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THE ECONOMIC IMPACTS OF CASINO GAMING IN MISSISSIPPI:
LOCAL, REGIONAL, NATIONAL AND INTERNATIONAL CONSIDERATIONS

by

Janelle Nicole Townes

A Dissertation
Submitted to the Graduate School,
the College of Arts and Sciences
and the School of Social Science and Global Studies
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved by:

Dr. Edward Sayre, Committee Chair
Dr. Robert Pauly
Dr. Tom Lansford
Dr. Joseph St. Marie

Dr. Edward Sayre
Committee Chair

Dr. Edward Sayre
Director of School

Dr. Karen S. Coats
Dean of the Graduate School

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ABSTRACT

Casino development and the proliferation of the casino gaming industry has centered on the prevailing issue of economic impact. The purpose of this study was to determine what impact casinos in Mississippi have on the economy of the host communities. In this quantitative descriptive research study, the primary employment, tourism and revenue data were gathered from records provided by the Mississippi Gaming Commission to test the level of change that occurred in the host communities of Mississippi casinos between 2000 and 2015, a period when Mississippi communities experienced severe economic crises due in part to natural disasters and economic recession. The study specifically looked at gaming revenue pre and post the economic recession; non-gaming entertainment and the impact of policy changes after a natural disaster. Each of the four variables of interest, casino characteristics, characteristics of casinos before and after the US financial meltdown, revenues and finances of casinos before and after the US Financial Meltdown, and operating expenses of casinos before and after the US financial meltdown were examined using descriptive statistics and the paired t-test to examine the differences between the pre and post measures, differences between the pre financial meltdown period and the post financial meltdown period in the operations at the Mississippi casinos. An important finding is the impact the meltdown casinos had on employment in the host gaming communities. Understanding the overall economic impact of casino development in Mississippi and the economic impact on employment, revenue and vulnerability during times of economic unrest and natural disasters is vital.

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DEDICATION

This dissertation is dedicated to my late father Mr. Isom Townes, Jr. who always encouraged me to strive for greater and to never give up on my dreams; to always finish what you start. Well dad, thanks for being my Angel and watching over me; I finished my dissertation and you would be proud!

This dissertation is also dedicated to my late grandparents Mrs. Lillie Ward Williams, Mr. and Mrs. Cornelius and Lillie Stamps and a very special family friend, the late Mr. Jewell C. Lockhart, who always believed that I could finish this dissertation. This indeed is a happy moment in my life.

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CHAPTER I - INTRODUCTION

Casino gambling in the United States is no longer a new phenomenon; it is an industry that has experienced rapid growth and expansion both domestically and internationally. During the early 1990s, several states and cities within states legalized gambling in hopes of revitalizing local economies in the United States (Geisler & Nichols, 2016; Hicks, 2014). While the casino commerce has experienced fast development throughout the previous two decades, revenue trials endure (American Gaming Association, 2014). Zheng, Farrish, Lee, and Yu (2013) revealed the gaming business survived numerous recessions and economic downturns throughout this time and was believed a recession-proof commerce. Alongside recessions and economic downturns, an upsurge in rivalry in this sector remained foremost in tribulations threatening the development of casinos in the United States. These difficulties were partially explained by a continuing upsurge in the number of contemporary casinos with larger volume, and the decay of earnings in the general US casino field in 2014 (American Gaming Association, 2014).

Similarly, these encounters exerted pressure to prevailing casino operatives to concentrate on rate decrease endeavors and differentiate income from the industry to supplementary, more lucrative systems of diversion (American Gaming Association, 2015). The casino and gaming businesses were deemed resilient to economic downturns for many years. Undeniably, the economic downturn of 2007-2009 tilted that viewpoint because the casino industry in the United States was enormously shaken and witnessed a significant drop in business (American Gaming Association, 1999–2016). Most existing

gaming-related research has focused on large gaming destinations like Nevada and New Jersey.

External to the United States, the growth of the gaming industry has been unprecedented and equally impressive; Macau, China, is one of those large-scale casino facilities that is internationally recognized for its unique characteristics (Shou-Tsung & Yeong-Shyang, 2015). Increased tourism revenues and job creation are the purported economic benefits of local governments pursuing such a development strategy (Shou-Tsung & Yeong-Shyang, 2015). While a myriad of scholarly research about the casino industry address the political and socio-economic impacts of casinos, very few focuses on the long-term economic effects, providing consensus among researchers (Walker, 2011).

The development of Mississippi's host gaming communities have increased revenues and job opportunities in areas throughout the state, from the Gulf Coast region, extending to the Delta region and even to the Choctaw Indian reservation in Philadelphia, Mississippi that has been propagated as cause for recent expansion of sports betting amendments in the state. The gaming industry in Mississippi has endured economic downturns, natural disasters, and policy changes since the late 1990s. Details were described in several economic impact studies that were conducted during the infancy of casino development in Mississippi (Eadington, 1999, Gazel, 1998, Eadington, 1999). However, these failed to examine these contributing economic factors in tandem. This research study was developed to gain an understanding of the critical factors that affect the condition of the gaming industry after the most societal upheavals. To achieve this, the study sought to examine the overall economic impact on the communities that host the gaming industry.

Statement of the Problem

Most casinos are in physically peripheral regions, which effectively isolate the gambling activities from other activities. Until recently in the United States, gambling was restricted to only a limited number of locations (Wenz, 2013). Many early casinos in the United States were in small to medium sized cities, but now casinos are spreading to diverse geographic areas, such as major cities. The scale of the level of casino activity is always a source of inquiry as governing bodies try to encourage and diversify tourism investment. When making an assessment about the economic impact of the gaming industry after an economic recession or disaster, it is important to determine the impact on the outcome of gaming revenue, employment, and tourism. For example, outside trials like the negative economic impact enabled by the recession in 2007– 2009 caused a reduction of gaming proceeds inside the big casino hotels located in the Las Vegas Strip; statistics suggest around a 14% decrease from 2007 to 2010 (Buil et al., 2013). Mississippi was not an exemption. In addition, Hurricane Katrina arrived on the American Gulf Coast on August 29, 2005. A decade after the hurricane, revival still lingers as an ongoing process.

