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THE DETERMINANTS OF INTERNATIONAL TOURISM AND THE RESTRICTIONS TO THE INCLUSION OF DEVELOPING COUNTRIES:

A COMPARATIVE ANALYSIS OF SOUTH AMERICA, AFRICA AND SOUTHERN ASIA

ABSTRACT

This research aims at identifying the determinants of the international tourism flow and diagnosing the main restrictions on its expansion in developing countries. The researchers made a comparative analysis of South America, Africa and Southern Asia specifying the determinants of international tourism flow applying an econometric tool in order to establish empirical evidence. The analysis was based on panel models due to its adequacy for identifying prominent factors in a generalized form. Furthermore, this paper discusses the performance of South American, African and South Asian countries in international tourism, regarding to their determinants. We ought to identify the empirical coherence of these general determinants and to compare the specificities and homogeneity of these regions comprising developing countries. This study concluded that income is a fundamental determinant to explain the emission of tourists and there are signs of a significant elasticity, which is empirically coherent. Regarding tourism attractiveness, we found out that the relevant roles of a country security risks and development level could be estimated by the Human Development Index - HDI. The comparative analysis of South America, Africa and Southern Asia revealed that the performance of their countries was consistent with the general determinants due to their conditions, for example, their distance from the richer countries. Furthermore, it should be understood that new differentiated tourism products can generate a displacement of the demand for the even. However, they should not ignore the steps they will face otherwise it could result in an overestimated expectation regarding the tourism potential of a country.

KEY WORDS: International Economy, International Tourism, Economic Development, Regional Economy, Developing economies

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1 - INTRODUCTION

The international tourist activity is characterized by the people's locomotion among countries, originating from a social phenomenon extremely related to the economical factor. In agreement preliminaries data of the World Tourism Organization -WTO, during the year of 2002, the international touristic flow, through which is possible to obtain revenue or to generate exchange expenses, was of approximately 702,6 million people, generating a medium revenue of US$ 675 by tourist, equivalent a total of US$ 475 billion of entrances with this activity. (WTO, 2003)

The touristic activity presents among other important peculiarities, the need of the consumer's locomotion to the place in that the goods and tourist services are being presented, what differs it from the mainly lines of international trade, which happen through the locomotion of the goods and not of the consumers. This happens because the services are characterized by the occurrence of the production and consumption at the same time and place.

However, in spite of the relevance in the world economy and the important multiplier effect with relationship to the employment generation, income, tribute and exchange revenue, the growth of tourism generated different results around the world. It is possible to verify a concentration of the international tourism flow in the developed countries, or in areas near to these countries.

Beyond the income and the availability of time through the labor legislation enabling the emission of tourists by the developed countries, there are some other factors that also act in the tourist attraction for these countries. Among them, the own geographical proximity of the other developed countries, which presents a larger demand capacity; high human development indexes, favorable conditions with relationship to the tourism supply (mainly related to the built tourist attractions), accessibility (through technologies related to the locomotion means, reducing the time and the cost of the trips, as well as to a better access to the information of the destiny), diversification of the supply (related to the largest amount of options of goods and services in a certain destiny), articulation of the section and larger safety in the destiny.

These factors tend to restrict a larger participation of the developing countries in the international tourism flow. The result is that the economical benefits generated by this activity has been concentrated on the advanced economies, which in a general way are located in North America and West Europe, with some exceptions, such as Asia and Oceania.

Besides they lead the emission international tourists market, what could be explained by their condition of higher income, the developed countries also stayed ahead of the receptive flow, what would not necessarily be explained by the same reasons, although these can be correlated. This demand would be in function of the income of other countries and of other factors that restrict the access of the developing countries in the international tourist activity.

South America, Africa and Southern Asia represent 1/3 of the world territory approximately. According to WTO (2003a) they would receive less than 7% of the international tourists and approximately 10% of the tourist revenue in the year 2000, On the other hand, there are nine countries that are among the top fifteen issuing and receiving, which are responsible for approximately 50% of the expenses and tourist revenues generated by the international tourism flow: USA, Germany, United Kingdom, France, Italy, China, Canada, Austria and Switzerland.

With few exceptions the developing countries have been reaching little insertion in the international tourism flow. Although the nineties has demonstrated larger growth rates of this activity at international level in the poor and developing countries, this participation is still little representative. There are some aspects related to the dynamics of this sector that need to be better understood. Although they present comparative advantages in natural attractions, the developing countries need other conditions to develop these advantages in welfare to the local community's through the economical effects generated by the tourist activity.

The main goal of this paper is to identify the determinants of the international tourism flow, looking for to diagnose the main restrictions to the expansion of this subject in the developing countries. A comparative analysis for South America, Africa and Southern Asia will be used

The hypothesis is that the amount of international tourists received by countries is function of: the abroad income; geographic distance from the consumer's potential market[3]; the degree of human development; the tourist supply conditions and tourist technology[4]; the cultural similarity with the issuing centers; the commercial relationships and attractiveness of businesses with the other countries; the articulation of the section?; price and safety.

The countries of South America, Africa and Southern Asia have limitations in these factors that restrict their participation in the international tourism market. However they have

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[3] given by the capacity of tourist emission for another countries
[4] given by the attractiveness, diversification and accessibility

a great potential due their natural attractions.

The present paper **is** structured in six sections included this introduction. The section 2 treats the conceptual subjects of the tourist activity, demonstrating the important differences from to the international trade of goods. The section 3 approaches a reference on the principal determinant of the international tourism. The section 4 presents the results of some econometrics tests. The section 5 makes a comparative analysis among the areas of South America, Africa and Southern Asia, identifying the restrictions on the insert of these countries in the international tourism and the section 6 makes a summary of the main conclusions.

2 PARTICULAR CHARACTERISTICS OF TOURISM IN THE INTERNATIONAL TRADE

The economical results by the tourist activity have importance through the generation of income, tributes, investments and mainly vacancies. The significant growth of the tourist activity also happened in its larger relevance in the international trade. In agreement with data presented by RABAHY (2003), in a relationship between tourist revenue and world exports, this sector passes of a participation of 3,6% in 1950 for an average of 8% in the nineties.

In the last fifty years the growth of the touristic activity was larger than real GDP growth along this period, except for the years 1982 and 2001, both of recession when the variation of the number of tourists was smaller than GDP. At the same time besides these years, joins 1958, 1996 and 1997 when the variation of the revenue by this sector was smaller than the real GDP growth. (OMC, 2003 & WTO 2003)

The faster growth of the touristic activity could guarantee an important position in the international trade, as in GDP of several countries, through the foreign and domestic tourists flow. According to EILAT & EINAV (2003) with base data of WTO, it's an intensive industry labor, using more than 100 million people, only by international flow. The expectation is that in 2010, the international trips will generate a superior revenue to a trillion dollars. Besides, there is also the internal tourism that maintains an important paper in the generation of income and vacancies, turning more expressive the results of this activity.

In agreement with the World Tourism Organization (WTO), tourism comprehends the activities accomplished by the people during trips and permanence in places different from the ones spill habitual, for a period of inferior consecutive time to one year because of leisure, businesses and other, not related with the exercise of a paid activity. The use of this wide concept, allows to identify so much tourism among countries as tourism inside of the own

country, referring the all the activities of the visitors, including tourists (visitors that stay overnight) and visitors of the day (excursionists that don't stay overnight). OMT (2003f)

The tourism is fundamentally an activity of services and as per definition, these activities are characterized by the fact of the production and consumption happening at the same time. Once domestic's or international visitors concept excludes those that have as a main purpose of the visit, the exercise of an activity remunerated at the country or visited place, this will be transferring demand for this place, without transferring their labor supply. That is, the income for the visitor to demand goods and services occur of a different place then the one visited.

