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28 February 2021

Online at <https://mpa.ub.uni-muenchen.de/107464/>  
MPRA Paper No. 107464, posted 04 Aug 2021 14:38 UTC

# Gambling Tourism and Economic Development: Some Lessons from Macao

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**Citation:** Metaxas, T. & Folinas, S. (2021). Gambling Tourism and Economic Development: Some Lessons from Macao. *Journal of Economics, Finance and Management Studies*, 4(3): 156-165 <https://doi.org/10.47191/jefms/v4-i3-07>

**ABSTRACT:** This article aims to explore and document the relationship between forms of alternative tourism and economic development. More specifically, the subject of this investigation will be whether a small national economy is able to rely wholly or largely on tourist flows as a source of income and even to invest in a single type of tourism. Alternative forms of tourism, gaming tourism as well as the features of territorially limited countries and how they are linked to the case of Macao will also be objects of study and annotation. With the process of text production through scientific articles, statistical data, and reliable databases, this article attempts to satisfy the investigated relationship as well as the stemming questions.

Keywords: gaming tourism, tourism-based development, regional development, small island developing states, Macao.

JEL Classification: Z32

## I. INTRODUCTION

Tourist activity is closely linked to the economic development of destination areas. The vast majority of national economies in the world are based on, either quantitatively or entirely, the development of tourism forms with reciprocal benefits. The aim of this paper is to clarify the criteria with which certain areas attempt to diversify in the global tourism market and create new trends, thus gaining competitive advantages over other destinations. Particularly, this research focuses on small spatial areas, where opportunities for progress and prosperity are limited, so the development of tourism emerges as the only solution. This tourist differentiation is referred to as 'alternative tourism' and it is usually an element of spatially restricted areas - destinations.

The additional value of this paper is not just its contribution to the advancement of scientific dialogue. Its true value is the promotion of an economic model of a very small region – state, based entirely on gambling tourism. The case of Macao could be a fine example of the creation or revitalization of a financially collapsed small state national economy. In order to support the case, this paper attempts to approximate via literature review the tourism, financial and socio-economical profile of Macau, although there are some serious limitations at the elaboration of this text. It must be pointed out that this manuscript has included a larger amount of recent research but further empirical research would be useful to understand in more depth the economic phenomenon of Macao. The literature about gambling makes a distinction between 'gaming' –which is the term for the legal form of the particular activity and 'gambling' –which characterizes mostly the illegal one, but the person who participates in those activities is named 'gambler' without distinction [1]. Also, in this paper, we will use both of terms 'Macao' (in English) and 'Macau' (in Portuguese).

## II. LITERATURE REVIEW

Tourism is one of the key areas of human global activity and the 'effective economic power tool' for the reception areas [2]. International literature is full of circumstantial research which directly associates tourism with economic growth [3, 4, 5, 6, 7, 8, 9]. Brohman [10] supported that tourism is a global industry that is growing rapidly and about a developmental way especially preferred by national economies of the third world countries. At the same time, tourism constitutes a major resource of economic revenues and a way to increase the GDP of destination countries [11, 12]. Poirier [13] concludes that tourism is a result of global liberalization policies. Especially for small spatial area national economies, the conclusions which researchers drew agree –more or less- that an economically viable and feasible solution is to develop alternative forms of tourism, based on the exploitation of the peculiarities of the characteristics of each region - destination [14]. Even though some countries cannot attract external tourism, they invest to create and increase domestic tourism, like China in the early 1990s [15].

### A. The gaming tourism as an alternative form of tourism: Previous studies:

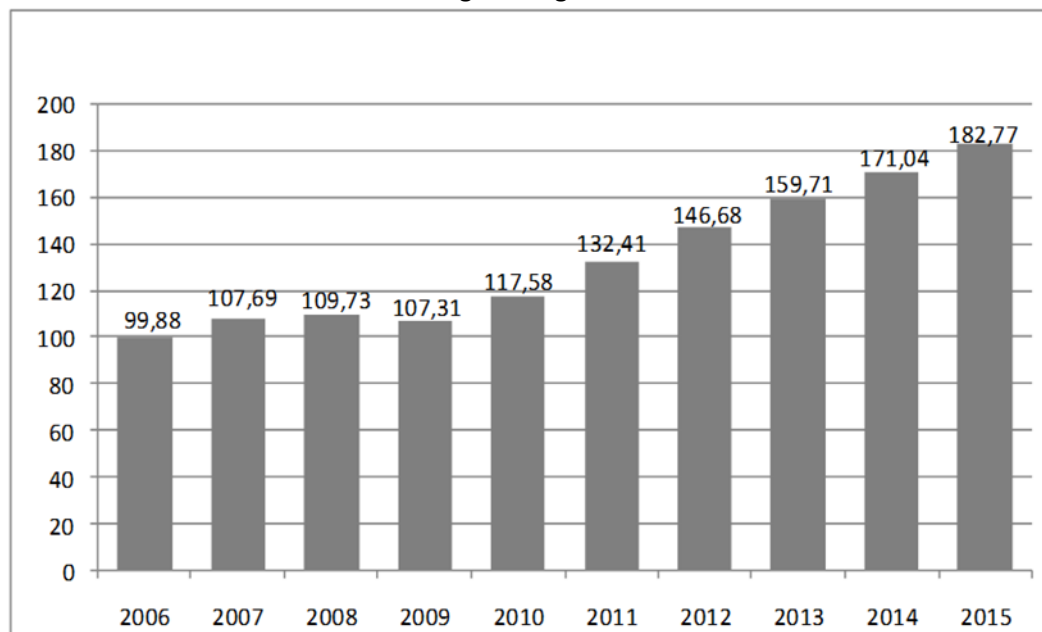
Among the many other special tourism forms, gaming tourism (or gambling tourism) is included, with reference to the casinos, hotel complexes with specially designated areas for conducting gambling. Many researchers have studied with this form of tourism [16, 17, 18, 19, 20, 21] and -less or more- they conclude that gambling tourism is a vital factor for the economic growth of a region or community [22]. Gamble industries have expanded worldwide with the blessings of many countries' governments, which benefit the gambling revenue for fiscal assignments, creating this way a specific governmental economic dependence on casinos [23]. Gamble which had been recently considered a deviant form of behaviour, a sin, a disease, or an outlaw activity, now has become a tool for planning, able to offer solutions to economic and social problems. A 'catalyst' for economic regional development, and redevelopment [24]. Furthermore, a harmonious passion for gamble is connected with positive outcomes, like reducing stress, excitement, challenge, escape, and the possibility to earn money [25].