With the scarcity of current literature to serve as a compelling reference, this research formulates a critical scope of the casino gaming industry's growth in the aftermath of economic downturn and natural disaster using Mississippi's gaming industry as the target for investigation. While Nevada is known as the premiere oasis for casino gambling in the United States, Mississippi was selected as the location of interest because Mississippi's gaming industries had successfully emerged into leading host gaming communities and because the state of Mississippi is one of the poorest states in the

United States (United States Census Bureau, 2014). The development of Mississippi's host gaming communities had increased revenues and jobs in areas throughout the state. Macao, China, is a casino gaming community that has evolved into an Asian attraction (Shou-Tsung & Yeong-Shyang, 2015) with similarities, which parallel that of the state of Mississippi. Mississippi can provide valuable insight into the gaming industry as Mississippi has endured natural disasters, policy changes and impacts from economic recession. Recent scholarly research has ignored this region of the United States, primarily focusing on gaming in Nevada and Atlantic City (Garrett, 2004). However, the Mississippi gaming industry is a unique case study due to a series of coterminous economic circumstances including Hurricane Katrina followed by the distressing economic downturn allowing minimal recovery.

Purpose of the Study

The purpose of this study was to determine what impact casinos in Mississippi had on the economy of the host communities considering the 2007-2009 economic downturn and Hurricane Katrina. The researcher was interested in understanding what type of social, economic, and environmental changes had occurred in selected communities as a result of the chaos caused by unanticipated economic and geologic disruptions from the context of casino operations. An important question of interest is whether the extent of catastrophe had caused any negative impacts to the relationship of casinos to their communities and if casino operations still had a long-term, positive, and sustainable relationship commensurate with pre-catastrophic conditions.

Research Questions

The primary question of interest was: What is the impact of casinos on the economy of host communities? Four research questions were developed to address the problem of this study. The specific research questions examined in this study included the following:

1. What changes occurred in the characteristics of Mississippi Casinos as measured by the number of employees, square footage, and other activities, between 2000 and 2015 after the financial meltdown and impacts of Hurricane Katrina?
2. Is there a significant difference between the characteristics of casinos before and after US financial meltdown and impacts of Hurricane Katrina (2000-2015)?
3. Is there a significant difference between the revenues and finances of casinos before and after US financial meltdown and Hurricane Katrina (2000-2015)?
4. Is there a significant difference between operating expenses of casinos before and after US financial meltdown and Hurricane Katrina?

Theoretical Framework

This study was primarily driven by an overarching theory of economic development. Petko (2014) illustrated the meaning of economic development is slightly indistinct in the economic writings. Economic development can be regarded as a legislative process to buildup commercial productivity by way of financing in some system of economic growth for example road and rail networks, commercial, security, or additional sorts of enterprises involving the populace. This activity can include straight investing of tax proceeds or indirect speculation like tax reductions for companies to fetch business into a vicinity. Administrative expenditure has a bearing on the market,

and any zone of legislative spending might be linked to financially viable expansion. Economic development can be analyzed by observing the evolution and expansion of per-capita income, societal inclusion, healthiness and security, knowledge, public services, provincial attractiveness, for example.

The reason of economic development is to advance the financial rank of all people by generating systems that deliver rudimentary human requirements while endeavoring to eradicate or decrease social disparity by enhancing the living benchmarks of the mainstream via economic progress (Petko, 2014). The approach advances a country's or state's financial well-being or resilience because it usually upsurges output, career creation, and individual revenue. Though, the results of economic development embrace more than jobs upsurge, improvement in gross domestic product, or salary; outcomes also embrace enhancements in public welfare in health care, shelter, and nutrition safety. Government expenses on health care or the formation of parklands has advantages for residents that go further than the monetary. Moreover, government spending on structure and amenities can underwrite not only to the benefit of persons but also to social goods such as a vibrant market and an involved community. In a civilization with a robust economy and well inhabitants, people have additional time to follow social and political activities.

Economic development must be a cooperative enterprise integrating the concentrated energies of inhabitants and their chosen representatives, functioning mutually to increase the standard of living and commercial fitness of societies. Whereas economic growth embraces investment in the form of governmental spending, and in other zones like infrastructure, for instance, streets and viaducts, medical services, fire

safety, and law enforcement agency protection, it also embraces investing in human capital—that is, financing in the growth of its residents’ services by way of education. Diffusion theory, which is also known as the “diffusion of innovation theory” was leveraged to understand early gaming adoption and to help explain policy decisions of law makers to legalize casino development (Richard, 2010 and vonHermann, 2006). Diffusion theory, for context of this study, can be used to understand the policy changes post natural disaster and recession impacts.

Another conceptual framework influencing this research study followed the methodology used by Garret (2004), who analyzed the impact of casinos on local employment. This study adopted a similar model also using employment as a key variable to test the economic growth of gaming since the late 1990’s to the mid 2000’s in Mississippi. Additionally, the study investigated the status of the casino gaming industry considering the infusion of non-gaming amenities, and the experiences of a recession, natural disasters, and policy changes.

An autoregressive integrated moving average ARIMA model was used to gauge “seasonally adjusted monthly household employment data” (Garrett 2004 p. 14) in six Mid-western counties examining the years of 1986-2001. The reason for applying ARIMA was because it is a statistical procedure that tests and measures the effect of an exogenous event like an economic downturn or the effects of a natural disaster across the dimension of time. Casinos communities chosen for Garrett’s research were selected because each host gaming community implemented gaming in the early mid-1990s. The years were selected in part, to account for pre and post gaming adoption. Again, this study adopts a comparable model leveraging the years 2000-2015. These years were

selected to assess the disaster impact of Hurricane Katrina and ensuing economic recession which followed. Researchers have previously used ARIMA to measure the relationship between economic downturn and casino gaming (Zheng, 2013) and for other tourism related studies following catastrophic or disastrous events. Most academic studies provide insight on disaster impact (Butler and Sayre, 2010, Schwartz, and Meyer-Arnet, 1999, Stutz 2015) or recession (Eadington, 2011, Cantor and Rosentraub, 2012, Zheng, Farrish, Lee and Yu, 2013) more research is needed on the complexity of multiple catastrophes and their economic repercussions from the context of the casino industry.

Significance of the Study

The findings from this study could raise awareness in the importance of accelerating the rebuilding of casino infrastructure important for the economic revitalization of areas impacted by natural disasters and economic instability. This has many benefits. The rebuilding of the casino industry will again, attract an assortment of ancillary services and professionals back into these areas. Salaries generated from casino employees have the potential to reduce the use of welfare dollars as well as poverty in these areas through an increase in job opportunities. The State of Mississippi may be stimulated by the additional tax dollars received from these casino employees. Real estate values may increase as a result of casino construction. However, study significance is tempered with the critical knowledge that casino development must occur and provide within enough infrastructure to manage the unintended consequences of gaming: the possible advent and influences of criminal elements, gambling addictions, and drug trafficking, for example. In summary, findings of this study would provide necessary information for economic development officials and for future sustainable expansion of

the gaming industry both domestically and provide a prototype for casino disaster recovery on an internationally level. Specifically, the study findings could set the stage for safe, sustainable economic development for several coastal towns in Mississippi.

