and Nelson (2000) describe that in the past 30 years Zimbabwe, Namibia and South Africa have given private landowners full control (and the full opportunity to profit) over the use of wildlife of there land. Consequently, wildlife tourism on private land has boomed. This task has had more success in promoting biodiversity in the southern African region than any other policy measure.

5 There is of course a natural steady decline of the number of species. But these decline rate is – first – very small and not relevant in the short run; and matters – second – mainly for taxa like mooses, insects and molluscs and not for "tourism relevant taxa" like vascular plants, birds or mammals (cp. Lomborg 2004, pp.249-257). To simplify the model we assume a fixed endowment of biodiversity.

to regenerate biodiversity. Yet, if a species is completely extinct it can not be recovered (Asufu-Adjaye 2003, p. 182). The goods are produced with different factor intensities. Machines are relative capital intensive, while the production of tourism requires relative more biodiversity. Next, assume that these countries engage in international trade. In a Heckscher-Ohlin world, international trade will force the individuals in the two countries to specialize according to their comparative advantage. Thus, country B focuses on the production of tourism, while country C produces relative more machines. The trade implications of this model are the following: country B exports tourism services via mode 2 of GATS (consumption of foreign services abroad). In exchange for the consumption of tourism, the citizens of country C export machinery.

Now it will be assumed, that B has a lower GDP per capita than C. The question is how the GDP per capita of B can converge to the higher one of C. To reach the targeted convergence, B must show a higher rate of GDP-growth $\dot{x}_B$ than C ($\dot{x}_C$). To understand the growth dynamics consider two different interpretations, a short-term and a long-term interpretation. For the short term interpretation, consider at a certain point of time $t < t_1$, not all $BD$ is used in country B, so that $b \leq \bar{b}$, where $\bar{b}$ is the upper bound of the biodiversity production rate.[6] In the short run a maximum economic utilization of biodiversity in country B ($b = \bar{b}$) tends to result in a higher rate of GDP-growth in B than in C ($\dot{x}_B > \dot{x}_C$). So, a complete utilization of the (slowly regenerative) biodiversity in country B up to $\overline{BD}$, tends to support a convergence of the GDP-growth rate $\dot{x}_B$ to the upper limit $\bar{x}_B$, where an increase of $\dot{x}_B$ is impossible. For this to happen, the absolute supply of tourism services and respective tourism receipts have to increase with the abundance of biodiversity.

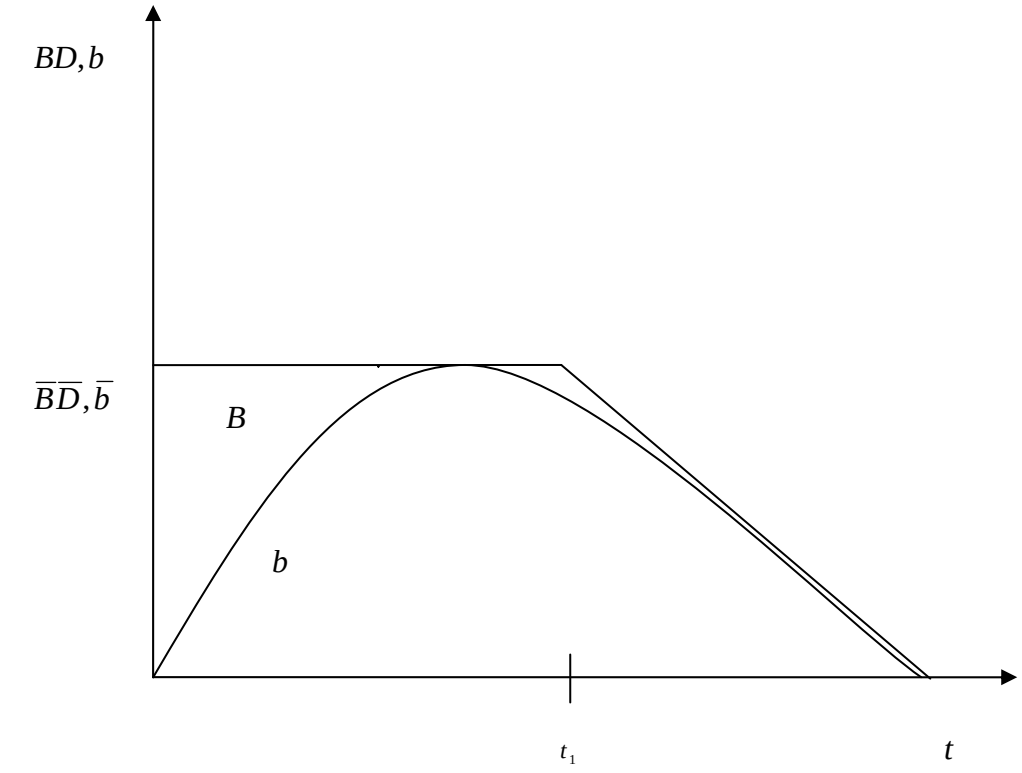
From the point of time $t_1$, an additional utilization of biodiversity leads to an overuse of that resource, in other words the consumption rate of biodiversity by the tourism industry is higher than the regeneration rate of biodiversity. Over time, this results – because of a decrease of the natural endowment of biodiversity $\overline{BD}$ (and therefore a lower biodiversity productivity rate $b < \bar{b}$) – in a lower GDP-growth rate in country B than in country C ($\dot{x}_B \leq \dot{x}_C$). The incremental degeneration of biodiversity which