Rephan's research [26] focuses on sixty-six counties in the U.S.A. with troubled economies, which found an outlet in the development of large casinos, transforming these areas, which did not have any highly lucrative land use, into tourist flow 'magnets'. Even in these cases, other problems are created, but less important in relation to the financial benefits for the region and the local community. There are areas that attract thousands of tourists only because of the existence of casinos and which have not any other touristic resource to exploit. In addition, regions with high levels of unemployment rates have a positive relationship with gambling tourism adoption at the international level [27]. On the other hand, for a lot of scientists gambling is not a form of urban regeneration [28].

Already, since the early 1990s, in the U.S.A. the gaming tourism has been seen as an innovative tourism development strategy "easily and quickly". Definitely, all the factors and parameters should be considered and, first of all, the social impact of gambling. In any case, this tourism model has been applied extensively in the U.S.A., where this is one of the most profitable business activities to develop areas that lacked specific characteristics, creating new touristic resources from scratch [22]. It is important to be marked that U.S. Central Government has embraced gambling legalization as a panacea to the economic problems which are facing some of the States local economies. A typical example of this is the State of Minnesota, where gambling is available almost in all drinking establishments [29].

The gambling industry is a very profitable branch of business, it is a worldwide phenomenon and as one can see in the next table, the worldwide revenue from gambling has been almost doubled in the last decade.

**Table 1:** The revenue from worldwide gambling in billions U.S. dollars.



[30]

### III. THE CASE OF MACAO: PROFILE IN BRIEF.

Macao is a complex of areas and not a single region. It consists of continental land sections and two islets. Geographically, it is located at the estuary of Perl River on the coast of east China, in a distance of a few tens of kilometres from Hong Kong [31]. Until 1999 it remained a Portuguese colony since the 16th century, and after 1999 was ceded to China. Today it is a special administration district and the official title of the state is 'Special Administrative Region of Macao'. However, Chinese sovereignty is limited to foreign relations and defence issues, as PRC grants Macao considerable economic and commercial autonomy. Macao is a separate customs territory and economic entity and is able to enter –on its own behalf- into international agreements. Macao is member of international organizations, including The World Trade Organization; the Egmont Group and the Asia/Pacific Group of Money Laundering. United States interests are represented officially by the Consul General in Hong Kong and Macau, based in Hong Kong [32]. The profile of Macao is similar, to some extent, to small sub-national – mainly island- jurisdictions (SNIJs) of ex British Commonwealth [33].

It occupies an area of 32 sq. km., which is constantly increasing with maritime area embankments aimed to cover the huge demand for land for the creation of superstructures, such as airports, bridges, etc. Macao is one of the most densely populated places on earth and also one of the most structured [34]. Macao was a financial, commercial, and cultural portal between the west and the east for more than five centuries. In the late 19th century it also served as a diplomatic affair centre too for four empires (Chinese, British, Spanish and Portuguese), as all of them had significant interests in the wider area of the Far East. At the same time, Macao remained an important port for the transportation of goods and ideas from the mainland of China to the west. In 2011 Macao rose to the top of the wealthier economies of East Asia. Following Li and Zeng [35], since 1999, when Macao returned territorially to China, it was decided by both governments that the vehicle of rapid economic growth would be tourism. By 2009 a continuous growth of 13% per year ensued. From 2010, onwards the growth exceeds 20%. In addition, the global opening of the gaming market was carried out in 2002, while Macao had already embarked on its developmental 'journey'. Large gaming companies moved their investments from the U.S.A. to Macao. Similarly, China loosened its

border policy with Hong Kong and Macao, offering the first substantial mass of tourists in the beginning period of the Macao tourism market.

All indicators on the economy, tourism, and development in Macao have been escalating since 1999 until 2015. Visiting digital data and information bases on reliable statistical websites such as the World Bank, the Central Intelligence Agency, the STATISTA, and Macanese governmental services like DSEC (Department of Statistics and Census of Macao), the DTM (Department of Tourism of Macao) one can accumulate a large number of information and data on Macao economy.

State Macao services, in particular, maintain data lists and constantly publish new ones and in most cases concerning the very recent past. In 2013 the CIA estimated the income per capita in Macao at \$ 89,000; ranking Macao in third place, while a year later, according to the classification given by the World Bank, Macao came in first place with Qatar (US \$ 140,000 income per capita). From the plethora of economic data that 'photographs' Macao development, those that are worth mentioning are the ones directly related to tourism, as this is leading the Macao economy. According to Statista, revenues from tourism in Macao in 2014 reached 44 billion dollars, of which 43.27 came from casinos and gaming tourism. Even more specifically, 32 of them came from a single game; poker [30]. Also, another finding of Wong and McKercher [36], exploring elements of DSEC, is that until 2008 50% of visitors entered by the land border with China, while another 40% by sea by ferry boats which connect Macao with China. The average stay was five to seven hours, sometimes less than the time that was spent on the ship for a visitor going to Macao. The desired index targeted in 2008 for Macao was 1.4 days stay in the country per visitor.

So, it is observed that gambling and industries operating around them (tourism structures, casinos, hotels, etc.) are the backbone of Macao's economy. The DSEC also gives detailed tables of data monthly, since 2008, on tourist arrivals. What figures indicate is that tourist flows ranging from 1,500,000 to 2,000,000 visitors each month have been steadily increasing over the last eight years. At the same time, a paradoxical feature - drawn again from DSEC- regards hotel accommodation, which for November 2015 amounted to 930,000, about half compared to the monthly average of tourists. Furthermore, this tourism economy model does not rely so much on the duration of the visitor's journey, as on the range of stakes for the game that the visitor spends. It is also estimated that the revenues for the Macao market per visitor come to about 1500 to 1800 U.S. dollars per guest -without including the gambling revenue.