Definitions of Key Terms

Anthropocentrism - the ecosystem is the primary basis of existence in the universe (Tomic et al., 2013).

Autoregressive integrated moving average (ARIMA) - a statistical analysis model that uses time series data to either better understand the data set or to predict future trends (Investopedia, 2018).

Cannibalization effect of casino development- also termed the “Walmart effect” where the casino operations partially or entirely sucks the business resources out of a local surrounding community (Gallenger, 2017).

Casino- A casino is an entertainment facility that operates various types of gambling and entertainment activities. In Mississippi, casinos are generally located near hotels, restaurants, retail shopping, cruise ships or other tourist attractions (“casino, n.”. OED Online. December 2018.)

Ecocentrism – human beings are equal to other forms of nature (Tomic et al., 2013)

Great Recession- December 2007 marked the start of the Great Recession, the most significant economic downturn in the United States since the Great Depression. By October 2009, nearly 8.5 million jobs had been lost and the unemployment rate in the United States had peaked at 10 percent (Appelbaum, 2013).

Gaming Industry- The gaming industry is the name applied to the industry that directs and manages the operations of casinos (Eadington, 1999).

Hurricane Katrina- devastating and most destructive hurricane ever in the United States that hit the Mississippi and Louisiana states (and other southern states) in August 2005 causing unprecedented death and destruction mostly in New Orleans (“Babylon,” 2018).

Morality Politics- argues that conservatives and liberals hold two different conceptual models of morality. Conservatives have a hold that people are made good through self-discipline and hard work, everyone is taken care of by taking care of themselves. Liberals hold that everyone is taken care of by helping each other (Nelson, 2013).

Non-Gaming Entertainment - conference centers/showrooms, expos, sporting events, gift shop/ boutiques, spa parlors, etc. (Zhang, Dewald, & Neiryck, 2009).

Time Series Analysis - A time series is a sequence of numerical data points in successive order. Can be useful to see how a given asset, security or economic variable changes over time. It can also be used to examine how the changes associated with the chosen data point compare to shifts in other variables over the same time period (Investopedia, 2018).

Tourism - The theory and practice of touring; travelling for pleasure. (Orig. usually depreciatory.) Also, the business of attracting tourists and providing for their accommodation and entertainment; the business of operating tours. ("tourism, n.". OED Online. December 2018).

Delimitations and Limitations

This study was delimited to the 27 casinos that were in operation in Mississippi between 2000 and 2015 and were located along the “three river regions” known as North River, South “Central” River, and Gulf Coast region. These River Regions are now known as the Northern Region, Central Region and Coastal Region, as Casinos and Casino Development in Mississippi are now permitted to be on land. Comparisons were

made based on the number of employees, square footage, activities in addition to gaming, facilities characteristics, revenues and finances, and operating expenses. The data collected from the Mississippi State Gaming Commission are also delimitations. Results of this study are only generalizable to the casinos used for this study and findings may or may not be applicable to other casinos in other parts of Mississippi or other areas of the United States of America. Limitations for this study involve the investigation of casinos in Mississippi with varying demographic characteristics. The data examined were based on 2000 and 2015 data collected by the Mississippi State Gaming Commission.

Organization of Study

This dissertation is divided into five chapters. The first chapter provides an overview and introduction of the research study, problem statement, purpose, research questions, significance, limitations, and definitions of terms used in the research study. The second chapter provides a comprehensive literature review of the historical significance and most relevant and available recent literature. The third chapter presents the details of the research methods used in this research study. The fourth chapter presents the results of the analyses conducted to address the research questions. The fifth chapter presents the summary, conclusions, and recommendations.

CHAPTER II – LITERATURE REVIEW

An extensive body of research exists that empirically evaluates the economic and societal impacts of the casino gaming industry on host gaming communities (Geisler & Nichols 2016, Hicks, 2014, Cotti, 2008, Walker, 2007). Most of this research used the case study methodology to highlight specific regions of focus. This dissertation mentioned some of the earlier work on gaming to provide proper context to the current body of literature contributing to the discussion. In reviewing relevant scholarly literature on the economic impacts of casino gaming, it was highlighted that early gaming was supported by states that were fiscally strained or depressed (Walker, 1999 Eadington, 1999, Garrett, 2004).

Earlier research studies focused on the positive impacts of casino gaming and others highlighted the negative ramifications, however, there are limited studies that provided consensus on either side of the discussion. Several studies highlighted the importance of casino development and employment, (Eadington, 1999; Friedman, Hakim, & Weinblatt, 1989; Garrett, 2004; Grinols 1994; Grinols & Mustard, 2006; Federal Reserve, 2003). The work of Walker & Barrent (1999) focused on the social cost and pathological gambling which highlighted cost studies, gambling probation and “rent seeking”. Their study found that welfare economics is vital and adds conceptual rigor to social cost calculations that should not be ignored. Like the current research, Walker & Barrett (1999) also studied the impact of casinos on employment in host communities.

Nelson (2013) mentioned in his study, that nearly fifty years ago, Nevada was the only state in the United States to permit casino gaming and there was not one state that had a lottery. This is not the current landscape of the gaming and lottery market in the

United States. As Nelson (2013) asserts, there are several other states that have approved casino establishments and permit lotteries. While the federal government has enacted a strong position in several facets of contemporary gambling policy--specifically, cultivating tribal gaming establishments and attempting to conquer internet gambling--the propagation of lotteries and commercial casinos throughout the American landscape has been mostly the total result of state governments operating independently (Nelson, 2013).