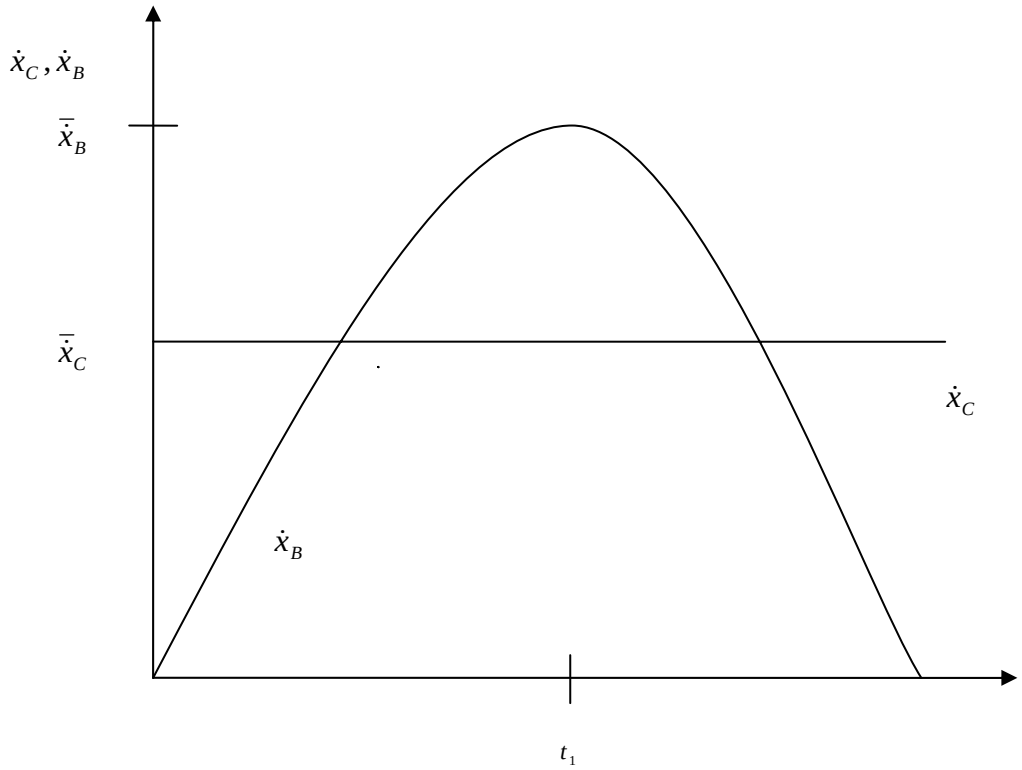
[6] E.g. not all parts of the country are ready to offer tourism services.

involves a decrease of the comparative advantage for tourism in B is the reason for this development.

Figure 1 points out to this development. Country B exploits its natural resource and generates an increasing productivity. Until $t_1$, the growth rate of GDP increases and income convergence to country C (whose GDP-growth rate remains constant) takes place. From $t_1$ on, the resource is overused. Productivity and growth decline. Instead of a convergence, the income divergence to country C increases after that. Consequently, in this interpretation a long run GDP growth as a result of the specialisation on tourism is impossible.