The touristic activity has some important specificities, to which can be analyzed by the microeconomics. In a general way, the process of the individual's choice for an international touristic destiny begins before the contact with the services and products to be consumed, being characterized by two stages.

In agreement with ANDRADE (2003), we cannot considerate the specificities of the tourism and the adoption as models of tourist demand, using a general microeconomic theory once it has not been taking to empiric results satisfactory, as it can be seen in the works accomplished by ATHYAMAN (1997) and LIM (1998).

Two significant factors in this process are the budget restrictions and the time. According to MORLEY (1992), the referring restrictions at the time are given by the equation (1):

$$t + t' \leq T \tag{1}$$

Where: t: time of displacement (traffic); t': worn-out time in the destiny; T: potential time to be worn-out in tourism.

Proceeding with the model of MORLEY (1992), the income can be spend in amounts q at prices p, or in tourism. However, expenses in tourism request the payment of the necessary transport to the displacement, f, expenses in the trip, plus the price, for unit of time worn-out with tourism (excluding the time of traffic). Therefore, the budget restriction is presented by the equation (2):

$$p'. q + c_0 + t^\wedge . f \leq Y \tag{2}$$

Where: p': vector of the price of other goods; c0: price for unit of worn-out time with tourism; t ^: worn-out time in the traffic; f: expenses with transport.

These specificities are worthy enough to explain the process of choice of the touristic destiny, once the expense with transport tends to be directly related to the distance and it climbs of the flow, mainly in the case of the aerial transport and mainly, for this to be

quite important in the basket of the tourist's consumption.

Based on the theory of the analysis benefit/cost presented in FRANK (1997), in case of the international tourism it is taken as that the individual will analyze the costs in detriment of the happening benefit of the same. This trip will happen if the benefit will be larger or at least the same of the opportunity cost of accomplishing it and if the individual has an income and available time for this consumption.

Therefore, it can be said that the demand for international tourism is represented by the following function:

DTI = f (y, t, p', q, c$_0$, f,α)   (3)

Where:

DTI: international tourism demand; y: income; t: available time for trip, α: another variable considered in the benefit/cost analysis.

Therefore, given that f and t' tend to be correlated with the distance of the destiny place to be visited, the option for distant destinies tends to turn expensive, in order that this choice allows the restrictions of time and income to become a relevant issue while searching for the closest option, what would explain the regional characteristic for this activity. This approach is easily figured while based in the economical cost generated by the distance, presented by POLÈSE (1998). Regarding the analysis of the individual's choice for a destiny, the illustration 1 demonstrates the process of two stages in which the tourist is taken to act.

Illustration 1 - Process of destiny choice
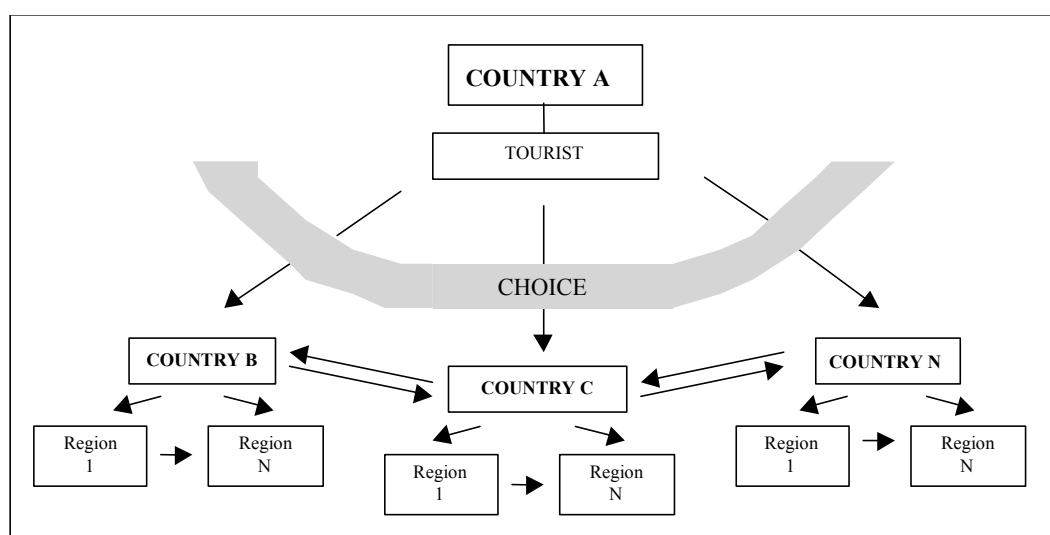
Source: elaborated by the author

In agreement with the illustration 1, as a first moment the international tourist chooses for a certain country, followed by the choice for areas (places) inside of this country.

Most of the time, the process heads a direct way, in other words, once the tourist receives an offer for a certain product in a city, the tourist can choose the area directly to be visited, being implicit the country, in which it's located. Once the destiny has been chosen, the products and services will compose the consumption set, restricted for that certain supply place.

However, this chosen process presents some important peculiarities. First, there is an information asymmetry on the destiny to be visited. This, because the tourist of the country A, will only have contact with the products and services of the countries B, C or N, starting at the moment that he/she will be at this place. In this sense, the perception regarding to the supply conditions in the destiny, becomes fundamental, in way that it will compose the expected benefits for the tourist, through the trip to be accomplished.

In most cases, this information asymmetry conducts the individual's choice for places already known or already visited for persons he/she can trust on, explaining the importance of the cultural proximity, the behavior of those whom the tourist has contact, of the agencies and operators of trips. As well as in other sectors of the economy, the information in this activity can be considered imperfect. This fact can become a limitation so that the tourist can maximize its usefulness, acting in agreement with the beginning of the economical rationality. Therefore, the perception regarding to the factors considered in the analysis benefit/cost are fundamental.

In this case, the country's development could be considered as a reference of good supply conditions assured by the destiny, the same happens with safe relationship and the cultural proximity. Besides these, there are another specifics factors to the touristic activity related to the attractiveness degree, supply diversification, accessibility to the destiny and special events, which will be considered as benefits.

Through this discussion, it is possible to establish some significant differences between the international trade of goods and the one of tourist products, what strengthens the relevance in analyzing the specificities and the impact of this activity. First, when transferring their needs to the visited place, the tourists won't be consuming a specific type of product, but, a set of goods and services characterized as a composed product.

In this case, for treating a composed product by several services, the tourism is considering a labor intensive activity, having an important function in the employment. If economical impacts promoted by this activity wakes up the public and private interests in this sector, there are some different forms of trading goods, some characteristics can make it more complex in comparison to the other sections. First, the fact of being accomplished through the consumer's locomotion and not through the product, the tourist's demand of a certain variety

of products can not be consider so much important while trading goods, just as safety and development of the destiny. Close to that, the transport cost tends to be more important in the total participation of the expenses, checking this as worthy to the geographical estrangement.

3 THE DETERMINANTS OF THE INTERNATIONAL TOURISM FLOW

If when analyzing the international commercialization of goods the relative prices and the income of the foreign country is the decisive principal, there is a significant difference regarding the trade of international tourism. The safety, the climate, the infrastructure, the natural attractions, the cultural proximity, finally, factors that are not considered or they are less important for goods´ consumer and goods mattered at your residence place, but that become extremely important in an international trip.

Besides, treating of a composed product, an international tourist destiny tends to differ at least for some of the factors that it is composed. There will be always a difference among the climate, architecture, culture, culinary, landscape or location, although they are considered as products easily substitutes. By the way, in this activity, as larger as the distance takes, adults tend to be the participating of the transport costs in the total of the expenses with trips, as well as the time spent in displacement. Although this rule is also valid for the case of the goods, the difference is that the cost with people's transport and the time spent for them tends to be more important than the one of goods, turning this into a more representative variable in the first case. Given that the available time for trip tends to be an important restriction, this reinforces the relevance of this variable.