Morality Politics and Gaming

Another important theme in the gaming literature that exists is that of Morality Politics (Nelson, 2013). According to Nelson (2013), many scholars place gambling directly inside the area of morality policy given the nature of the matter and state-centric politics by which it has been primarily contested. Nelson mentions the argument of Christopher Mooney (2001) on this issue and highlights the distinguishing characteristics of "morality politics" (Nelson, 2013). According to Nelson (2013), and identified in work of Mooney (2001), morality politics means arguments of "first principles" where at least one side suggests lawful authorizations of correct and incorrect, and authentications of specific groups of central ethics (Nelson, 2013). The opposite side frequently attempts to surround the subject as one of financial prosperity, democratic choosing, an opposing ethical merit, or, pertaining of gambling for all three. Practically anyone can profess to be knowledgeable because of the focus on values in these debates. This approach tends to simplify and equalize morality policy. Morality Politics is heavily subjective in the public discourse and issues of morality tends to readily catch the community eye (Nelson, 2013).

Fiscal and Societal Influences of Casino Gambling Establishments

Walker (2013) provided an examination of the fiscal and societal influences of gambling establishments. Probing existing investigations, with a blend of philosophy and experiential data, Walker provides critical factors influencing the public policy argument over this debatable business. These factors included key themes: casinos and economic development, tax revenues of government, gambling and consumer behaviors, misconceptions about gaming establishments and the social cost of casino development.

Although the gaming industry has persisted to expand in the United States and abroad, critics contend that casinos transport undesirable public influences that counterbalance any financial advantages to society. Walker investigated the data on the often-declared costs and benefits arising from developments in the gaming industry and the influence on additional industries (Walker 2013).

Casinos and Employment

Employment opportunities provided by casino establishments have often been touted as the economic indicator of growth and development, and largely referenced in the gaming literature by numerous scholars (Rephann et al., 1999; Garrett, 2004; Hicks, 2014; Geisler & Nichols, 2016). Rephann, et al.'s (1999) work examined the regional economic effects of casino development. A central thesis of their research sought to answer is “Who gets the jobs, Locals or outsiders?” Their research found that casino riverboat counties provide significantly larger employment and income opportunities than other host casino counties and highlight that some of the income generated by the gaming industry regionally is dissipated through leakages. Additionally, they suggested that

economic growth depends on the skill set of workers in the host gaming community, as employment outside of local gaming does not benefit residents.

These authors recommended that communities invest in training opportunities such as courses in Hospitality Management for those who reside in the community thus investing in local employment and provide economic outcomes that can benefit residents (Rephann, et. al 1999). Garrett's (2004) work is one from which this study employed a similar methodology. His study examined casinos and their impact to local employment, which is explored more in-depth in the methodology section of this study.

Another study of this kind includes a more recent work by Geisler & Nichols (2016) whose research explored the impacts of employment and income. The authors specifically examine six riverboat gaming states and providing an updated account on casino impacts. They found through data analysis that counties that have casinos saw an increase in income as well as the impacts of casinos on employment and unemployment of neighboring counties, (Geisler & Nichols, 2016). The authors used per capita income data, labor force participation rate as well as unemployment rate to determine outcomes. Walker and Johnson's (2007) research provides an interesting perspective on economic growth and gaming establishments. Their study examined eleven states and found that the casino gaming industry does not significantly impact economic growth and that growth can remain stagnant overtime. This is a contradiction to a previous study conducted by the author (Walker, 1996). Walker (1996) further highlighted the complexity and limitations of cost-benefit analysis and asserted that it is better to examine the impacts of policy changes (Walker, 2007). He asserted that casinos detract from state revenues, largely due to cannibalization (Walker, 2009)

Perhaps the most common notion presented in academic literature with reference to local economic growth and gaming focused on that of the cannibalization effect of casino development (Goodman, 1994; Rose, 1998; Rephann, et.al 1999; Alexander & Paterline, 2005; Walker 2009). The concept of cannibalization is one that focuses on the casino industry and its effects on local businesses in the host gaming community (Goodman, 1994). Goodman contended that the cannibalization effect, the process as Gallenger (2017) asserted “by which a new product or service partly or completely substitutes for those in existing markets” causes local business to close because the casino industry has drained the resources of local businesses outside of the casino. The research by Garret (2004) suggested that there is a significant relationship between casino development and employment. Garret (2004) also contends that the location of casinos has an impact on the skill level of its workforce. This was the case of Tunica during the early stages of gaming development and expansion.

The work of Long, Johnson and Oakley (2011) discussed the effects of the casino gaming industry on employment rates and the quality of life of residents. Their study found that while employment rates increased, employees who lived outside the county were offered the highest paying job opportunities.

Figart & Mutari (2014) study largely focused on employment changes for gaming establishments with specific mention of the quality of the jobs now provided by gaming industries over the last decade. They assert, because of the overexpansion and market saturation communities should reconsider gaming establishments as a primary source of economic development. Their work relied on survey data received from the American Gaming Association as well as case study data. The survey data provided by the

American Gaming Association focused on the percentage of Americans that have frequented casinos, this data showed that 34% of Americans visited a casino in 2011 and the ages twenty-one to thirty-five were the patrons with the highest frequency. These researchers also investigated, as a case study, the job quality in Atlantic City scrutinizing the non-gaming amenities including hotels and restaurant jobs, and noted the deterioration of gaming floors of Casinos in Atlantic City (Figart & Mutari, 2014)

Another work by Huang, Humphreys, and Zhou (2014) looked at gaming expansion in Canada and analyzed the consequence of new casino gaming establishments and its impact on nearby neighborhoods between the years of 1986 and 2007. The researchers found that there was no significant evidence that new casino gaming development cause negative affects to population growth or population composition, nor was there evidence that casino developments reduced unemployment neighboring communities or if there was any correlation of household income increases (Huang, H. Humphreys, B. and Zhou, L. 2014). These authors highlighted in their study that casinos do not always make positive contributions to the local economies as evident in the housing and rental values within the communities of close proximity to these host casino gaming establishments (Huang, H., Humphreys, B. and Zhou, L. 2014)

Various economic forces may influence the effectiveness of a recession. A study by Repetti & Jung (2014) examined the impact of the recession in Atlantic City casinos during the years of 2007-2009. Their work sought to quantify how much of the decline in gaming revenue were due to the 2007-2009 recession or were there other contributing competitive factors. The study revealed that during the same time of the recession there were two newly legalized gaming establishments in neighboring Philadelphia. There was

a substantial reduction of \$422.9 million in monthly slot takes and 34.1 million in monthly table games (Repetti & Jung, 2014). However, the results of the study showed that the recession had no noteworthy effect on either slots or table games capacity once the influence of the latest casinos in Pennsylvania was assessed.