***Figure 1: Over Utilization of Biodiversity and Convergence***



In contrast, the long-term interpretation relies on a “terms of trade effect”. In other words, tourism is beneficial for growth if the international terms of trade move in favour of tourism services. In this case a higher rate of GDP-growth in B than in C ($\dot{x}_B > \dot{x}_C$) and therefore a convergence from B to C is possible. It may be accepted that tourism is a superior or luxury good, such that consumers’ preferences increase strongly by increasing income (income elasticity of demand higher than one) (Brau, Lanza and Pigliaru 2003, S. 16; and Eilat and Einav 2004, p. 1325). Furthermore there is a low price elasticity of demand at least aside from mass tourism.[7] The consequence is a terms of trade “improvement” in country B as an increase of the relative price of tourism by increasing world GDP. In other words, an increase of GDP in country C tends to result in a higher demand for tourism, which is produced by country B and this causes a relative rise in prices for tourism.

Unlike the short-term interpretation, this second mechanism – not crucially based on output expansion – tends to make sustainability of tourism-based development in B and therefore a convergence to C without a higher utilization of biodiversity (e.g. $b \leq \bar{b}$) in the long run possible. However, this result demands the development of sustainable tourism, which is using but is not overusing biodiversity ($b \leq \bar{b}$).[8] In Figure 2, the level of $BD$ remains constant and the gdp growth rate $\dot{x}_B$ increases beyond $t_1$.[9] Hence, constant biodiversity is a necessary condition in this model, which then attracts sustainable tourism and an expansion of tourism products with low price elasticity of demand. Interpreted in terms of a trade model, tourism receipts are negatively correlated to an endangered biodiversity.