#### **A. Gambling History in Macao:**

Macao's gambling history starts in 1850s with gambling legalization in this particular region. China and Hong Kong do not permit gambling, so that gives a great advantage for economic development to Macao. Familiar is the case of Nevada which was for several years the only U.S. State where casino gambling was legal, so it attracted large pocket tourists for gambling purposes from all over the United States.

This long-standing local tradition in trade, commerce, and services forges 21st century Macao, the 'ultimate destination' with respect to gambling tourism worldwide. All numbers show an increase in sectors such as development, economy, income, investments, gaming tourism flows, and casinos. This growth started with the birth of Macao State, peaked in the mid-2000s, and continues rapidly to the present [37]. Indeed, the 'effect' of Macao which, just in a few years, sprang into the global economic and tourist scene, became widely known through sources that the internet provides and achieved formatting an image that links desire to a destination [38]. Macao bases its economy by 85% on tourism (DSEC). While Macao applies as many types of tourism as its spatial limitation allows it, gaming tourism proves to be by far the most efficient form. The government invests heavily in all tourism areas; in 2005 the historic centre of Macao joined the World Heritage Sites of UNESCO, giving in this way one

more tool to this small spatial area to support the tourism project [39]. Macao is a gold mine for casino operators all over the world. Empirical data collected by Wong and Rosenbaum show that Macao's casino visitors are motivated mainly by five factors: entertainment and novelty seeking, leisure activity, escape from pressure, casino sightseeing, and socialization [40].

The gambling tourism development model was the spear of Macao's strategic planning since the early 2000s. They followed the model of Canada, which benefited for decades from the fact that the law did not permit casino activity in most of the United States. As Canada attracted gaming tourists from the U.S.A., Macao draws tourism from China and Hong Kong. In the same way, Egypt absorbs the Israeli market, as in Israel there is no policy for the liberalization of gambling yet. Very recently – February 2016- Prime Minister Benjamin Netanyahu declared legalizing gambling in the country. We should note that tourism in Israel has been collapsing by the year and this is one of the solutions series for its invigoration [1]. As Egypt takes advantage of this situation, the same way Macao remains a monopoly market for gambling in the region of China and will remain a highly successful gambling destination for Chinese and Hong Kong tourists until casinos in the region are legal [41]. Macao uses its cultural and historical Chinese – Portuguese background to give the market a differentiated tourism gaming experience and to distinguish itself from Las Vegas and other popular gambling destinations [42].

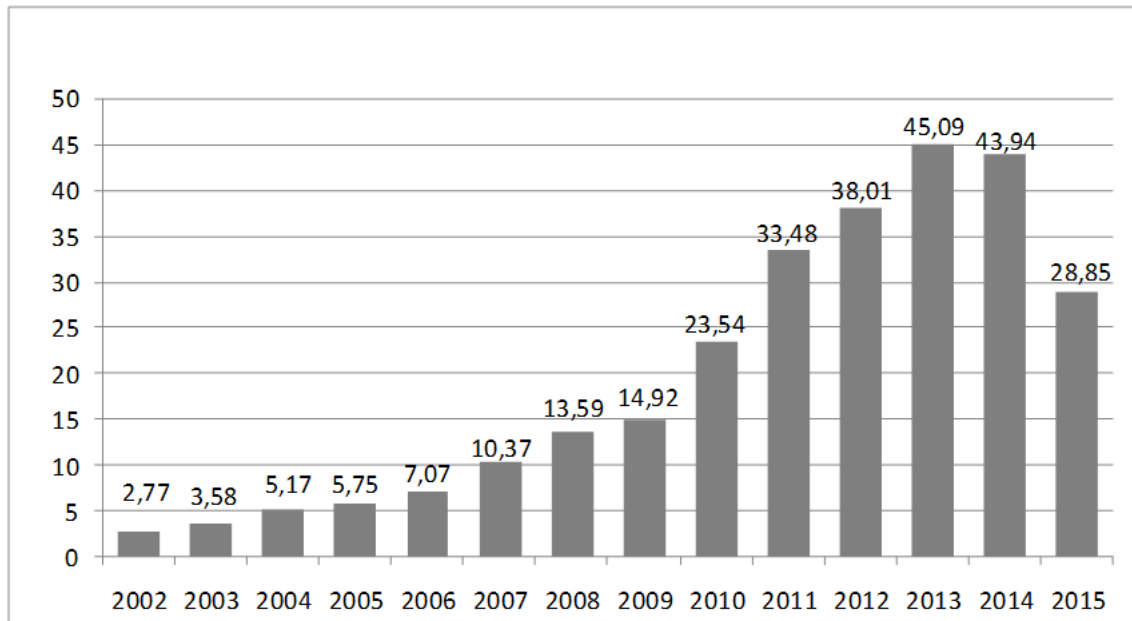
#### **B. Macao: the world's 'hottest' gaming market:**

Macao could be mentioned as the top gaming destination in the world [43, 44, 45]. With only one-fourth of Las Vegas size, Macao almost monopolizes the huge Chinese gamblers' market and increases continuously the gaming revenue; and this revenue is a manifestation of Macao's financial competitiveness as a gambling destination. The case of Macao proves that it is possible for a small-scale investment to generate great revenue in a short payback period [43]. So, Macao forms its national image as the world's top gaming destination, a goal that reaches easily because the entire governmental policy is oriented towards this target. Despite the fact that Macao dominates the first position of gaming destinations, it has to learn a lot of things from an 'old player' and to adopt some 'Las Vegas-style' management strategies, without changing its unique Chinese gaming playground identity. Macao has to invest more on sectors like hospitality and air traffic, developing low price carriers' policy [44].

In this world's largest casino market some of the most known properties of the casino industry were established such as 'The MGM Grand', 'The Sands', 'The Wynn' and 'The Venetian', transporting the Vegas experience to the former Portuguese colony [40]. In 2006 Macao overtook Las Vegas in gaming revenue with almost \$ seven billion income and became the world capital of gambling [46], in eight major region – markets: China, Taiwan, Hong Kong, Japan, Philippines, United Kingdom, Korea, and the United States (Song & Witt, 2006). Especially for Chinese gamblers, it is necessary to point out that they have a cultural tendency to gamble, and statistically the Chinese are to gamble most frequently in comparison with other nationalities [47].