In agreement with FRECHTLING (1996, p.135) the emission factors, could be explained for: a) - Size of the population; b) - Per capita income and tendency of the income; c) - Distribution of income; d) - Educational distribution; and) - Age distribution; f) - Time destined to the leisure; g) - Family structures; h) - Moment.

On the other hand, the attraction factors would be given for: a) - Friends and relatives; b) - Climate; c) - Commercial relationships; d) - Cultural relationships; e) - Marketing programs and promotion of the destiny; f) - Distribution channel; g) - Attractiveness of the destiny; h) - Special events; i) - Complementary destiny; j) - Habits;

Resistance factors, given by: a) - Prices; b) - Competitors' actions; c) – Supply capacity; d) - Distance; e) – Trip time; f) - Controls of entrance to foreign coins; g) - Border formalities; h) - Wars, terrorism, crime (insecurity); i) - Possibility of natural disasters; j) - Physical barriers to the entrance.

There are two fundamental variables to be explained regarding the identification of the determinants in international tourism flow. First, relating to the emission factors, in other words, amount of tourists emitted by the country (QTIo). Second, relating to the attraction factors, amount of foreign tourists that arrive at a country (QTId), especially because while explaining the reasons a country has become an issuing center, it is related to the geographical proximity with this country an important condition to consolidate in a receiving center.

EILAT & EINAV (2003) presented an important diagnosis on the determinant of the international tourism, being used by an analysis of panels data, in which the origin, the destiny and the flow are considered among equal countries, looking forward to detect some differences between those of high income and the others. The study concludes that the developed countries have an elasticity regarding the unit price, while the international tourism in the developing countries tends to be less sensitive to the price flotation. The risks figured regarding to the destiny, can also be presented as being an important in the electric outlet of decision, for both, developed and in development. Another variant, as the borders and languages in common are verified also in the determination of the tourist flow. There is a significant progress on the diagnosis of the determinant of the tourist activity in the study presented by ELIAT & EINAV (2003), however, like they've own recognized, it is treated as a first step in this direction.

4 ECONOMETRIC APLICATION FOR EXPLANATION OF THE DETERMINANTS OF THE TOURISTIC FLOW

Based in the variables presented as determinant, the econometric becomes important for the accomplishment of empiric tests, which look forward to verify the effects of the same ones as determinant of the international tourism flow. The econometric approach which one was demonstrated as the one more appropriated regarding to the needs of this work was the panel data model. Because when referring to the determinant of the international tourism it becomes important to consider the behavior of the units cross-section (the countries) along the time and in this case it would become necessary the use of a process in pooling, considering the individual heterogeneity.

The use of panel data allows conjugating the diversity of individual behaviors, with the existence of adjustment dynamics and it allows identifying and measuring effects that won't be detected exclusively in time series or cross section. In this case, it would fit choosing among effects fixed or alternated. In agreement with VERBEEK (2000, p. 318), "*This interpretation is probably more appropriated when it denote countries, (large) companies or*

elaborate, and predictions we want to make plows it is the private country, company or industry ", referring to the models of fixed effects. Therefore, generally in the macro econometrics studies, it will be impossible to see a sample of N countries as a random selection of a population with dimension tending to infinite; it becomes evident that the right choice is the specification with fixed effects, as it is protected in JUDSON & OWEN (1996).

In this case, choosing by using the model with fixed effects, considering the problem here treated more approximate of these characteristics, approximately 100 countries along the time will be analyzed. Emission models and attraction of the international tourist flow were specified, turning the relative variables to the population of the country in reference.

Regarding the tourists emission, it was considered with explained variable the per capita tourist emission, understood as the percentile of the population of the country that consumes international trips.

When trying to simplify the behavior of this variable through a model, looking for the principal decisive factors by empirical analysis, the restriction was had regarding to the use of some variables, which don't tend to change along the time. In this case, these "no observed" variable by the model (former. territorial extension, division of income) will be considered as fixed effects and they will be represented by the intercepts to each country.

The amount of per capita tourists issuing by country is explained by the equation (4).

$$(4) \quad qte_{it} = gnp_{it}\beta^1 + P_{it}\beta^2 + PPP_{it}\beta^3 + \alpha_{it} + \varepsilon_{it} \quad where\ t=1,..,T\ and\ i=1,...,N$$

Where: qte_{it}: reason among the amount of tourists emitted by the country i in the time t and population of the country i in the time t; gnp_{it}: per capita income of the country i in the time t; P_{it} proportion of the population above 65 years in the country i in the time t; PPPit: conversion factor of Purchase Parity Power of the country i in the time t: α_{it}: intercept of each individual cross-section ε_{it}: term of random residue.

In this case, the reason among the amount of tourists emitted by the country i in function of the population of the country i (qte_{it}) in the period t, is explained by the equation (5). The parameters will be the same ones to all the countries, being just differentiated the fixed effects, represented by the intercept of each individual cross-section.

Besides favoring the analysis demonstrating the elasticities, the transformation of these variables in log favors the econometric results when softening the dispersion problem among the units cross section. Therefore, the specification of the model of per capita tourism, it is given by the equation (5).

$$(5)\ \log(qte_{it}) = \beta^1 * \log(gnp_{it}) + \beta^2 * \log(P_{it}) + \beta^3 * \log(PPP_{it}) + \alpha_{it} + \varepsilon_{it}$$

To facilitate the identification of the variables and the origin of the adopted proxies, the table 1 demonstrates the meaning of the denotation adopted above in the equations and the source of the same ones.

Table 1 - Specification of the variables used in the emission models

Variable	Variable / Proxy	Symbol	Expected signs	Source
Explained variable				
1 - Emission of tourists	Amount of tourists that left the country i in the time t divided by the population of the country i in the time t	qte_{it}		OMT (2003) / WDI (2003)
Factors of Emission				
1 – Income	per capita PNB, under the parity of the purchase power	gnp_{it}	> 0	WDI (2003)
2 - Age distribution	2 - Percentile of the population above 65 years	p_{it}	> 0	WDI (2001)
Factors of Resistance				
3 – Parity of the power of purchase	Conversion Factor	ppp_{it}	> 0	WDI (2003)

Source: elaborated by author

First the regression analysis was accomplished to explain the amount of tourists emitted by the countries in proportion to their population, based on the equation (5). In spite of significant coefficients presented, the autocorrelation presence was diagnosed, through Durbin-Watson test, what turns the estimators inefficient and biased.

To correct the problem, the procedure was adopted presented by GREENE (1997, p. 639), applying a partial differentiation (almost-difference), in a way that the specification of the model took the form presented in the equation (6).

$$(6)\ \ dqte_{it} = \beta^1 * dgnp_{it} + \beta^2 * dP_{it} + \beta^3 * dPPP_{it} + \alpha'_{it} + \varepsilon_{it}$$

Where:

dQTE $= \log(qte_{it}) - \rho * \log(qte_{it(-1)})$

dgnp $= \beta^1 * (\log(gnp_{it}) - \rho * \log(gnp_{it(-1)}))$

dP $= \beta^2 * (\log(p_{it}) + \rho * \log(p_{it(-1)}))$

dPPP $= \beta^3 * (\log(PPP_{it}) + \rho * \log(PPP_{it(-1)}))$

$\alpha' \ = \ \alpha_{it}(1-\rho)$

Therefore, based in the equation (6), the model has been used for the regression, looking for determining the amount of emissive tourism per capita, which presented all the significant variables by the tests t and F, with high significance level, 95 cross sections were used (countries), totaling 1.390 observations. The power of explanation of the model is of

87,16% and Durbin-Watson's test has not appeared for the existence of residual autocorrelation. By the way, the procedure adopted to correct the identified problem at first, was satisfactory. The obtained coefficients presented the expected signs, standing out the elasticity found regarding the population above 65 years, which is demonstrated expressive, in comparison to the other coefficients, according to the equation (7).