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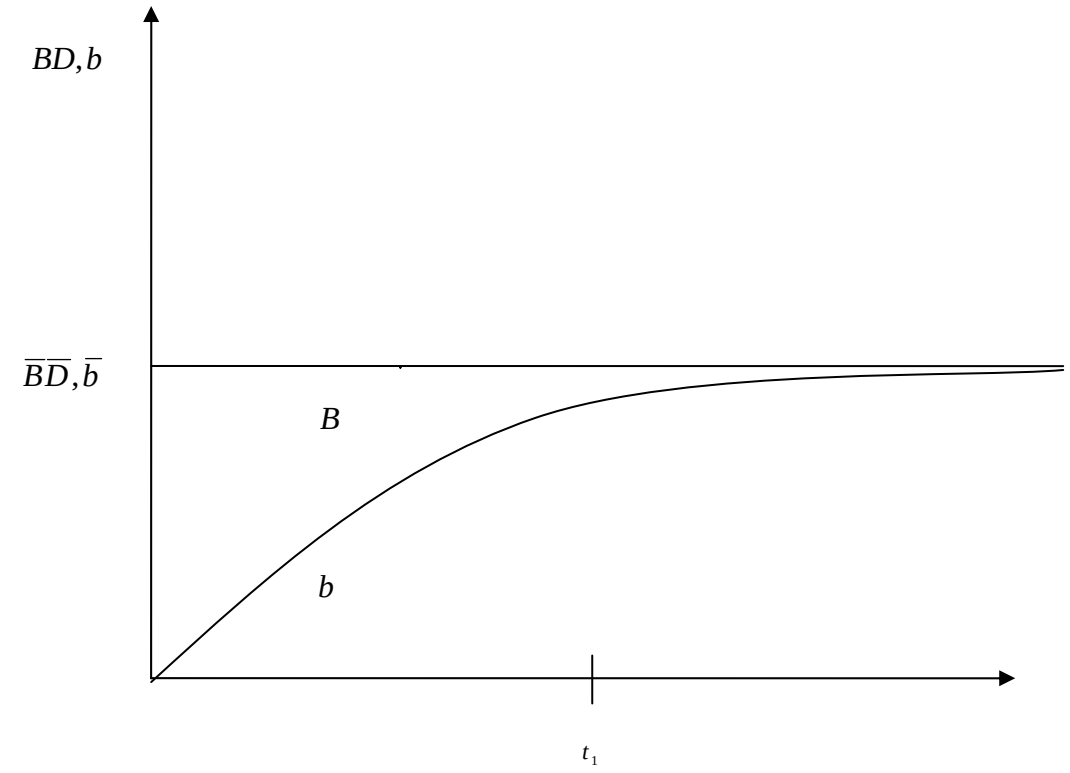
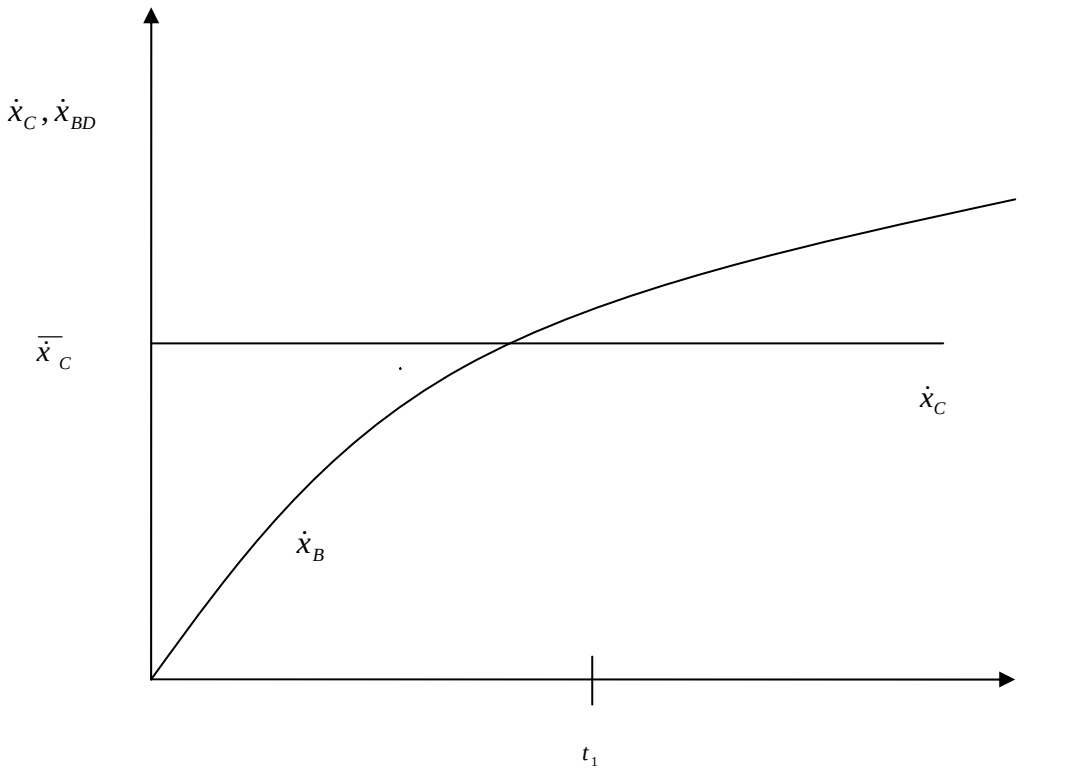
7 Eilat and Einav (2004) find empirically that there is a low price elasticity of demand for tourism to low GDP destinations, in which tourism are typically no mass phenomena. Eugenio-Martin et al. (2004) find in an empirical study about the determinants of demand for tourism in Latin America, that the relative price of goods and services in a destination is not relevant for the demand of tourism.

8 While biodiversity is a common good (competition in consumption) “biodiversity watching” is a public good (no competition in consumption).

9 There may be a point in time far beyond $t_1$ when growth in country B is deteriorating again as convergence in proceeding. This is not covered by Figure 2.

***Figure 1: Regeneration of Biodiversity and Convergence***



## Section 3: Empirical Evidence

This section of the paper is dedicated to assess the three basic hypotheses of our theoretical section. First, we claim that countries with abundant biodiversity endowment are likely to export tourism services; they attract high tourism receipts because they have a comparative advantage in tourism services. In other words, there should be a positive correlation between the degree of biodiversity and a measure reflecting comparative advantage, namely the revealed comparative advantage (RCA) for the tourism industry T in country $i$ in the year 2003. The RCA-index is calculated as follows: $RCA_{Ti} = \ln \frac{X_{Ti} / M_{Ti}}{\sum X_i / \sum M_i}$, were $X_T$ are the inbound tourism receipts, $M_T$ are the outbound tourism expenditure, both reported by World Tourism Organization (2005); and $X$ respectively $M$ are the total amount of goods- and services exports and imports (source is World Trade Organization 2005) of country $i$. This hypothesis will be assessed by estimating the influence of proxies for biodiversity and some control variables on the RCA in a cross country analysis using a simple OLS model.