Macao's economic development is not disconnected from its advantageous geostrategic placement, very close to the largest gambling market in the world: China. In addition, Macao's gambling tourism managers and marketers are very good connoisseurs of Chinese gaming behaviour and its motivation, and provide the appropriate high quality and well-chosen casino services and products, offering this way the right gaming experience to the right market target [48].

**Table 2:** Macao's gaming revenue 2002-2015 in billions U.S. dollars.



[30]

Macanese residents also are great supporters of gambling. Gaming is a very typical feature of Chinese culture [49], directly connected with materialism, life dissatisfaction, and will for risk [50]. This motivation is so strong that the majority of the residents prefer offline than online gaming procedure. Internet gambling is not very popular, only 5,4% prefer this form, due its anonymity and convenience and this is an important point that demonstrates that offline traditional gambling –at least in Macao- is still competitive against online, especially in a time period when online activities gain ground against offline [51].

#### **IV. FUTURE PROBLEMS AND OBSTACLES AT THE POWERFUL MACAO MODEL ECONOMY.**

Macao's gaming industry has suffered greatly and revenue has tremendously decreased since 2015 when the government of China decided to crack down corruption at the public sector. As a result of this campaign, Macao lost in this very last year a lot of high rollers [45]. Another factor that impacted negatively on Macao's tourist flows, and therefore its economy, was the tighter visa policy from the side of China. Among others, a new smoking ban in the casinos in combination with greater supervision of Union Pay cards, which is a very popular way of withdrawing money by the gamblers in Macao, adds more pressure to a segment of VIP high rollers [46]. At the same time, competitive Asian destinations 'steal' a lot of Chinese gamblers from Macao. Although destinations like Cambodia, Vietnam, Philippines, and South Korea have not got the gaming brand of Macao, they rapidly invest on the casino industry [52].

Pacific Asia is becoming a very competitive environment as casinos located in Malaysia are pursuing Chinese gaming tourists aggressively. These casinos are planning very serious and careful marketing strategies to extract part of the Chinese gaming market [53]. In the Philippines, casinos cannot be compared with those of Macao, but the state applies other attractive strategies, like lower tax rates for the casinos. Telephone betting also is allowed in many casinos [54]. The expansion of gambling legalization in the U.S.A. and Australia will also

affect Macao's economy in the future. Macao's 32 km<sup>2</sup> surface may not be enough to antagonize upcoming gaming destinations, so perhaps Macao should benefit from the gaming tourism revenue and plan a new favourable strategy for re-investment of this wealth to other tourism sectors [55]. We have also to note that the Government of Macao will not grant any further casino licenses until the current agreements expire in 2022 [56]. That fact is a major limitation to the economic development of Macao.

The success of the gaming tourism business does not come about accidentally or by fortunate circumstances, but it is based on multi-step plans, renewal of the touristic destination, readiness to gamble the revenue and to seek strategic partners, investments in making more attractive the surrounding region and, of course, the market limitation of new competitive entries. Experience from the United States such as Foxwoods Casino Resort for example, one of the biggest casinos in the world, demonstrates that creativity, life cycle estimation, and strategic management are basic factors that lead to continuous and sustainable growth for any touristic business related to gamble [57].

#### **A. Seeking of Option of a non-gaming tourism destination?**

As we have noted in a previous section, Macao is in danger of losing its privileges as 'World Gaming Mecca' and is already suffering a diminution to the gamble's revenue in this very last year. The entrance of new competitive gaming destinations in Pacific Asia in combination with the Chinese campaign against corruption led to a revenue reduction more than 30% in 2015 [58], in relation to 2014. An alternative option is transformation of Macao to a cultural touristic destination using all the financial benefits of the last decade. Its strong point is the existence of the historic city which has already been characterized as UNESCO World Heritage City [59].

The uniqueness of the cityscape is based on the rare combination of Portuguese and Chinese architectural elements. The designation as a UNESCO World Heritage City was the key to the traditional urban landscape conservation [60] and ironically the reason for a large old buildings lot demolition, as some habitants and investors worried about the listing of these buildings to the 'heritage'. Something like that could be an obstacle to the development which is based on casinos and luxurious hotels construction. According to Chu [59], Macao remains a 'city of culture' despite the dream of 'fantasyland of gaming', and efforts have to be made by the local government aiming at the equivalence of those two destination identities.

#### **B. Need for sustainable development.**

Although the swift economic growth of Macao was a remarkable phenomenon, data and statistics show that since 2015 the situation does not seem good. Gambling does not have any more the past glory, and it has been considered 'guilty for the worst economy of the world' [54]. The consequences of this depression on the gambling industry are evident, and a lot of scholars are speaking for needful changes in the economy model towards sustainable development. All these previous years Macao has followed the 'leading industry' model. This model is based on a theory of the American economist W. W. Rostow, but Macao's gambling industry is a completely different case as it does not base its development on national resources but on foreign capitals. That was the 'Achilles heel' of Macao's economy. According to Piao Zhenzi [54], Macao's new sustainable economic model must put emphasis on its main enterprising force: small and medium-sized enterprises. It has to support them and build a



new regional form of economy, characterized by vigorous vitality and social stability, obtaining this way a sustainable and stable development.

## **V. EFFECTS OF GAMBLING TOURISM**

After accepting the fact that tourism in a region forms the culture and lifestyle of the indigenous inhabitants [61], effects recorded by researchers will be reported further on. So, according to the above authors, the effects are -first of all- economic. The figures reveal an increase in per capita income in reception areas compared to other non-tourism areas. Likewise, the increase in revenue from gaming tax corresponded to an increase of Macao citizens' benefits, such as numerous financial allowances for them [62].

From a sociological perspective, the impact mainly alters the traditional relationships between the members of the local communities of reception areas. The influences are more prominent when it comes to geographically limited areas, where human relationships are stronger. An important sector that receives a large part of the impact is the environment which is often replaced entirely because of the forced change of land (sometimes of sea too) use to cover touristic needs, that are increasingly growing; more and bigger casinos, more public works and more and more touristic facilities [63].