(7) $\quad dqte_{it} = 0,56 * dgnp_{it} + 1,54 * dP_{it} + 0,12 * dPPP_{it} + \alpha'_{it} + \varepsilon_{it}$

Referring tests were also accomplished to the per capita expenses generated by the international tourism. In this case, the same correction procedures were adopted for the specification, where by the model analysis was verified an income elasticity equal to 1,44, demonstrating strong indications of confirmation the hypothesis that the international tourism is basically constituted by superior goods that it presents a high sensibility front to the variation of the income.

In what concerns the tourists reception, the per capita concept was also used (qtr), which can be understood as the amount of tourists received (QTR) for the country in proportion to the local population (Pop). As well as in the case of the principal determinant of the emissive flow, the factors of tourists reception can be fixed (former. language, natural attractions) or varied along the time (former: IDH).

 It is important to consider that there are factors that vary along the time and they should be considered important to explain the insert of a country in the tourist receptive flow, but they don't possess good available proxies that make possible the inserts as explanatory variables, in a panel model. For instance, the advertisement of a destiny overseas, has been taken through adds and application of marketing instruments. Although this variable is important, there is not a good available proxy for most of the countries used like sample. The specification of the model of the amount of received tourists is the following:

(8) $\quad qtr_{it} = idh_{it}\beta^1 + r_{it}\beta^2 + room_{it}\beta^3 + \alpha_{it} + \varepsilon_{it} \quad$ where t=1,..,T and I=1,..., N

Where: qtr_{it}: reason among the amount of tourists received by the country i in the time t and population of the country i in the time t; idh_{it}: IDH of the country i in the time t; r_{it}: risk offered by the country i in the time t; room_{it}: offer of lodging means for the country i in the time t; α_{it} :intercept individual of each individual cross-section; ε_{it} : random residue.

In this case, just as in the emission model, it was adopted the variables in log, due to the same subjects presented in that case. Therefore, the specification of the model is given by the equation (9):

(9) $\log(qtr_{it}) = \beta^1 * \log(idh_{it}) + \beta^2 * \log(r_{it}) + \beta^3 * \log(room_{it}) + \alpha_{it} + \varepsilon_{it}$

Table 2 - Specification of the variables used in the attraction model

Variable	Variable / Proxy	Symbol	Expected signals	Source
Explained variables				
1 - tourists' emission	Amount of tourists that inside in the country i in the time t divided by the population of the country i in the time t	qte_{it}		OMT (2003) / WDI (2003)
2 - revenue with tourism	Revenue with International Tourism obtained by the country i in the time t divided by the population of the country i in the time t	rt		OMT (2003) / WDI (2003)
Attraction Factor				
1 - HDI	Human Development Index	IDH	> 0	ONU (2003)
2 – Supply Diversification	Apartments Supply	room	> 0	OMT (2003
Factors of Resistance				
3 - Safety	risk Index [5]	r	> 0	EILAT & EINAV (2003)
2 – activity of the power of purchase	Conversion Factor	PPP_{it}	> 0	WDI (2003)

The regression analysis seeking to explain the amount of received tourists per capita, based on the equation (9), verified the presence of autocorrelation, through Durbin-Watson test. As well as in the emission models, the procedure was adopted presented by GREENE (1997, p. 639), applying a partial differentiation (almost-difference) for the correction, resulting to the following specification.

(10) $dqtr_{it} = \beta^1 * didh_{it} + \beta^2 * dr_{it} + droom_{it} + \alpha'_{it} + \varepsilon_{it}$

Where:

$dqtr = \log(qtr_{it}) - \rho * \log(qtr_{it(-1)})$

$dgnp = (\log(idh_{it}) - \rho * \log(idh_{it(-1)}))$

$dr = (\log(r_{it}) + \rho * \log(r_{it(-1)}))$

$droom = (\log(room_{it}) + \rho * \log(room_{it(-1)}))$

$\alpha' = \alpha_{it}(1-\rho)$

Through the equation (10), and the results gotten presented by the equation (11) it possible to observe that the variables HDI and R (risk) are significant at a smaller level than 1% of mistake probabilities. However, the variable room (beds for km^2) does not demonstrate statistical significance.

(11) $dqtr_{it} = 3{,}55 * didh_{it} + 0{,}22 * dr_{it} + 0{,}047 * droom_{it} + \alpha'_{it} + \varepsilon_{it}$

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[5] The risk index was captured through a rising of risk of PRS GROUP (2002), *apud* EILAT & EINAV (2003). THE expected positive sign with relationship to the risk index if he/she gives in function that as larger the value of the index, smaller the risk. The interval feels between 1 and 12, being 12 the safest scenery. The used values were built with base in the geometric average of three indexes (I scratch out of conflict ethnic, internal and external).

The option for maintaining the variable *room*, happened in function that the specified model, after the treatment through the almost difference appeared for the resolution of the problem of residual autocorrelation, as demonstrated by Durbin-Watson test. When removing the variable, the results for correction were not satisfactory, being possible the occurrence of problems of bad specification. In this case, it opted to maintain the variable, although the existence of the multicolinearity risk.

5 COMPARATIVE ANALYSIS OF SOUTH AMERICA, AFRICA AND SOUTHERN ASIA ABOUT THE RESTRICTIONS OF THE INSERTION IN THE INTERNATIONAL TOURISM FLOW

A lot of developing countries are placed distant of the principal emissive centers and although they present natural attraction what differs them of other countries, problems related to the accessibility, diversification, complementarily of these attractions and insecurity, they can turn part of these sub-used natural resources.

In agreement with the available data for WTO (2002) it is possible to observe that countries that more receive tourists are in the Europe (58%), with prominence to West Europe, North America (14%) and East of Asia and Pacific (15%), demonstrating strong evidence that the international tourism flow comes concentrated in the developed countries.

An explanation that must be considered for this phenomenon of regionalization of the touristic activity is related to the relevance of the transport cost in the composition of the touristic consumption set, mainly in reference to the international flow, where the practice of intercontinental trips is less viable. However, it is not an unique determinant, not even rigid, once there is a technological dynamic in this process that can turn the subject of the distance, less important or promoting reduction of the costs and faster speed in the locomotion. Besides, institutional factors as language and culture in a general way, can favor aspects that characterize the proximity. In this case, it's possible to have a comparison among South America, Africa and South of Asia, once they are considered distant areas in comparison of those with big potential of tourist emission and they represent a small part of the international touristic flow.

5.1 South America

South America is composed by Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela. In general, these countries are classified as of low medium income and high medium income, in

agreement with the classification of the WORLD BANK (2001). Among these, Argentina, Chile and Uruguay are part of the group of countries considered as high Human Development Index, in agreement with the classification of UN (2003).

In agreement with data of WTO (2003), approximately 77% of the international tourists that arrive in South America are from own American continent. However, great part of this flow is South American, having little incidence of Central America and of the North, evidencing the participation of the United States.

The table 3 demonstrates the South America participation in the international tourists' arrival to countries composed by this area, identifying the four issuing principal countries, also identifying the percentile of participation of each one[6].

Table 3 - South America Participation and the principal issuing countries in the receptive tourist flow of the South America countries.