A second main hypothesis reflects the short-term perspective of a biodiversity abundant country. Assuming that a permanent biodiversity loss diminishes the growth perspectives of the very country we assess, how a proxy for potential biodiversity loss influences the inbound tourism receipts per capita for 2003 $TR_i$ as reported by the World Tourism Organization (2005). For this estimation, we expect a negative sign. The necessary data are available for more than 160 countries and seem uncontroversial.[10]

The third hypothesis of the theoretical section is that sustainable tourism is a superior good and can "in the long run" create sustainable development, if the regeneration of the natural resource $BD$ is taken seriously. We assess whether the absolute amount of inbound tourism receipts per capita is determined by the same exogenous variables as above, with the exception that we use a proxy for biodiversity instead of one for biodiversity loss. We expect a positive influence of biodiversity on inbound tourism receipts. A challenge of future research is to run a cross-country regression about the price and income elasticities of sustainable tourism.

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[10] Trade data are from the World Trade Organization (2005).

The most important exogenous variables (variable BIRDS and ENBIRDS) as proxies for biodiversity and its loss respectively are measured by the number of birds living (and breeding) in the country for the year 2003, as documented by BirdLife International (2005). Birds are suitable indicators for biodiversity for several reasons (Riecken 1992, Boening-Gaese and Bauer 1996, Plachter, Bernotat, Müssner and Riecken 2002, Gregory et al. 2003, BirdLife International 2004), especially for studies on a global scale (Bibby et al. 1992, Burgess et al. 2002):

- Individual birds usually have large home ranges in complex habitats that require specific structures for several parts of the life-cycle (e.g. nesting sites, hibernation sites). Thus, they respond often very sensitively to changes in their habitat (e.g. due to economic efforts or due to nature protection efforts).
- Many species are carnivorous, representing high positions in the food chain. Thus, they also need a complexly structured habitat fulfilling the requirements for a high prey density. Consequently, many species are considered as "flagship species" (Lawton et al. 1998) whose presence indicates the presence of a species rich animal and plant community.
- Birds may represent the best-known animal taxon, and an avifauna is usually available not only for countries, but also for other geographical or political units.
- The number of bird species can not be politically instrumentalized (Metrick and Weitzman 1998; Rawls and Laband 2004), as long as the counting is done correctly.

In addition to BIRDS, we calculate the ratio of endangered birds to all birds in a country (variable ENBIRDS). The list of endangered birds is applied world-wide. Therefore, even if some distortions are in the list, this holds for all countries similarly. The variable BIRDS is expressed as number of bird species in relation to the size of the country in square kilometres (km), as it is done by Asufu-Adjaye (2003). Other exogenous variables are the following:

- real GDP per Capita in current $ for the year 2000 (GDP2000) and 2003 (GDP2003), source is Heston, Summers and Aten (2002) and IMF (2005),
- the length of the coast line (in km) in relation to the size of the country in square km (COAST), source is CIA (2005),

- the number of UNESCO world heritage sites in relation to the size of the country in square km (WHS), source is UNESCO (2005)
- the distance of the country to the equator in grad (EQ) as a proxy for differences in climate, source is CIA (2005),
- life expectancy (LE) as a proxy for the safety of a destination, source is CIA (2005).

Because it is apparent that the variables are very heterogeneous we generally run a White – Heteroskedasticity Residual Test. These tests approve our assumption. Thus we use an estimator robust to heteroskedasticity. Although this estimation technique produces higher standard errors and therefore lower t-statistics in our sample, the significance of the following regression results is high.