In addressing the social costs issue connected with gambling, the Australian Productivity Commission (APC), whose mission is to serve as government's principal review and advisory body in microeconomic policies and regulation, categorizes the basic gamble – introduced costs for a society in five groups: financial costs (family debts, bankruptcy), employment effects, crime, personal – family impacts (divorces, depression, suicides) and treatment costs [64].

Several studies have found correlations between gambling and crime [65, 66, 67], and they give examples from England, Scotland, Germany and other countries. In contrast with this 'rule', an examination of gambling consequences in Macao (two pieces of research, 2002 and 2007) shows that 'crime rate' has not increased significantly, despite gaming tourism activity increase [68].

Another empirical research [69] on seventeen different key communities in Macao reached the conclusion that the development of gaming tourism activities had no negative effects on the locals. The results show that the local population's financial status is increasing by the year. The population also believes that the impact of gaming tourism on sectors as society and environment is negligible. On the other hand, similar research in Singapore [70], about the impact of gaming tourism there, concluded to the exact opposite. In Xinhua's research, negative financial effects and social costs are mentioned. Through a third research about the same subjects [63], which was materialized in both countries, it was discovered that both of them were correct, and the gambling tourism impact on the economy, society, and environment is totally different in Singapore and Macao. Especially for Macao research shows that residents support completely the gambling activities as their high quality of life is directly connected to the tourists visiting repeatability. We should not forget that gamble has historically a long and strong connection with Chinese culture and it is regarded by the Chinese people as a social and entertaining activity among friends and families [71]. It is obvious that the casino activity will continue to expand in the coming years, creating this way new and better employment opportunities for the local people [41].

In addition, Chan et al., [72] focused on casino dealers, proves that those employees suffer negative changes in their family life, despite their positive financial situation. About 48.000 dealers in Macao are affected by the casino culture, which negatively influences their family and parental relationships. In addition, we must not overlook the fact that Macao's gaming-based development, such as in Las Vegas, has been accused of having ties with organized crime groups [73]. Concerning the negative impact, a research in Missouri, U.S.A. must be added, which shows since the State introduced gambling riverboats, consumer expenditure reduced critically from conventional retail establishments in the region [74]. And of course, one should not fail to mention some social effects, which are related to gambling addiction. A research in the Netherlands shows that since the 1980s the problem has been increased, with a lot of individuals between 16 and 25 years of age calling for professional help [75]. This is not a new phenomenon, as gaming activity is very popular among adolescents, and in many cases, it causes gambling-related problems to a small but significant minority of young people [76].

As regards the environment, the ecological disaster began in the 1920s, when it was decided to cut almost all of the original forest for building construction use and for doubling the city surface area [77]. In the 21st century, Taipa Island and Coloane Island's connection into a united land project destroyed a large part of the remaining natural environment, polluting irretrievably Macao's specific biodiversity. Furthermore, there was no precaution for water and air pollution. The policy for waste was based on burning or exporting to the continent. Authorities only in the very last years have started to pay attention to the environmental pollution problem and to manage projects in order to address it. These projects also include precaution for secure flatlands against the possible rise of the sea because of climate change [77].

## **VI. DISCUSSION**

This paper aims to present a special form of tourism and how can this form function as a major instrument for the economic development of a region or a community. Macao shows in action an alternative model of rapid development based on gamble and tourism. Both of them are international human activities, so with the proper management and planning movements is possible that this model could work in other small territories. Another question is how feasible it could be for a small state or region to adopt this development form. Cases, not only from Macao but from all over the world testify that already gambling tourism is a well-tried method for quick development in regions with great financial and unemployment problems. Even countries with very conservative societies now accept and apply development methods based on gambling tourism.

Given the fact that any product or service has a life-cycle, we can say that gaming tourism destinations are replaced continuously by new entrances to the touristic market, but with convenient politics and strategies, a regional economy is possible to be increased rapidly via this touristic form and to create strong bases for other potential forms of economy – touristic or not-. Macao's economy model maybe starts to collapse, maybe just 'suffers' a recession. The point is that this tiny spatial economy has gained too much financial profit in only a few years and is already prepared for a potential transition to other touristic forms, as MICE and cultural tourism. We also take lessons from Macao about the full exploitation of the touristic sources and the opportunities for development.

Gambling tourism of course is not a panacea for any economic 'disease', but it is a very useful tool especially for the first steps of a developing economy.

## CONCLUSIONS

Through this short study, we reach a series of conclusions, the most important of which is that the rapid development of a national economy from scratch is achievable. The case of Macao teaches us that the exploitation of the traditional identity of the locality and its population in combination with modern considerations of the economy can be the vehicle for the route to growth. At the same time, a full perception of opportunities, threats, and possibilities, as well as planning and management illustrate that strategic planning, vision; implementation and improvement are indispensable terms when speaking about development and sustainability. A further conclusion is that alternative and special forms are the future of tourism, especially for limited land areas and small states economies. Finally, one could reasonably conclude that gaming tourism and gamble constitute an integral part of human activity and a very important tool for growth and development, if we overlook moral, religious and political issues.

## ACKNOWLEDGMENT

I address my sincere thanks to Marie-Noëlle Duquenne, a professor of 'statistical and econometric methods for spatial analysis' at the University of Thessaly, for her patience, availability and all her wise advice, which have fuelled my reflection, S.F.