Repetti (2016) indicated that gaming establishment administration may have been overstaffed prior to the Great Recession. Since casino management ensued to decrease workers and related payroll expenses due to commercial vacillations throughout the recession, they might have had too many personnel before the recession. The fact that casino administration continued to slash employment started to climb further reinforces the overstaffing phenomenon. Casino executives appeared to have fine-tuned some of their expenditure choice behavior from pre-recession.

Proponents of casinos and casino expansion argue local employment decreases joblessness providing optimistic economic effects (Garrett 2004). Opponents assert the contrary, providing a research concept of tenacious hardship or as the Farrington (2005) asserts “persistent poverty” even with the achievement of casino establishments (Farrigan 2005). Prior to gaming initially being presented in Tunica County, Mississippi, in 1992, the education and employment statistics showed the dire financial situation that existed, which has often been referenced as “America’s Ethiopia” (Farrigan, 2005). Employment is an essential factor of economic development for any business in a community; the gaming industry has afforded occupations to thousands yearly in the state of Mississippi. A research study composed by von Herrmann (2002) expressed the significance of a stable workforce for the development of casinos in the state of Mississippi. As previous

studies have surmised, the casino industry, just as any industry, requires skilled and quality workers (Garrett, 2004).

The work of von Herrmann (2006) provided a snapshot of casino workers in two counties in the state of Mississippi and asserted that many of the persons employed by the Gulf-Coast Region located to the area because of the employment opportunities provided. A study by Butler and Sayre (2010) focused on the employment impact of Hurricane Katrina in the southern communities along the Mississippi Gulf coast. Their findings revealed that all sectors of employment, in the four counties examined, dipped except for the construction industry due in part to efforts to rebuild in the impacted communities. Because the coastal regions examined were highly service employment communities, these communities saw the largest decreases in employment (Butler & Sayre, 2010).

Casinos and Non-Gambling Entertainment

The few casinos present in the earlier days of gaming were unattractive in appearance, did not offer on-site hotels, golf, spa treatment, restaurants and other forms of entertainment now available in many gaming destination areas (Loi & Kim 2010). The expansion of casino development provided the need for a skilled workforce. Skill sets such as accounting, business management, and marketing were necessary in the expansion of the gaming industry from sole gaming establishments to resort entertainment enterprises (von Hermann 2006)

Because of competition, many gaming industries are proposing entertainment and as a bundled package in effort to curtail the negative image of gaming (Loi, 2008). However, from a political and public policy standpoint, Siu (2006) contended that there must be a balance between the macroeconomic performances and that of the

microeconomic level of small-scale local companies to ensure sustainable and long-term economic growth, using a gaming community in the Asian Pacific, specifically Macao asserted

In view of Macao's particular, historical, social, and economic settings, the coexistence of large-scale casino operators providing world-class recreational services, and a large number of small-scale local firms featuring the uniqueness of Macao's tourism, could realistically elevate the local economy to an even better welfare state (Siu, 2006, p. 984).

Siu (2006) created a thesis that was comparable to those of early researchers of casino development (Rose, 1998; Goodman, 1996), which also mentioned the importance of local economic development. While Goodman (1996) and Garret (2004) focused primarily on local development impacts, Rose (1998) highlighted the economic impacts of gaming on the regional level. According to Garret (2004), there exists a relationship between casinos and employment and concluded that the impact of employment is difficult to quantify, depending on whether the casino is in a rural or metropolitan area. Garrett (2004) also highlighted how competition may hinder the growth of gaming in rural areas.

In an early study, Grinols (1994) centered on the thesis that depict casino gambling as simply a transfer of money and a formidable factor that can reduce a nation's income. His research, however, provided little evidence to support this argument. Numerous factors play a role in casino development and economic growth, thus the assertions conveyed in (Grinols, 1994) earlier work must be examined from a much clearer perspective. Based on the number of years since the conception of legalized

gaming, the changes in economic development strategies and gaming policies must be re-examined to provide insight to the overall study of gaming across national borders.

As McCartney suggested, the casino industry can be viewed as a tourism re-development strategy (McCartney, 2002). Siu's (2006) research shed light on tourism development and focused on the Asian Pacific market and the gaming industry in Macao, as a tourism destination and the strategies the industry would need to maintain its competitive edge. Siu's study examined the role of government and government's commitment to the building of various sporting and recreational facilities. Siu further asserted that in order to sustain performance and boost the overall economy, pairing the development of tourism and recreation is vital and necessary. Stansfield (1996) agreed and made the point that in effort to remain competitive casinos must develop more comprehensive and spectacular entertainment packaging using the American casino design-type as a model which is comprised of non-gaming amenities offered, including shows, concerts, spas and golfing amenities for foreign markets to replicate (Stansfield, 1996).

In a study composed by Kim, et al, (1999), the authors explored the benefits and constraints of competition in a casino gaming industry, enhancing the resorts' competitive position in light of a changing gambling environment. Using data collected by personal interviews, the attributes examined in their study were infrastructure, entertainment, physical environment and wildlife viewing. The results of their study showed that in an effort to respond to rapid competition, companies must provide attributes other than gaming to compete with other similar entertainment and tourism development strategies.

In short, they concluded that casinos are now joining the tourism product offering found in destinations as an effort to gain part of the tourism pie (Kim, et al, 1999).

McCartney (2002) concurred and asserted that entertainment and gaming are bundled because such a combination helps to lessen the negative imagine of gaming. Gu (2003) study focused on the performance of casinos and highlighted that while in a monopoly setting or noncompetitive market, casinos produce better revenue and profit margins. On the other hand, competition in casino developments in America, provide better service and products, hence benefiting the customer. Siu (2006) to some extent, disagreed and asserted that even in a monopoly gaming environment, there are gains in revenue and profit margins and the efficiency gains would be short-term and in the long-haul "inefficiency gains would very likely result" (Sui, 2006).

Thompson, as cited in Gu (2003), highlighted that the design of casinos are important; comparing the development of casino establishments in the United States, (particularly in Las Vegas) with those in Europe, and mentioned that Las Vegas casinos are "large, ostentatiously colorful, and full of excitement, whereas European casinos are drab in appearance. He further asserted that "competition can motivate casino firms to provide better services and products hence benefiting customers". As Eadington (1999a) alluded, local communities have used the gaming industry as an economic development strategy as well as to create economic sovereignty in the city-state which hosts such an activity. However, as Pablo (1996) contended, in order to provide evidence of economic growth for host gaming communities, it is critical that one carefully examine all cost encountered by such communities (Pablo, 1996).