Country	Year	Tourist	Source of Tourist										
			South America	%	1º	%	2º	%	3º	%	4º	%	Top 4
Argentina	2000	2.949.139	2.519.898	85,45	Chile	19,06	Paraguay	16,95	Uruguay	16,55	Brazil	15,80	68,56
Bolivia	2000	381.077	158.862	41,69	Peru	13,24	USA	11,59	Argentina	11,50	Brazil	6,37	42,70
Brazil	2000	5.313.463	3.036.169	57,14	Argentina	32,82	USA	12,20	Uruguay	7,60	Paraguay	7,00	59,62
Chile	2000	1.742.407	1.456.648	83,60	Argentina	49,28	Peru	8,72	USA	7,70	Bolivia	7,70	73,39
Colombia	2000	557.280	210.558	37,78	USA	29,52	Venezuel.	13,50	Ecuador	12,51	Peru	4,04	59,56
Ecuador	2000	615.493	287.900	46,78	Colombia	27,44	USA	24,06	Peru	10,27	Aleman.	3,54	65,31
Guyana	1995	105.536	20.835	19,74	USA	36,40	Canada	15,86	-	-	-	-	52,27
Paraguay	2000	323.041	248.872	77,04	Argentina	47,61	Brazil	15,72	Chile	4,11	USA	3,83	71,27
Peru	1998	723.668	275.993	38,14	USA	22,39	Chile	18,90	Argentina	4,98	UK	4,09	50,36
Suriname	1998	54.585	4.136	7,58	Holland	82,95	Guyana	5,94	China	2,57	Brazil	1,39	92,85
Uruguay	2000	2.235.887	1.706.397	76,32	Argentina	67,55	Brazil	6,30	USA	1,44	Chile	0,99	76,28
Venezuela	2000	469.047	36.945	7,88	Germany	17,12	USA	15,80	Holland	15,20	France	4,35	52,48

Source: WTO (2002)
* The table presents the amount of tourists coming from South America and its participation (%) in the total tourists´ received by the mentioned countries. Following, the four principal issuing countries of each country are identified, followed by its respective participations (%) in the total. The last column refers to the participation (%) of the four principal issuing countries of each country.

Based on WDI (2003) and UN (2003) it is possible to observe that there is heterogeneity by the tourist, among the several countries. A larger prominence for Argentina and Chile is due to the maintenance of an intra-regional receptive flow superior of 83%. However, seven of the twelve countries present a smaller proportion than 50%. They are: Bolivia, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela, being these last ones

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[6]The table 18 presents the referring data to the latest available year. Following attached the tables regarding all information of the countries of the areas of South America, Africa and South of Asia, with the origin of the flow consisting the four principal isssuing and the area where the country interferes. The rising was accomplished based on the statistical annuals of WTO (1997, 2002), consisting the available information among the years of 1991 and 2000.

the most expressive cases.

In a general way the countries of South America present a low per capita income, high dependence degree, small proportion of the population above 65 years. The exception cases are basically Argentina, Chile and Uruguay and they are the ones that also present a larger amount of emitted tourists, proportional to their population.

Regarding to the attraction factors, in case of South America, Argentina, Chile and Uruguay only, are considered as high development degree in agreement with the classification of UN (2003). Excepted by Brazil, where the income index is the smallest among the other indexes that compose HDI.

Regarding to the degree of natural and built attractiveness, the countries of South America are in general very endowed with natural attractions if compared to the countries that stand out as principal receivers of international tourists. Most of the South American territory is located between the Tropics of Capricorn and Cancer, what guarantees them a tropical climate, favoring the use of their coast, being exceptions the case of Argentina, Chile and Uruguay.

Regarding to the wealth of the Fauna and Flora in the countries of South America there are several areas that provide a larger prominence. The Amazon Forest and the Swampland are among the main areas of environmental preservation of the world, being most of them located in Brazil, extending borders to Bolivia, Peru, Colombia and Venezuela. In agreement the World Resource Institute (2002), Brazil is internationally recognized regarding to the natural resources related to the forest areas.

There are few cities of South America that demonstrate to have a capital related to monuments and constructions that have great worth in the inter-continental tourists' attraction. Besides of taking part of the history in a recent period, if compared to Europe, for instance, the countries of the area didn't have a chance of great relevance in the contemporary world history, either are considered as references in the urban development. In the case of South America, most of the patrimonies declared by UNESCO refers to units of environmental preservation.

Regarding to the supply conditions, Brazil, Argentina and Chile and Ecuador present the most favorable conditions regarding the number of apartments in hotels, relative to the territory, maintain the largest amount in absolute terms. Regarding to the accessibility, Brazil leads the airports supply, but the relative numbers to the territory size are lesser than the developed countries.

Map 1 - Map of the world demonstrating the principal international tourist flows route and identifying the analyzed areas

Legend: Principais fluxos — Asia.snp — Africa.shp — Américadosul.shp — Country.shp
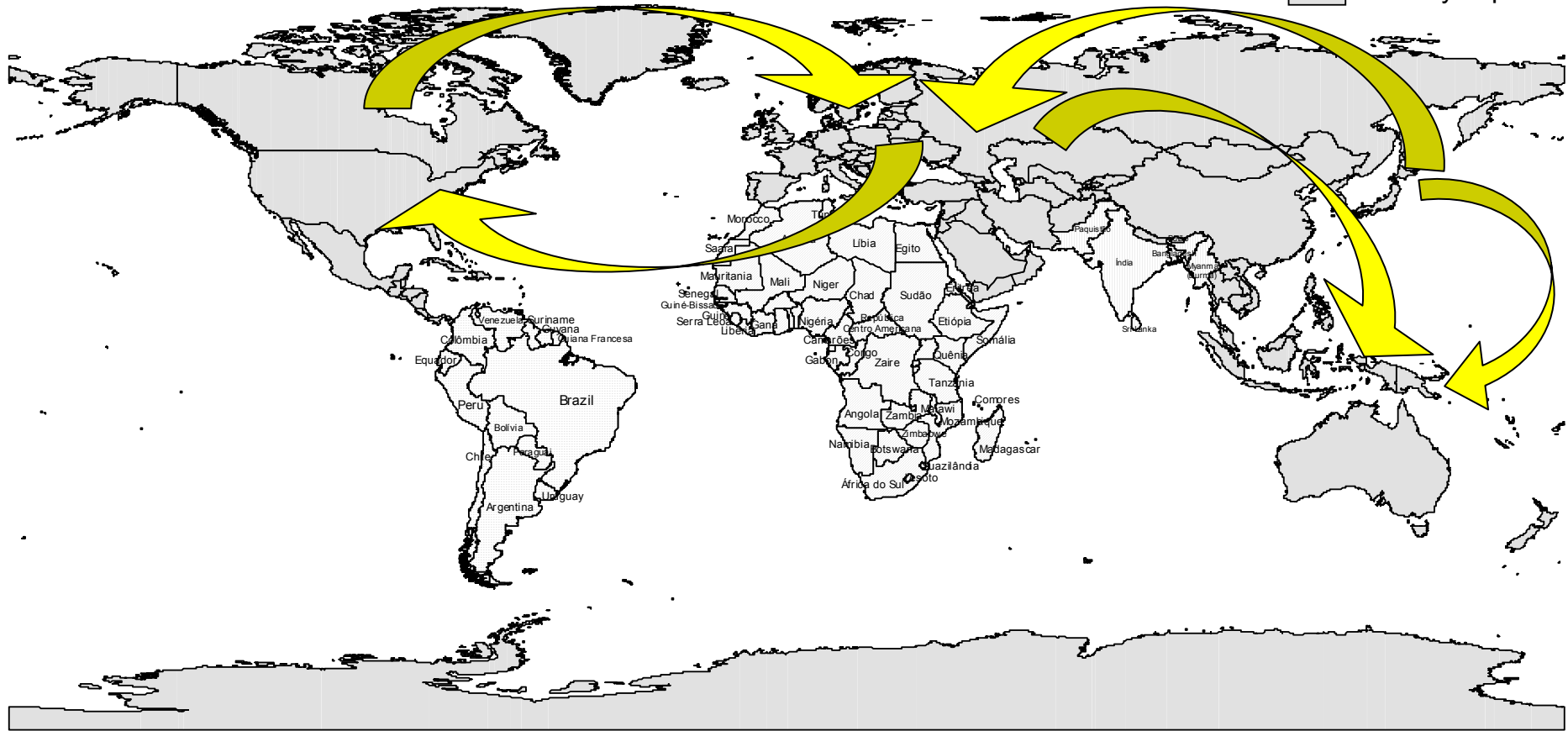
Source: Elaborated by the author, using the application ARCVIEW, with base in OMT (2001).