## REFERENCES

- [1]. Israeli, A. & Mehrez, A. (2000). From illegal gambling to legal gaming: Casinos in Israel. *Tourism Management*, 21(3): 281-291. [https://doi.org/10.1016/S0261-5177\(99\)00059](https://doi.org/10.1016/S0261-5177(99)00059)
- [2]. Mishra, P., Himanshu, R. & Mohapatra, S. (2011). Causality between Tourism and Economic Growth: Empirical Evidence from India. *European Journal of Social Sciences*, 18(4): 518-527.
- [3]. Dritsakis, N. (2004). Tourism as a long-run economic growth factor: an empirical investigation for Greece using causality analysis. *Tourism Economics*, 10(3): 305-316. <https://doi.org/10.5367/0000000041895094>
- [4]. Oh, C.O. (2005). The contribution of tourism development to economic growth in the Korean economy. *Tourism Management*, 26(1): 39-44. <https://doi.org/10.1016/j.tourman.2003.09.014>
- [5]. Ivanov, S. & Webster, C. (2007). Measuring the impact of tourism on economic growth. *Tourism Economics*, 13(3): 379-388. <https://doi.org/10.5367/000000007781497773>
- [6]. Sequeira, T. & Nunes, P. (2008). Does Tourism Influence Economic Growth? A Dynamic Panel Data Approach. *Applied Economics*, 40(18): 2431-2441. <https://doi.org/10.1080/0003684060094952>
- [7]. Samini, A.J., Sadighi, S. & Sadighi, S. (2011). Tourism and economic growth in developing countries: P-VAR approach. *Middle-East Journal of Scientific Research*, 10(1): 28-32.
- [8]. Lee, J.W. & Brahmaire, T. (2013). Investigating the influence of tourism on economic growth and carbon emissions: Evidence from panel analysis of the European Union. *Tourism Management*, 38: 69-76. <https://doi.org/10.1016/j.tourman.2013.02.016>
- [9]. Folinas, S. & Metaxas, T. (2020). Tourism: The Great Patient of Coronavirus COVID-2019. *International Journal of Advanced Research*, 8(4): 365-375. <http://dx.doi.org/10.21474/IJAR01/10788>
- [10]. Brohman, J. (1996). New directions in tourism for third world development. *Annals of Tourism Research*, 23(1): 48-70. [https://doi.org/10.1016/0160-7383\(95\)00043-7](https://doi.org/10.1016/0160-7383(95)00043-7)
- [11]. Belloumi, M. (2010). The relationship between Tourism receipts, real effective exchange rate and economic growth in Tunisia. *International Journal of Tourism Research*, 12(5): 550-560. <https://doi.org/10.1002/jtr.774>
- [12]. Folinas, S., Duquenne, M.N. & Metaxas, T. (2020). Problems and Opportunities in the Hospitality Industry in a Masked and Rubber-Gloved World. *Virtual Economics*, 3(3): 7-24. [https://doi.org/10.34021/ve.2020.03.03\(1\)](https://doi.org/10.34021/ve.2020.03.03(1))
- [13]. Poirier, R. (1995). Tourism and development in Tunisia. *Annals of Tourism Research*, 22(1): 157-171. [https://doi.org/10.1016/0160-7383\(94\)00053-U](https://doi.org/10.1016/0160-7383(94)00053-U)
- [14]. Huang, C.H., Tsuar, J.R. & Yang, C.H. (2012). Does world heritage list really induce more tourists? Evidence of Macau. *Tourism Management*, 33(6): 1450-1457. <https://doi.org/10.1016/j.tourman.2012.01.014>
- [15]. Zhang, W. (1997). China's domestic tourism, impetus, development and trends. *Tourism Management*, 18(8): 565-571. [https://doi.org/10.1016/S0261-5177\(97\)00082-4](https://doi.org/10.1016/S0261-5177(97)00082-4)
- [16]. Stansfield, C. (1978). Atlantic City and the resort cycle background to the legalization of gambling. *Annals of Tourism Research*, 5(2): 238-251. [https://doi.org/10.1016/0160-7383\(78\)90222-0](https://doi.org/10.1016/0160-7383(78)90222-0)
- [17]. Perdue, R., Long, P. & Kang, Y.S. (1995). Resident support for gambling as tourism development strategy. *Journal of Travel Research*, 34(2): 3-11. <https://doi.org/10.1177/004728759503400203>
- [18]. Rephann, T., Dalton, M., Stair, A. & Isserman, A. (1997). Casino Gambling as an Economic Development Strategy. *Tourism Economics*, 3(2): 161-183. <https://doi.org/10.1177/135481669700300204>
- [19]. Beeton, S. & Pinge, I. (2003). Casting the holiday dice: Demarketing gambling to encourage local tourism. *Current Issues in Tourism*, 6(4): 309-322. <https://doi.org/10.1080/13683500308667958>
- [20]. Chhabra, D. & Gursoy, D. (2007). Perceived impact of gambling: integration of two theories. *UNLV Gaming Research and Review Journal*, 11(1): 27-40.
- [21]. McCartney, G. (2008). The CAT (Casino Tourism) and the MICE (Meetings, Incentives, Conventions, Exhibitions): Key development considerations for the convention and exhibition industry in Macao. *Journal of Convention and Event Tourism*, 9(4): 293-308. <https://doi.org/10.1080/15470140802493380>