Casino Gaming and Natural Disasters

Most of the casino gaming literature with relationship to economic growth and development, we can rely on the Mississippi Coastal Region to provide perspective. Another imperative factor as it relates to Casinos and the Mississippi Coastal region, is the discussion of natural disasters. An early study by Schwartz and Meyer-Arnet (1999) provided insight to Hurricanes and Casinos in Biloxi Mississippi. Their study examined the hurricane preparedness of Gulf Coast gaming establishments and found the risk of desertion of casino buildings hazardous due in part to natural disaster impacts and recommended that casinos be built on land (Schwartz & Meyer-Arnet 1999).

Ellis and McWhirter (2015) showed that even after a decade, the effects of Hurricane Katrina endured. The authors asserted that Biloxi's populace had fallen 9.4% to 44,984, and numerous dwellings remained empty. The effects of the water surges threw gaming establishments and neighboring vessels into neighborhoods and tossed away structures on August 29, 2005. The effects of the Hurricane caused fatalities and demolished approximately one-fifth of its structures (Ellis & McWhirter, 2015). At the time of the study, the authors asserted that noble residences that once prevailed close to the gulf, were left with bare lots and dense grassland. The authors also provided insight to the lodging establishments, and asserted that approximately 20% of Biloxi lodging units were unoccupied in 2010, a significant increase from 11.4% in 2000, per the census (Ellis & McWhirter, 2015)

According to Ellis and Mcwhirter (2015), before hurricane Katrina, gaming establishments in Biloxi appeared to be at the top of gaming expansion, with a total of nine gaming establishments and additional tourist pulls. After the hurricane, there were

numerous businesses that proclaimed strategies for redevelopment of new casinos, however, these campaigns vastly dissolved amidst concerns of the regions ability to sustain further casino development. While much of the development consisted of tourism-related companies, the Region's additional labor force reflected military centers, the seafood trade, additional tourism related companies along the beachfront. However, even with all of the additional establishments the gulf coast labor force was down 4.9% in comparison to its level in August 2005, per the Bureau of Labor Statistics (Ellis & McWhirter, 2015)

As tourism was a major contributor to economic development in Biloxi along the Mississippi Gulf Coast, these tourism related companies, military centers and the seafood trade business were equally challenged by the 2010-oil spill and rivalry from imports. Ellis and McWhirter (2015) research showed that Biloxi's Unemployment was 6.5% in June 2013, were above the national rate, according to the year's current data available. Their study also showed that in 2000, 14.6% of people in Biloxi lived below the poverty line, according to census data (Ellis & McWhiter, 2015). Since Hurricane Katrina, that figure rose steeply attaining 22.4% for the years from 2009 to 2013. In fiscal year ended September 2013, tax on gambling revenue represented nearly 36% of the general fund revenue, the chief individual contributor to Biloxi's economy, according to a city budget document. Their study also highlighted, per the city government that taxed gross gaming revenue in 2014 was down 11% from fiscal 2004 the year before Hurricane Katrina (Ellis & McWhiter 2015).

Phillips et al. (2013) study examined the legislative and organizational response to the 2005 Hurricane Katrina. The authors posits that a while a natural disaster with the

magnitude of Hurricane Katrina would surely pose many obstacles; the degree of unpreparedness by leadership was astounding. Leadership preparedness was the central thesis of their work. They discussed the exploited adaptations and the various plans for synchronizing subsequent disaster response. There were several learning acquired from this natural disaster were rapidly merged into numerous institutional preparations, readiness, and response programs.

Phillips et al. (2013) note that many of the modified changes in policies were not provided by those directly impacted or involved in Katrina's repercussions. These researchers recommend or perhaps coin the expression "vicarious leadership learning" to define this trend. Their work examined the examples of several organizations and the benefits of the gains of "vicarious leadership" learning was deliberated to add to the discussion of leadership preparedness post a natural disaster (Phillips, et. Al, 2013).

Ellis & McWhitter (2015) in their work showed that over a decade post Hurricane Katrina, that Biloxi's total populations fell 9.4% to 44,984 and many of the establishments remained empty, still displaying the wounds of the natural disaster. At the time of this writing and per the census, approximately 20% of Biloxi lodging units were unoccupied in 2010, increased from 11.4% in 2000 (Ellis & McWhirter, 2015).

Before Hurricane Katrina, Biloxi appeared to be a booming gaming market, with nine gaming establishments and tourist. After the disaster, several projects were placed on hold which cause unemployment and opportunities in the workforce for many. Ellis and McWhirter (2015) also discussed the labor force along the state's Gulf Coast was down 4.9% in comparison to its level in August, per the Bureau of Labor Statistics (Ellis & McWhirter, 2015).

Smith (2014) reported current years have demonstrated that disasters have become increasingly destructive, hazardous and intricate both domestically and internationally. Their work highlighted the instances of the 2004 South Asian tsunami, Hurricane Katrina in 2005, and the Sichuan earthquake of 2008.

Hurricane Katrina in 2005, and the Sichuan earthquake of 2008 were identified as having similar adversities for several years and were deemed as neither man-made nor truly ecological and that a good number of tragedies are a composite blend of natural energies and societal configuration. They looked at the disasters that are man-made like the Madrid bombings of 2004 and the London bombings of 2005 and explained that these consequences are enormous, with organizational, societal, and ecological consequences that echo in the vicinity, nationwide, and worldwide. They examined the preparedness approaches of both and assert that single-discipline approaches are impossible (Smith, 2014).

Smith (2014) contemplated and endorsed the progressively interdisciplinary quality of catastrophes and disaster investigation. The inquiry of disaster research is extensive because hazards studies are very wide-ranging, encompassing various fields of analysis like research on industrial tragedies, exploration on public health disparities, biosecurity subjects and "homeland security", for example. This investigatory scope consisted of an eclectic collection of aspects because researchers from the social, natural, and behavioral disciplines have determined that humankind cannot entirely comprehend perils and catastrophes without an understanding for the social, natural and man-made situations involved (Smith, 2014). Smith covered numerous topics significant to positive investigation and practice and deliberates these matters through an international lens.

Smith's work embraced all fields associated with the study of calamities and natural disasters, including interdisciplinary research forms which expanded the scope of research on the natural sciences, social sciences, physical sciences as well as engineering (Smith 2014)

Stutz (2015) provided insight as he described the triple threat impact to the coastal gaming markets. These are the impacts of Hurricane Katrina, followed by the economic recession and the deep-water oil spill. His research concluded that casinos in such host gaming communities must have "a diversification to the economy" including additional non-gaming amenities such as an entertainment complex, in which he mentioned non-gaming sporting complexes, as well as to expanding airports to include international flights versus simple domestic only terminals. Expansion in the market to appeal to others outside of gaming can prove beneficial (Stutz, 2015). Natural disaster impacts are a critical consideration that should not be ignored.