* The application had not incorporated the alteration of the names of the countries. Therefore the name is maintained Zaire, instead of Republic of Congo.

* * Where the legend appears like Asia, he/she specifically refers to the South of Asia, in the map.

* * * Following the political division of OMT, Egypt and Libya are not being considered in the area of Africa

In general the South American countries present predominance of the Spanish and Portuguese languages, having a small participation of English and French, as official languages of Guyana and of French Guiana, respectively. In this case, Brazil tends to be the last beneficiary, in regards to this variable, once it is the largest country that the Portuguese language represents 80% of the population having the Portuguese as first language approximately. (CIA, 2003)

About the resistance factors, based in the data of criminality by INTERPOL (homicides and robberies), the countries of South America present a high volume of crimes if compared to the developed countries and a high proportion of cases solved.

5.2 Africa

In agreement with the classification of WTO (2002) [7], the area of Africa is composed by the following countries: Algeria, Morocco, Sudan, Tunisia (North Africa), Benin, Burkina Faso, Castrate Green, Ivoire Côte, Gambia, Ghana, Guinea, Mali, Mauritania, Niger, Nigeria, Senegal, Saws Lioness, Togo (West Africa), Angola, Shrimps, Rep. of Africa Central, Chad, Congo, Rep. Dem. Congo, Gabon, Saint Takes and Prince (Central Africa), Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauricio, Reunion, Rwanda, Seichela, Somalia, Tanzania, Uganda, Zambia, Zimbabwe (Asian East), Botswana, Lesotho, Namibia, South Africa, Swaziland (Southern Africa).

In general, the African countries are classified by low income, having five only classified as low medium income and six as high medium income. Regarding to the human development, most of them are considered as "less developed", with HDI below 0,5.

Table 4 - Participation of the region and of the main issuing in the receptive tourist flow of the countries of Africa

Country	Year	Turistas	ÁFRICA	%	1st	%	2nd	%	3rd	%	4th	%	top 4
Algeria	2000	865.984	55.508	6,41	RNE	79,73	France	7,49	Tunisia	3,75	Mali	1,02	-
Benin	1995	579.829	528.842	91,21	-	-	-	-	-	-	-	0,00	0,00
Botswana	1999	843.314	720.310	85,41	South Afric	46,66	Zimbabwe	34,10	Namibia	5,55	Zambia	4,01	90,32
Burkina Faso	1998	160.284	62.673	39,10	France	28,16	Q. Ivoire	8,05	Mali	3,60	Niger	3,51	43,33
Burundi	1998	15.404	7.394	48,00	-	-	-	-	-	-	-	0,00	0,00
Shrimps	1997	239.379	77.673	32,45	France	27,67	USA	7,92	Germany	5,40	UK	2,76	43,75
Castrate Green	1998	52.000	-	-	Portugal	31,00	Italy	31,00	Germany	12,40	France	11,00	85,40
RC Africana	1998	7.478	3.439	45,99	France	28,26	Shrimps	7,52	Chad	7,27	Congo	6,69	49,73
Chad	2000	43.034	12.542	29,14	France	31,85	USA	12,36	Canada	5,74	Germany	3,16	53,12
Comoros	2000	23.893	15.812	66,18	South Afric	38,28	France	24,43	Reunion	5,87	-	-	68,58

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[7] The classification of OMT considers Libya and Egypt belonging to Middle East. For this reason, these countries won't be being considered in the analysis of the data, although presents stay in the related political maps Africa.

Country	Year	Turistas	ÁFRICA	%	1st	%	2nd	%	3rd	%	4th	%	top 4
Congo	2000	75.761	32.090	42,36	France	29,97	Congo	8,65	Italy	6,68	Angola	5,95	51,25
Quote d´Ivoire	1998	301.039	158.808	52,75	France	24,30	USA	6,23	Burk. Faso	5,67	Senegal	5,51	41,72
Eritrea	2000	70.355	4.023	5,72	RNE *	75,23	-	-	-	-	-	-	75,23
Ethiopia	2000	135.954	48.796	35,89	Djibouti	10,67	USA	8,32	UK	5,20	France	4,31	28,51
Gabon	2000	155.432	37.712	24,26	EUROPE	72,06	-	-	-	-	-	-	72,06
Gambia	1999	96.126	928	0,97	UK	42,22	Germany	26,42	Holland	10,01	Sweden	5,78	84,43
Ghana	1999	372.651	126.788	34,02	Nigeria	8,66	UK	8,66	USA	6,60	Germany	4,82	28,74
Guinea	2000	32.598	12.308	37,76	France	22,50	Mountain Lioness	9,04	Senegal	8,13	USA	7,77	47,44
Kenya	2000	1.036.628	282.458	27,25	Germany	15,74	UK	15,30	Tanzania	11,25	USA	6,56	48,84
Lesotho	1998	289.819	285.734	98,59	South Afric	97,27	Zimbabwe	0,37	Botswana	0,31	Swaziland	0,22	98,17
Madagascar	2000	160.071	54.534	34,07	France	55,00	Reunion	9,00	Italy	5,00	Germany	4,00	73,00
Malawi	2000	228.106	179.000	78,47	Zambia	14,99	Zimbabwe	8,20	Moçambiq.	8,02	UK/Irl	7,54	38,75
Mali	2000	86.469	18.962	21,93	France	21,98	Benelux	9,09	USA	7,91	Germany	3,21	42,19
Maurício	2000	656.453	163.763	24,95	France	30,23	Reunion	13,24	Áfr. of the South	7,42	UK	11,35	62,23
Morocco	2000	4.113.037	88.689	2,16	France	21,33	Spain	6,22	Germany	5,39	Italy	3,57	36,51
Namibia	1998	599.674	429.543	71,63	Áfr. of the South	34,91	Angola	29,57	Germany	9,94	Botswana	3,27	77,68
Niger	2000	50.263	28.181	56,07	France	24,33	RNE	10,94	-	-	-	-	-
Nigeria	2000	1.491.767	1.050.993	70,45	Niger	20,79	Benin	13,17	Ghana	6,91	Liberia	3,60	44,46
Reunion	1999	394.000	53.000	13,45	Europe	85,79	-	-	-	-	-	-	85,79
S T and Prince	1997	4.924	1.109	22,52	Portugal	34,65	France	20,23	Angola	6,82	Spain	4,83	66,53
Senegal	2000	389.433	96.834	24,87	France	49,59	Benelux	3,91	Italy	3,58	Germany	2,11	59,19
Mountain Lioness	1995	13.765	5.087	36,96	UK	12,97	France	5,57	RNE	29,12	-	-	47,66
Seichela	2000	136.046	13.746	10,10	France	20,79	Italy	14,66	Germany	13,03	UK	11,85	60,33
South Africa	2000	6.000.538	4.309.893	71,83	Lesotho	25,99	Swaziland	12,54	Moçambiq	8,19	Zimbabwe	7,96	54,68
Swaziland	2000	280.870	177.216	63,10	South Afric	44,97	Moçambiq	8,42	UK	9,46	Australia	2,24	65,09
Sudan	1995	63.040	5.715	9,07	China	5,61	Egypt	5,21	Canada	5,13	Ethiopia	5,10	21,05
Togo	2000	59.541	29.546	49,62	France	16,27	Burk. Faso	10,21	Benin	8,34	Nigeria	5,34	40,16
Tunisia	1998	4.646.670	267.256	5,75	France	23,79	Germany	23,68	Italy	9,22	UK	6,68	63,37
Uganda	2000	191.276	131.687	68,85	Kenya	31,84	Rwanda	18,84	Tanzania	7,52	USA	5,02	63,21
Zambia	2000	457.419	394.479	86,24	Zimbabwe	25,46	Áfr. of the South	15,50	UK	11,25	Tanzania	5,97	58,18
Zimbabwe	2000	1.868.412	1.403.774	75,13	Zambia	19,57	Moçambiq	5,99	UK	7,26	Germany	1,76	34,59

Source: WTO, 2002

In agreement with the table 4, a first difference to be outstanding regarding to South America refers to the fact that the main issuing to the African countries are not from own continent. For forty-one countries in the table, there are information about the main issuing for thirty seven. Of these, approximately 65% have like main issuing, countries by Europe and China, in the case of Sudan. If considered the seconds, third and fourth issuing principal, nevertheless the participation of external countries to the area stays quite high and not just for some areas, just as the North of Africa that is close to Europe, but for the continent in a general way. If verified the behavior of the origin of this flow along the decade of 1990 it is possible to observe that there were few alterations, maintaining this strong participation of inter-continental originators to the countries of Africa.