- [22]. Nickerson, N. (1995). Tourism and gambling content analysis. *Annals of Tourism Research*, 22(1): 53-66. <https://doi.org/10.1016/0160-7383/95>
- [23]. Marshall, D. & Baker, R. (2002). The evolving market structures of gambling: Case studies Modelling the socioeconomic assignment of gaming machines in Melbourne and Sydney, Australia. *Journal of Gambling Studies*, 18(3): 273-291. <https://doi.org/10.1023/a:1016847305942>
- [24]. Eadington, W. (1995). Preface gambling: Philosophy and policy. *Journal of Gambling Studies*, 11(1): 9-14.
- [25]. Lee, C.K., Chung, N. & Bernhard, B. (2014). Examining the structural relationships among gambling motivation, passion, and consequences of internet sports betting. *Journal of Gambling Studies*, 30: 845-858. <https://doi.org/10.1007/s10899-013-9400-y>
- [26]. Rephann, T., Dalton, M., Stair, A. & Isserman, A. (1997). Casino Gambling as an Economic Development Strategy. *Tourism Economics*, 3(2): 161-183. <https://doi.org/10.1177/135481669700300204>
- [27]. Richard, B., (2010). Diffusion of an economic development policy innovation: Explaining the international spread of casino gambling. *Journal of Gambling Studies*, 26: 287-300. <https://doi.org/10.1007/s10899-009-9166-4>
- [28]. Brooks, G. (2012). Challenging the myth of urban regeneration: raising the profile of problem gambling with a media campaign. *Journal of Gambling Studies*, 28: 741-751. <https://doi.org/10.1007/s10899-011-9276-7>
- [29]. Aasved, M., Schaefer, J. & Merila, K. (1995). Legalized gambling and its impact in a Central Minnesota vacation community: A case study. *Journal of Gambling Studies*, 11(2): 137-163. <https://doi.org/10.1007/BF02107112>
- [30]. Statista, (2016). The Statistics Portal, Global Casino Gaming Revenue. Retrieved from: <https://www.statista.com/statistics/270728/market-volume-of-online-gaming-worldwide/>
- [31]. Hobson, P. (1995). Macau: gambling on its future? *Tourism Management*, 16(3): 237-246. <https://doi.org/10.1177/004728759503400271>
- [32]. U.S. Department of State (2017). US relations with Macau, Bureau of East Asian and Pacific Affairs; fact sheet September 13 2017. Retrieved from: <https://www.state.gov/r/pa/ei/bgn/7066.htm/>
- [33]. McElroy, J. & Pearce, K. (2006). The advantages of political affiliation: Dependent and independent small island profiles. *The Commonwealth Journal of International Affairs*, 95(386): 529-539. <https://doi.org/10.1080/00358530600931285>
- [34]. DSEC (2015). Government of Macao Special Administrative Region: Department of Statistics and Census. Statistics Yearbook 2015 / Retrieved from: [http://www.dsec.gov.mo/home\\_enus.aspx/](http://www.dsec.gov.mo/home_enus.aspx/)
- [35]. Li, B. & Zeng, Z. (2015). Economic structure, social risks and the challenges to social policy in Macau, China. *Asia and Pacific Policy Studies*, 2(2): 383-398. <https://doi.org/10.1002/app5.80>
- [36]. Wong, U.I. & Mc Kercher, B. (2011). Tourist information center staff as knowledge brokers: The Case of Macau. *Annals of Tourism Research*, 38(2): 481-498. <https://doi.org/10.1016/j.annals.2010.10.003>
- [37]. Sheng, L. & Tsui, Y. (2009). A general equilibrium approach to tourism and welfare: The case of Macau. *Habitat International*, 33: 419-424. <https://doi.org/10.1016/j.habitatint.2009.01.002>
- [38]. Choi, S., Lehto, X.Y. & Morrison, A.M. (2007). Destination image representation on the web; Content analysis of Macau Travel related websites. *Tourism Management*, 28(1): 118-129. <https://doi.org/10.1016/j.tourman.2006.03.002>
- [39]. Huang, C.H., Tsuar, J.R. & Yang, C.H. (2012). Does world heritage list really induce more tourists? Evidence of Macau. *Tourism Management*, 33(6): 1450-1457. <https://doi.org/10.1016/j.tourman.2012.01.014>
- [40]. Wong, I. & Rosenbaum, M. (2012). Beyond hardcore gambling: Understanding why mainland Chinese visit casinos in Macau. *Journal of Hospitality and Tourism Research*, 36(1):32-51. <https://doi.org/10.1177/1096348010380600>
- [41]. McCartney, J. (2005). Casinos as a tourism development strategy – The case of Macao. *Journal of Macau Gaming Research Association*, 1(2): 40-54.
- [42]. Gu, Z. (2004). Macau gaming: Copying the Las Vegas style or creating a Macau model? *Asia Pacific Journal of Tourism Research*, 9(1): 89-96. <https://doi.org/10.1080/10941660410001695278>
- [43]. Gu, Z., & Gao, J. (2006). Financial Competitiveness of Macau in Comparison with Other Gaming Destinations. *UNLV Gaming Research & Review Journal*, 10(2). Retrieved from <https://digitalscholarship.unlv.edu/grri/vol10/iss2/1>
- [44]. Loi, K.I. & Kim, W.G. (2010). Macao's casino industry: Reinventing Las Vegas in Asia. *Cornell Hospitality Quarterly*, 51(2): 268-283. <https://doi.org/10.1177/1938965509339148>
- [45]. Li, J., Wong, I. & Kim, W.G. (2016). Re-segmenting a gaming destination market: A fresh look at Mainland Chinese tourists in Macau. *Journal of Vacation Marketing*, 23(3): 205-216. <https://doi.org/10.1177/1356766716647438>
- [46]. Li, J., Wong, I. & Kim, W.G. (2016b). Does destination perception differ based on traveler type? A case of the world gambling capital: Macau. *Tourism Planning and Development*, 14(1): 15-30. <https://doi.org/10.1080/21568316.2016.1152289>
- [47]. Li, X., Yin, A. & Luo, J.M. (2015). An analysis in cultural differences effect on tourist behavior in Macau. *International Journal of Marketing Studies*, 7(5): 25-32. <https://doi.org/10.5539/ijms.v7.n5p25>
- [48]. Park, S.H., Hsieh, C.M. & Miller, J.C. (2015). Investigating tourists' casino retention: cross-cultural comparison with Chinese and Westerners. *International Journal of Tourism Sciences*, 15(1-2): 30-43. <https://doi.org/10.1080/15980634.2015.1118874>
- [49]. Loo, J.M.Y., Raylou, N. & Oei, T. (2008). Gambling among the Chinese: A comprehensive review. *Clinical Psychology Review*, 28(7): 1152-1166. <https://doi.org/10.1016/j.cpr.2008.04.001>
- [50]. Wu, A., Lai, M. & Tong, K. (2015). Internet gambling among community adults and university students in Macao. *Journal of Gambling Studies*, 31: 643-657. <https://doi.org/10.1007/s10899-014-9451-8>
- [51]. Cole, T., Barrett, D. & Griffiths, M.D. (2010). Social facilitation in online and offline gambling. *International Journal of Mental Health and Addiction*, 9: 240-247. <https://doi.org/10.1007/s11469-010-9281-6>
- [52]. Steven, S. (2014). Macau VIP gambling revenue to shrink 5% as other Asian casinos get grabby. Retrieved from <http://calvinayre.com/2014/09/05/casino/macau-vip-gambling-revenue-poached-regional-competitors/>
- [53]. Zeng, Z., Prentice, C. & King, B. (2012). "To gamble or not? Perceptions of Macau among Mainland Chinese and Hong Kong visitors. *International Journal of Tourism Research*, 16(2): 105-112. <https://doi.org/10.1002/itr.1902>
- [54]. Lu, P. (2016). Study on the moderate diversification of industrial structure of Macao. *American Journal of Industrial and Business Management*, 6(2): 176-187. <http://doi.org/10.4236/ajibm.2016.62017>
- [55]. Mieiros, S., Ramos, P. & Alves, J. (2012). Gaming tourism boom, foreign currency inflows and Dutch Disease effects: An empirical model for Macau. *International Journal of Trade, Economics and Finance*, 3(6): 421-427. <https://doi.org/10.7763/IJTEF.2012.V3.238>