Stuart (2015) related that casino establishments are required to be located on water is a concept that should be re-evaluated. At the time of this author's research, five of seventeen states that permitted industrial casino development were required to operate on water. He contended that riverboat casino establishments were a dated notion, from the nineteenth-century, and water setting regulations should be amended to mirror more modern gaming establishments. His research primarily focused on the contention that riverboats present rare hazards to human safety and property, are destructive to the ecosystem, and possibly instigate a deficiency in taxation proceeds in states that also allow tribal casinos. Stuart further contended and ultimately concluded that states should

revoke locality rules and permit gaming commissions the complete control of casinos locations while awarding operating licenses to these establishments (Stuart 2015)

Taras (2015) examined and compared the responsiveness to Hurricanes Katrina and Wilma using Mexico and Cuba as a case in point to the United States. Specifically, the author inspected etiologies of storm destruction caused by political monarchs and community leaders in both countries. While highlighting some of the mismanagements and lessons learned from the United States during Hurricane Katrina, it was found that that Caribbean nations responded differently with respect to storm readiness and disaster managing. These differences were the functions that were anticipated by administrators and cultures to lessen mortality and physical destruction caused among partisans systems and countries. A crucial theoretical interrogation the research addressed is if the efficiency of hurricane reactions depends on the country's capability, which included societal capital, public policy significances, social morals, and excellence of management. Explanations were presented and issues acknowledged regarding why a country with enormous resources like the United States replied unsuccessfully to Hurricane Katrina although the Cuban governmental regime with inadequate resources acted successfully in handling Hurricane Wilma (Taras 2015).

Background of the United States Gaming Industry

Although much of the historical research on gaming has been published in several previous gaming studies, this section provided a brief review from a general perspective as most of the information is related to the development of casinos in the state of Mississippi. This research relied largely on the early work of Eadington (2000) for an

historical perspective on Gaming in the United States and a more recent account from the work of Hsu (2016) and Camp et al (2018) on gaming expansion in the United States.

For an extended period during the early 1900s gaming was prohibited in the United States; it was not until 1931 when the first legal gambling establishment took place in Nevada. Moreover, the establishment of legal casino operations was only authorized in Nevada and New Jersey between 1978 and 1989. In the United States, the casino industry was prohibited everywhere except for Nevada. In 1978, Nevada and New Jersey were the only states that could authorize casino gaming industries. Casino gaming industries in the United States have experienced substantial growth and expansion in the early 1990s. The casino industries that were available during this time were in historic agriculture and mining communities, on riverboats, in suburban and urban locations, and on Tribal Indian lands (Eadington, 2000). As Eadington (2000) indicated, the size of the gaming industries is measured by gross gaming revenues; these are the revenues received after all slot wins and takes (losses) are assessed. Between the years of 1982 through 1996, the revenues grew from 10 billion to 47 billion, which reflect a significant amount in gross gaming revenue (Eadington, 2000).

Several variations of casino gambling exist in the United States. However, the casinos that are the most popular today are the full-service casinos. Since the time of Eadington's 2000 study, Nevada and several other casinos offer "full-service" casinos. Nevada gambling establishments have state of the art facilities and was the first host community to provide full-services for casino entertainment. Eadington asserted,

True "full service" destination resort casino hotel entertainment complexes can be found only in Nevada and Atlantic City, New Jersey. Indeed, by the end of the

1990's, the standards for such resorts in Las Vegas call for facilities with 3000 or more hotel rooms; unique-often spectacular -architecture; extensive entertainment offerings; indoor and outdoor recreational options; extensive culinary and shopping experience; and of course, "state of the art" gaming opportunities (Eadington, 2000:3).

The cost of new development in the casino industry is an expensive undertaking. In the United States, the Las Vegas strip is the largest and the most expensive by far (Eadington, 2000). The cost of construction of a new property on the Las Vegas tourist market was reported over \$500 million in the early 1990's with construction cost of \$2 billion (Eadington, 2000). More recent casino project plans show that casino resort construction has increased with cost of up to 8 billion (Statista, 2018) Casinos in Atlantic City, Reno and those in Mississippi replicate the Nevada-style market structure and regulatory principles. The trend toward construction design and entertainment use Las-Vegas as a model. Tunica County used the Casino industry in Nevada as a development model (von Herrmann, 2002). Moreover, Mississippi has no political restrictions on how many casinos' can be placed within a region (Wallace, 1998; von Herrmann, 2002). Tourism plays a vital role in the casino gambling industry and showed how mega complexes contribute extensively to external non-casino industries (Eadington, 2000).

Recent historical accounts can be found in the work of Hsu (2016) and Camp et al (2018). Hsu (2016) provided a collection of essays on the economic and social impacts of legalized gaming in the United States using case studies to understand the social and economic impacts. Her work provides a comprehensive historical overview of the

gaming market from both a regional and national perspective, as well as a current market status of the gaming industry (Hsu, 2016). Specifically her combined research took a through look into the modifications of gambling laws and regulations by state, examined the positive and social ramifications of gaming as well as the overall future of gaming expansion and the larger combination of the industry in the field of hospitality management (Hsu 2016).

Camp et al (2018) work examined the expansion of the gaming industry in the United States and analyzed the public interest implications, which included the social costs associated with gaming expansion as well as the state revenues obtained to assist with such costs. Their research examined growth while simultaneously, reviewing the Indian Gaming Regulatory Act (IGRA) and their role in casino expansion. The study used Northeastern states within the United States as a case in point examining state revenues of those casinos and the funding provided specifically for the prevention of problem gaming and the research linked with the social cost of those areas. Their research found that there was a lack of consistency in the examined states casino tax rates, revenues and ultimately the support for problem gambling prevention (Camp et al, 2018).