The understanding of this phenomenon is characterized by the necessity of analyzing the capacity of tourist emissive from the African countries. Based in WDI (2003) and UN (2003) it is possible to observe that in its great majority, these present low incomes, restricting the international tourists emission. The exceptions are due to Botswana, Gabon, Mauricio, Seychelles, South Africa and Tunisia, considered as high medium income for the classification of the World Bank (2001).

Regarding to the attraction factors, most of the African countries present a low IDH, making possible the visualization of some problems regarding to the destiny offers. Only six of them present life index expectation above 0,7. The great majority presents inferior indexes to 0,5. (UN, 2003)

It's interesting to observe that even the countries with larger per capita income, possess low expectation of life index, just as South Africa, Botswana and Namibia. Once a problem of imperfect information exists it is difficult to agents identifying which are the marginal differences about the probability of risk of each country. To reduce this kind of problem, one of the solutions placed in practice by South Africa, for instance, was the construction of restricted areas for tourists.

The African continent is characterized as the largest territory among the tropics, basically all the countries have tropical climate, except Morocco, Tunisia, Swaziland, Lesotho and part of South Africa, coincidently the countries that receive more tourists. Although this characteristic is close of the presented by South America, the sub-tropical extensions of the African countries don't allow offering it climatic conditions diversified just as this other continent.

Just as the case of South America, Africa possesses favorable climatic conditions to the leisure exploration in coast by tropical climate. However, this reaffirms the hypothesis that these natural resources are not factors that determine in it the conditions for the sector development.

Regarding to the African countries´ Fauna and Flora, several of them present territories preserved that stand out in international terms. In agreement with World Resource Institute (2002) the African countries are in general well served in forest areas, with prominence for the Savannas.

Regarding to the Built Touristy Attractions (ATC´s) tending to be less representative in a comparative analysis before the developed countries, as well as South America. However, regarding to the resort's, the Sun City complex is considered as one of the largest tourist enterprises for South African territory.

Regarding to the diversification of the touristic supply, using as proxy the number of rooms in hotels and similar establishments, it is possible to observe that the largest prominences are due to Tunisia, South Africa, Nigeria and Algeria, according WTO (2003). Tunisia is the country of larger prominence supplement. Besides consisting among the ones that present the largest amount beds, overcoming South Africa, Tunisia also present a relationship of proportional supply to the quite significant territorial extension.

About accessibility, none of them stands out with relationship to the amount of airports. South Africa is the largest reference among the others, followed by Madagascar. Nevertheless, it is important to consider that these data don't bring information regarding the airport conditions of use; this is restricted to an accessibility analysis. In the case of Tunisia, for instance, seven of the nine mentioned airports are international. (CIA, 2003)

The countries nearly South Africa have in the great majority English as one of its official languages (CIA, 2003). However, in the African continent the local dialects are spread by every territory. It is interesting to observe that among the countries that present a larger receptive tourists flow, stands out the English and Arab language. However, there are several of other countries that speak this language in Africa, but they are far away of presenting a significant international tourist flow.

Regarding to the resistance factors, insecurity is certainly one of the great problems faced by the African countries while reaching a larger insert in the flow of international tourism. In general the risks of internal and ethnic conflict come high, and in 1985 the risks related to external conflicts were also significant, based by an international comparison, in agreement with data from PRS Group (2000)

Through INTERPOL (2003) as complement of the risk information, is possible to identify that the criminality index in the African countries is quite high. The criminality indexes related to homicides and robberies are extremely superior to the indexes presented by South America and Southern Asia, and are enough above the average of the developed countries, in some countries.

4.3 Southern Asia

In agreement with the classification of WTO, the Southern Asia is composed for: Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan and Sri Lanka. These countries are basically classified as of lowers income by World Bank (2001), with exceptions of Iran, Maldives and Sri Lanka, which are considered as of low medium income. Regarding to HDI, it's treated of medium and low human development countries.

As well as in the case of Africa the inter-regional touristic flow in the countries of the South of Asia tends to be less significant than observed in South America and in the another areas. In agreement with the table 5, except for Bangladesh, all the other countries present an index below 28%, regarding to the received tourists from own region.

Table 5 - Participation of Asia and of the principal issuing in the receptive tourist flow of the countries of the Southern Asia

Country	Year	Tourist	Southern Ásia	%	1º	%	2º	%	3º	%	4º	%	top 4
Bangladesh	2000	199.211	93.709	47,04	India	37,28	UK	14,61	USA	5,99	Japan	4,02	61,90
Bhutan	2000	7.559	50	0,66	USA	36,43	Japan	11,58	UK	7,87	Holland	4,75	60,63
India	2000	2.641.157	663.581	25,12	Bangladesh	16,70	UK	13,41	USA	11,71	Sri Lanka	4,86	46,69
Iran	1999	1.320.690	298.954	22,64	Azerbaijan	33,91	Afghanistan	11,08	Pakistan	10,22	Arábia Sdt	1,87	57,07
Maldives	2000	467.154	20.648	7,31	Italy	22,76	Germany	16,62	UK	15,29	Japan	10,10	64,77
Nepal	2000	463.646	125.787	27,13	India	20,69	Japan	8,86	USA	8,72	UK	8,15	46,41
Pakistan	2000	556.805	108.960	19,57	UK	32,28	USA	12,77	India	11,86	Afghanistan	5,01	61,93
Sri Lanka	2000	400.414	51.555	12,88	UK	21,18	Germany	17,64	France	6,52	Holland	5,65	51,00

Source: WTO, 2002

None of the countries presents an absolute receptive flow of tourists larger than the principal countries of South America and of Africa. India receives a smaller flow than Brazil and South Africa. However, the extra-regional flow of India is more representative than both countries.

The low intra-regional touristic flow among the countries of Southern Asia, suggests, as well as in the Africa case, that these countries face strong restrictions regarding to the emission factors, mainly the income.

Regarding to the conditions of international tourists emission from these countries, in agreement with WDI (2003) and UN (2003), it is observed that in a general way they present a low per capita income, as well as in the case of Africa, it results in important explanation to understand this phenomenon.

Regarding to the attraction factors, HDI of the countries present low levels, being in your majority considered as of medium human development, with close values to the inferior limit. The climate of the Southern Asia is characterized as subtropical, just having part of India and of located Bangladesh among the tropics, besides Sri Lanka Lanka. In this sense, the climatic conditions of this territory differ from South America and Africa in a significant way. The extension of the coast is also more discreet in this region, which is surrounded by Indian Ocean.

About Southern Asia fauna and flora, in agreement with the World Institute Resource (2002), a wide variety can be found mainly in India and it's present a total area of

quite significant forest, in the case of South America, it's only behind Brazil. Regarding to the Built Touristic Attractions, the Southern Asia possesses a differentiated architecture. About the humanity's patrimonies, India overcomes the countries of South America and of Africa and most is constituted of monuments and constructions.