- [56]. Vlcek, W. (2012). Taking others people's money: development and the political economy of Asian casinos. *The Pacific Review*, 28(3): 323-345. <https://doi.org/10.1080/09512748.2014.995127>
- [57]. d' Hauteserre, A.M. (2000). Lessons in managed destination competitiveness: The case of Foxwoods Casino Resort. *Tourism Management*, 21(1): 23-32. [https://doi.org/10.1016/S0261-5177\(99\)00097-7](https://doi.org/10.1016/S0261-5177(99)00097-7)
- [58]. University of Las Vegas (2016). Center of Gaming Research, University Libraries, Macau Gaming Summary. Retrieved from: <https://gaming.unlv.edu/abstract/macau.html>
- [59]. Chu, C.L. (2015). Spectacular Macau: Visioning futures for a World Heritage City. The HKU Scholars Hub – The University of Hong Kong, Retrieved from: <http://hdl.handle.net/10722/212318/>
- [60]. Simpson, T. (2008). Macao, capital of the 21st century? *Environment and Planning D: Society and Space*, 26(6): 1053-1079. <https://doi.org/10.1068/d9607>
- [61]. Proença, S. & Soukiazis, E. (2008). Tourism as an Economic Growth Factor: a case study for Southern European Countries. *Tourism Economics*, 14(4): 791-806. <https://doi.org/10.5367/000000008786440175>
- [62]. Benton, C. (2015). The economic and social effects of casino development in Macau, UNLV – University Libraries: Theses, Dissertations, Professional Papers and Capstones. <https://digitalscholarship.unlv.edu/thesesdissertations/2601>
- [63]. Wu, S.T. & Chen, Y.S. (2015). The Social, Economic and Environmental Impacts of Casino Gambling on the Residents of Macau and Singapore. *Tourism Management*, 48: 285-298. <https://doi.org/10.1016/j.tourman.2014.11.013>
- [64]. Eadington, W. (2003). Measuring Costs from Permitted Gaming: Concepts and Categories in Evaluating Gambling's Consequences. *Journal of Gambling Studies*, 19(2): 185-213. <https://doi.org/10.1023/A:1023681315907>
- [65]. Cowlshaw, S., Merkouris, S., Chapman, A., & Radermacher, H., (2014). Pathological and problem gambling in substance use treatment: A systematic review and meta-analysis. *Journal of Substance Abuse Treatment*, 46(2): 98-105. <https://doi.org/10.1016/j.jsat.2013.08.019>
- [66]. Laursen, B., Plauborg, R., Ekholm, O., Larsen, C., & Juel, K. (2016). Problem gambling associated with violent and criminal behaviour: A Danish population-based survey and register study. *Journal of Gambling Studies*, 32(1): 25-34. <https://doi.org/10.1007/s10899-015-9536-z>
- [67]. May-Chahal, C., Humphrey, L., Clifton, A., Francis, B. & Reith, G. (2017). Gambling Harm and Crime Careers, *Journal of Gambling Studies*, 33(1): 65-84. <https://doi.org/10.1007/s10899-016-9612-z>
- [68]. Vong, F. (2009). Changes in Residents' Gambling Attitudes and Perceived Impacts at the Fifth Anniversary of Macao's Gaming Deregulation. *Journal of Travel Research*, 47(3): 388-397. <https://doi.org/10.1177/0047287508322787>
- [69]. Wan, Y.K., (2013). The social, economic and environmental impacts of casino gaming in Macao: the community leader perspective. *Journal of Sustainable Tourism*, 20(5): 737-735. <https://doi.org/10.1080/09669582.2011.636818>
- [70]. Xinhua, G., Li, G. & Tam, P. S. (2013). Casino tourism, social cost and tax effects. *International Gambling Studies*, 13(2): 221-239. <https://doi.org/10.1080/14459795.2012.760641>
- [71]. Wu, A., Lai, M., Tong, K.K. & Tao, V. (2013). Chinese attitudes, norms, behavioral control and gambling involvement in Macao. *Journal of Gambling Studies*, 29: 749-763. <https://doi.org/10.1007/s10899-012-9344-7>
- [72]. Chan, S., Kwok, C. & Siu, J. (2015). The Macau family-in-transition: The perceived impact of casino employment on family relationships among dealer families. *The Open Family Studies Journal*, 7(2): 86-95. <https://doi.org/10.2174/1874922401507010086>
- [73]. Khitani, P.V. (2015). Not just another crapshoot development: the challenges and opportunities of modeling after Las Vegas and Macao as an economic development strategy in the 21st century. *Journal of the Global South*, 2(1): 1-18. <https://doi.org/10.1186/s40728-015-0024-8>
- [74]. Siegel, D. & Anders, G. (1999). Public policy and the displacement effects of casinos: A case study from riverboat gambling in Missouri. *Journal of Gambling Studies*, 15(2): 105-121. <https://doi.org/10.1023/A:1022230124148>
- [75]. Hermkens, P. & Kok, I. (1990). Gambling in the Netherlands: Developments, participation and compulsive gambling. *Journal of Gambling Studies*, 6(3): 223-240. <https://doi.org/10.1007/bf01014580>
- [76]. Calado, F., Alexandre, J. & Griffiths M. (2017). Prevalence of adolescent problem gambling: A systematic review of recent research. *Journal of Gambling Studies*, 33: 397-424. <https://doi.org/10.1007/s10899-016-9627-5>
- [77]. Zadori, I. (2016). Cultural aspects for sustainability challenges of island-like territories: Case study of Macau, China. *Scientific Journal of the European Ecocycles Society*, 1(2): 35-45. <https://doi.org/10.19040/ecocycles.v1i2.37>