*a) Biodiversity and comparative advantage*

The first hypothesis suggests that biodiversity is influencing the comparative advantages of countries. The higher the biodiversity abundance in a country, the higher is the RCA index for tourism in this country. We add the current GDP per capita as proxy for the state of development (expected sign negative), the number of World heritage sites (positive) and the length of the coastline (positive) as control variables. For a test of this hypothesis, we apply the following OLS estimation:

(1) $$RCA_T = ß_0 + ß_1 BIRDS + ß_2 GDP2003 + ß_3 WHS + ß_4 COAST + \varepsilon$$

***Table 1: Biodiversity and Revealed Comparative Advantage***

| | RCA | RCA | RCA | RCA |
|---|---|---|---|---|
| **Constant** | 0.129*** | 0.835*** | 0.717*** | 0.699*** |
| **BIRDS** | 2.632*** | 2.79*** | 2.803*** | 2.441*** |
| **GDP2003** | | -3.45E-05*** | -3.02E-05*** | -3.01E-05*** |
| **WHS** | | | -41.3 | -56.9 |
| **COAST** | | | | 0.5* |
| **R²adj** | 0.122 | 0.225 | 0.221 | 0.223 |
| **N** | 126 | 125 | 124 | 124 |

Source: see above.

The interpretation of Table 1 is fairly simple. The abundance of biodiversity has a positive impact on the RCA-index. Countries with a rich biodiversity have a comparative advantage in tourism services and are able to exploit it. At the same time, these countries have a relatively low GDP per capita, implying that the potential for convergence is given. Both results make sense and are in line with the theoretical reasoning. These two results remain robust, even if we introduce further control variables, i.e. the number of UNESCO world heritage sites and the length of the coast. The latter variables do not improve our estimates, which is probably due to the fact that the RCA index is directed at relative trade flows. The variables may rather influence absolute flows (Tables 2 and 3). The rather low R²adj reflects the fact that the RCA index contains much more information than just tourism data.

*b) Biodiversity and tourism receipts: the short-term perspective*

The next function we estimate can be interpreted as an aggregate demand function for tourism services by foreigners. As we take the short term perspective, we analyze the loss of biodiversity. We expect a negative impact of potential biodiversity loss, namely the share of endangered birds in all birds living in a country, on inbound tourist receipts per capita. The additional determinants of inbound tourism receipts of

a country depend on roughly the same exogenous variables as in model 1. However, we expect that the GDP per capita in the host country is positively influencing inbound tourism receipts per capita, as foreigners expect certain standards in the host country. As tourists plan some time in advance, we use dates of 2000. Similarly, life expectancy can be interpreted as proxy for personal security (positive). The distance to the equator increases the attractiveness for tourist. Again, we use an OLS regression model:

(2) $$TR_i = ß_0 + ß_1 ENBIRDS + ß_2 WHS + ß_3 GDP2000 + ß_4 LE + ß_5 EQ + ß_6 COAST + \varepsilon$$

The results are encouraging with respect to our second hypothesis. Potential biodiversity loss discourages international tourism; the result is robust when other variables are added. The same holds with the positive impact of GDP on inbound tourism receipts and the number of world heritage sites. Whereas the latter are attracting foreign demand for domestic tourism services, potential biodiversity loss is deterring. However, the explanatory of other variables (with the exception of life expectancy) is low.

***Table 2: Endangered Birds and Tourism Receipts: Empirical Evidence***

| | **TR** | **TR** | **TR** | **TR** |
|---|---|---|---|---|
| **Constant** | -26.9 | -856* | -874*** | -1,149*** |
| **ENBIRDS** | -1,884* | -3,035* | -2,896** | -4,616** |
| **WHS** | 208,256*** | 273,977*** | 276,187*** | 275,827*** |
| **GDP2000** | 0.045*** | | | |
| **LE** | | 21.78*** | 22.28*** | 28.33*** |
| **EQ** | | 0.029 | -0.58 | |
| **COAST** | 1,488* | 85.9 | | 198.3 |
| **R²adj** | 0,7573 | 0.4895 | 0.4872 | 0.37 |
| **n** | 122 | 149 | 149 | 161 |

Source: see Table 1

*c) Biodiversity and tourism receipts: the long-term perspective*

Again we estimate an aggregate demand function for tourism services by foreigners, employing the same exogenous variables to explain inbound tourism receipts of a country. Instead of biodiversity loss, we employ actual biodiversity abundance (BD). We expect a positive influence from the incidence of bird species to inbound tourism receipts per capita. For the rest of the variable we expect the same outcome as for model 2. Again, we use an OLS regression model:

(3) $$TR_i = ß_0 + ß_1 BIRDS + ß_2 WHS + ß_3 GDP2000 + ß_4 LE + ß_5 EQ + ß_6 COAST + \varepsilon$$