About the lodging supply, in absolute way, it's possible to verify that there is by any part of any countries, a significant amount that takes being considered the existence of a wide diversification of the tourist supply as a significant advantage. The largest prominence is due to India, followed by Pakistan. (WTO, 2003)

However, it is also necessary to observe the structure meditated to the territorial space. In this case, the countries of the South India maintain a very close relationship of the observed in South America. The referring data to the accessibility don't demonstrate great problems to the countries of the South of Asia. The India possesses larger number of airports than to South Africa, country that presents the largest amount in Africa.

Based in the lifted up information close to CIA (2003) the first language of these countries is mainly spoken in their own. Certainly can have some diffusion of these languages in other countries, besides among them, but the fact is that this is less significant as an attractiveness factor to the tourist flow.

Regarding to the resistance factors, the indexes of risk of Southern Asia come quite high, so much for ethnic and internal conflicts, regarding to the external ones, in agreement with data of PRS Group (2002). The criminality indexes presented by INTERPOL to these countries are demonstrated enough below the average of South America and Africa, so much regarding to the voluntary homicides, as for robberies. However, in the beginning of nineties was shown problematic in that region, which had an external conflict in the middle of 2002 with the invasion of the USA in Afghanistan.

6 CONCLUSION

This research had as the main goal demonstrating the economical importance of the tourism in the international trade, identifying which are the principal determinant of this activity and the restrictions to the insert of the developing countries. Based on the identified determinant, it took a comparative analysis among the countries of South America, Africa and Southern Asia, regarding to the participation in international tourist flow and their conditions of competitiveness in this section.

Some convergent points stand out among the areas: a) they have low emission

capacity; b) they are far away from the principal centers emissive of tourists c) low HDI indicates that some supply conditions are not favorable to the international tourism (p. ex. low IDH-L in Africa, demonstrates the possibility of risks related to the health to the tourist; d) the natural attractions are numerous in these areas. However, the accessibility conditions and diversification supply don't demonstrate relevant differentiate in international terms, except for few exceptions; e) the countries that presented the largest emissive per capita flows of the region, were those with larger per capita income, larger participation of the population above 65 years, better distribution of income and smaller territorial extension. However, the per capita income came as the principal factor; f) the attraction determinant also came valid to these countries. Even the exceptions related to the countries that received larger amount of tourists could be explained by the identified determinants.

On the other hand, some divergent points are observed such as the fact that the countries of Africa and Southern Asia presented a larger participation of inter-continental tourists. In this case, the capacity of emission of the countries of Africa and South of Asia comes more precarious than those from South America. Although they obtain positive results and these results are significant to their countries, the flow in these areas is concentrated in some countries that present favorable attraction conditions. Besides, the countries that received the largest amount of tourists had a larger participation of visitors coming from neighbor places. This is evident in South Africa.

In short, the restrictions to the human development, the supply conditions and the geographical location in economical areas with little capacity of demand of this kind of service, tend to restrict a larger insert of the majority of the countries that compose these areas in the international tourism flow.

BIBLIOGRAPHY REFERENCES

ANDRADE, José Roberto. **Abordagem econômica da demanda por turismo doméstico no Brasil**: aspectos teóricos e evidências empíricas. In: V Encontro de Economistas da Língua Portuguesa, nov. 2003.

BANCO MUNDIAL. **Relatório sobre o desenvolvimento mundial 2000/2001**: luta contra a pobreza. Washington: OXFORD, 2001.

CIA. **The World Fact Book**. [on line]. Captured via internet in www.cia.gov, em 5 de julho, 2003.

CROMPTON, John L; ANKOMAH, Paul K. **Choice set propositions in destination decisions**. Annals of Tourism Research, v. 20, p. 221-228m 1997.

CROUCH, Geoffrey I. **Demand Elasticities in International Marketing**: a Meta-Analytical Application to Tourism. Journal of Business Research, n.36, p.117-136, 1996.

DIVESEKERA, Sarath. **A model of demand for international tourism**. Annals of tourism research, vol. 30, n.1, p 31-49, 2003.

EILAT, Yair; EINAV, Liran. **The Determinants of International Tourism**: A Three-Dimensional Panel Data Analysis. JEL: C13, C23, F14, L83, Feb, 2003.

FRECHTLING, Douglas C. **Practice Tourism Forecasting**. Butterworth: Heinemamn, 1996

IMF. **Committee on Balance of Payment Statistics**. Anual report, 2001 [on line]. from http://www.imf.org/external/pubs/ft/bop/2001/index.htm, em 5 de julho, 2003a.

FRANK, Robert H. **Microeconomia e Comportamento**. 3 ed, Alfragide: McGraw Hill, 1997, ISBN 972-8298-72-2

GREENE, William H. **Econometric Analysis**. Prentice-Hall: New Jersey, 1997

HODGSON, Geoffrey M. **Economics and Institutions**: a Manifesto for a Modern Institutional Economics. Philadelphia: University of Pennsylvania Press, 1988.

INTERPOL. **International Statistical Crime**. From www.interpol.int, 03/06/2003.

JUDSON, R. A. & OWEN, A. **Estimating Dynamic Panel Data Models**: A Guide for Macroeconomists. *Economics Letters,* vol. 65 (October 1999), pp. 9-15

LANCASTER, Kelvin J. A New Approach to Consumer Theory. The Journal of Political Economy, v. 74, n.2, 1966.

MARQUES, L. D. **Modelos Dinâmicos com Dados em Painel**: revisão de literatura. Porto: Centro de Estudos Macroeconômicos e de Previsão, 2000.

NEALE, Walter C. **Institutions**. Journal of Economic Issues, 21 (3): 1177-1206, 1987.

WTO. **International Trade Statistics**. From: www.wto.org, 20/04/2003.

UNDP. **Human Development Report**. New York: Oxford, 1990.

UNDP. **Human Development Report:** Deepening democracy in a fragmented world. New York: Oxford University Press, 2002.

UNDP. **Human Development Report.** New York: Oxford University Press, 2003.

PRS GROUP. **Country Risk Guide**, CD, 2000.

PINDYCK, R. e RUBINFELD, D. **Econometric Models and Economic Forecasts**. New York: McGraw-Hill.

POLÈSE, Mario. **Economia Urbana e Regional**: Lógica espacial das transformações econômicas. Coimbra: APDR, 1998.

RABAHY, Wilson. **Turismo e Desenvolvimento**. São Paulo: Manole, 2003

UNESCO. **World Heritage List, 2003** [*on line*]. From www.unesco.org, 10/03/2003

VERBEEK, Marno. **A guide to modern econometrics**. Londres: John Wiley and Sons, 2000.

WITT, Stephen F. & WITT, Christine A. **Forecasting tourism demand**: a review of empirical research. In: International Journal of Forecasting, n.111, 1995, p.447-475.

World Bank. World Development Indicators. CD, 2001.

World Bank World Development Indicators. CD, 2003.

World Resource Institute. **Global Resource Information Database**, 2002.

WTO. **Yearbook of Tourism Statistics.** Madrid, 1996.

_____. **Yearbook of Tourism Statistics.** Madrid, 2002a.

_____. **Tourism Highlights 2002**. Relatório da Organização Mundial do Turismo, 2002b. From http://www.world-tourism.org. 15/03/2003.

_____. **International Tourist Arrivals - by country** [*on line*]**.** From: www.world-tourism.org, 20/04/2003.

_____. **International Tourist Expenditure - by country** [*on line*]**.** From: www.world-tourism.org, 20/04/2003.

_____. **International Tourist Receipts - by country** [*on line*]**.** From: www.world-tourism.org, 20/04/2003

WTTC. **The 2003 Travel & Tourism Economic Research**. Vilamoura, mai, 2003. From www.wttc.org.