*Table 3: Biodiversity and Tourism Receipts: Empirical Evidence*

| | TR | TR | TR | TR | TR | TR |
|---|---|---|---|---|---|---|
| **Constant** | -167.0** | -167.2** | 610.8*** | -1118.3*** | -26.75 | -24.4 |
| **BIRDS** | 2,015.2** | 2,000.4** | 2,440** | 2,399** | 2,629.7** | 2,638.7** |
| **WHS** | 243,171*** | 242,085*** | 236,181*** | 224,850*** | 238,892*** | 239,252*** |
| **GDP2000** | 0.047*** | 0.044*** | | | | |
| **LE** | | | 10.29*** | 22.03*** | | |
| **EQ** | | | 8.54* | | 12.41*** | 12.36** |
| **COAST** | | 27,84 | -0.22 | 67.65 | 11.1 | |
| **$R^2$adj** | 0.7825 | 0.7878 | 0.530 | 0,3868 | 0.527 | 0.532 |
| **N** | 123 | 123 | 150 | 162 | 150 | 150 |

Source: see Table 1.

The results in Table 3 do indeed support the third hypothesis. Those countries rich in biodiversity are attracting high inbound tourism receipts per capita. High GDP per capita or high life expectancy[11] and a huge number of world heritage sites are also important for the demand for tourism as tourists care for complementary goods and services. Other variables do not add much to the explanatory power of the model.

## 4. Conclusions

In this paper we discuss how biodiversity contributes to trade structures and economic growth. While we are able to find a robust positive impact of biodiversity on the comparative advantage in tourism services in poor countries, the potential of sustainable tourism can be seen indirectly via absolute inbound tourism receipts per

[11] As in regression model b) we do not use GDP2000 and LE simultaneous in the same estimation because they are highly auto correlated.

capita. These are positively influenced by the richness of biodiversity and negatively determined by a potential biodiversity loss. These results support our growth model although they do not provide strong evidence. Further research is necessary to learn more about price and income elasticities for sustainable tourism. Nevertheless, our results give us an indirect and encouraging hint that it makes sense for developing countries to preserve their biodiversity or even to invest into more biodiversity.

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## Appendix A: Countries included in the Analysis

Afghanistan
Albania
Algeria
American Samoa
Andorra
Angola
Antigua and Barbuda
Argentina
Armenia
Aruba
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh
Barbados
Belarus
Belgium
Belize
Benin
Bermuda
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil
Brunei
Bulgaria
Burkina Faso
Burundi
Cambodia
Cameroon
Canada
Cape Verde
Cayman Islands
Central African Rep.
Chad
Chile
China
Colombia
Comoros
Congo, Dem. R.
Congo, Rep. of
Costa Rica
Cote d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Denmark
Djibouti
Dominica
Dominican Rep.
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Estonia
Ethiopia
Fiji
Finland
France
French Polynesia
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guam
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
Hong Kong
Hungary
Iceland
India
Indonesia
Iran, Islamic Rep.
Iraq
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kiribati
Korea, DPRp
Korea, Republic of
Kuwait
Kyrgyzstan
Laos
Latvia
Lebanon
Lesotho
Liberia
Libya
Liechtenstein
Lithuania
Luxembourg
Macao
Macedonia, FYR
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Mauritania
Mauritius
Mayotte
Mexico
Micronesia
Moldova
Monaco
Mongolia
Morocco
Mozambique
Myanmar
Northern Marianals
Namibia
Nepal
Neth. Antilles
Netherlands
New Zealand
New Caledonia
Nicaragua
Niger
Nigeria
Norway
Oman
Pakistan
Palau
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Puerto Rico
Qatar
Romania
Russian Federation
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Samoa
San Marino
Sao Tome and Principe
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
Solomon Islands
Somalia
South Africa
Spain
Sri Lanka
Sudan
Suriname
Swaziland
Sweden
Switzerland
Syria
Taiwan
Tajikistan
Tanzania
Thailand
Togo
Tonga
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Uganda
Ukraine
United Arab Emirates
United Kingdom
United States
Uruguay
Uzbekistan
Vanuatu
Venezuela
Vietnam
Virgin Island
Yemen
Zambia
Zimbabwe

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