In the context of this study, a background of Casinos and Tourism driven economies in the coastal areas within the United States are imperative. Schumann (2013) showed that tourism-dependent coastal regions are vulnerable to severe damage imposed by hurricanes and non-physical damage from a negatively compromised destination image. Though limited research is found on the function of destination image in tourism re-development post a natural catastrophe, those that do limit the scope of research and

separate from other social and economic parameters are recognized to inspire recovery. To address this phenomenon, this study used a mixed methodology to investigate how a destinations imagine, operating in tandem with the social weakness of neighborhood inhabitants, local economic reliance on tourism, and pre-storm journey's end popularity, may change the financial trends of tourism evolution in U.S. Southeastern coastal provinces recuperating from storm strikes. Results display that designs of monetary regaining do not correspond to typical forms of physical impairment corresponding the gale path. These researchers also highlight the significance of economic diversity and an optimistic destination image in nurturing a swift tourism sector recapture after hurricanes (Schumann, 2013)

Background of Gaming in Mississippi

In examining the growth of the casino industry in Mississippi, one can assess the economic and overall impacts of casino development. This section contains the political and legislative history as it pertains to gaming activity in Mississippi. The formal introduction to casino gaming in the state of Mississippi began by legislative activity. Thus and understanding of the early stages of gaming in Mississippi is given to provide proper perspective.

Political History

The proposal to legalize gaming in Mississippi was first introduced in 1990 by State Representative Tommy Walman of McComb, MS and later proposed by State Senator Tommy Gollot of Biloxi (von Herrmann, Ingram, & Smith 2000). It was the economic astuteness of Walman, and Gollot who, as a follow up, proposed casino development in Mississippi (von Herrmann, Ingram, & Smith, 2000). Walman included a

five-member governing body to oversee the regulations of the industry. This governing body was housed in the state tax commission and later moved to what is known today as the Mississippi Gaming Commission (von Herrmann, Ingram, & Smith, 2000).

It was only a two-year span in 1992, when the first dockside casino appeared on the Mississippi Gulf Coast in the form of a paddlewheel steamboat. During this same time both state representatives and senators alike, passed versions of the bill on the development of casinos. There were differences in attitudes toward this new legislation; some accepted casino gambling as a positive economic generator for the south, while others held a persistent anti-gambling position. By the end of the year, Mississippi led the way in job creation and employment opportunities in Mississippi and had five other casinos.

A Present Examination of the Mississippi Casino Industry

At the time of this study, Mississippi had a total of 27 casinos, a complete list can be shown below in Table 1. Mississippi presently has 26 operating casinos (Mississippi Gaming Commission, 2019) and today's casinos in Mississippi no longer have the paddlewheel boats, but are more modernly constructed in both style and design. As of 2019, the casinos in Mississippi range from 14,000 square feet of gaming space to 136,000 square feet per take (Mississippi Gaming Commission, 2019). Most are designed like those in Las Vegas, Nevada. Many of the newly developed casinos feature first class hotels, meeting facilities, regional cuisine, and 24-hour world-class entertainment. The primary growth of the casino industry is primarily on the Gulf Coast and in the greater Tunica area. The Mississippi casino industry is labor intensive and has brought in many service jobs to the state of Mississippi.

Table 1 List of Mississippi Casinos

Mississippi Casino's	Casino Location
Beau Rivage Casino	Biloxi, MS
Boomtown Casino Biloxi	Biloxi, MS
Golden Nugget Biloxi	Biloxi, MS
Hard Rock Casino Biloxi	Biloxi, MS
Harrah's Gulf Coast	Biloxi, MS
Hollywood Casino Bay St. Louis	Bay St. Louis
IP Casino Resort Spa	Biloxi, MS
Island View Casino	Gulfport, MS
Palace Casino	Biloxi, MS
Scarlet Pearl Casino Resort	D'lberville, MS
Silver Slipper Casino	Bay St. Louis
Treasure Bay Casino	Biloxi, MS
1 st Jackpot Casino	Robinsonville, MS
Fitzgerald's Casino - Tunica	Robinsonville, MS
Gold Strike Casino Resort	Robinsonville, MS
Hollywood Casino - Tunica	Robinsonville, MS
Horseshoe Casino and Hotel	Robinsonville, MS
Isle of Capri - Lula	Dundee, MS
Sam's Town - Tunica	Robinsonville, MS
Ameristar Casino Hotel	Vicksburg, MS
Harlow's Casino Resort	Greenville, MS
Lady Luck Casino	Vicksburg, MS
Magnolia Bluffs Casino	Natchez, MS
Riverwalk Casino	Vicksburg, MS
Trop Casino Greenville	Greenville, MS
WaterView Casino & Hotel	Vicksburg, MS

Figure 1. Mississippi Casino Gaming Locations



<http://www.mississippicasinos.com/images/MainMap1.gif>

The extensive growth of the gaming industry in Mississippi has been attributed greatly to what casino authors and scholars attest as the states “‘Nevada-style’ regulatory and market structure, which neither limits the number of licenses that may be granted, nor places restrictions upon the amount players may wager or lose” (von Herrmann, Ingham, & Smith, 2000). Some believe that Mississippi has not yet reached its peak, others, perhaps, would contend the opposite; and that casino development in the Mississippi region have reached their maximum capacity. Although the casino industry has been a

catalyst for economic growth in Mississippi, it is imperative for social scientist and economist, to continue scholarly research. Threats such as crime, prostitution, and even natural disasters can destroy families due to crime (Grinols and Mustard, 2006), and bankruptcy (Garrett and Nichols, 2008) as natural disasters can impact growth to employment and policy implications and considerations (Butler and Sayre, 2010 and Stutz, 2015)

The Growth of the Gaming Industry in Mississippi

Before the economic recession in 2008-2009 and the devastating events of Hurricane Katrina in 2005, Mississippi had experienced growth in the gaming industry from the casinos inception to 2005 before Hurricane Katrina. Although such a catastrophic event caused the state millions of dollars in the loss of tourism and in tax generated revenue; the state has since then rebuilt in the Coastal region. Even though Mississippi lost tourists during the hurricane the Gulf Coast continues to remain a chief area of attraction for gaming in Mississippi. Due to the loss of revenue from the gaming industry, policy makers had intense debates over the issue of permitting land-based construction in its rebuilding process once the Hurricane destroyed most of the coastal gaming establishments. Mississippi legislators called a special session in 2005 and in this session permitted casinos to be built on land (Clarion Ledger, 2006).

Each casino has its own market area; these areas can be referenced as gaming regions. In Mississippi there are three regions, also known as the “three river regions” primarily because before Hurricane Katrina, gaming establishments were only permitted on water. These “three river regions” are known as North River, South “Central” River, and Gulf Coast region.

The Coastal Region

In the Mississippi gaming industry, the Coastal Region is the area of south Mississippi with 62 miles of coastline along the Gulf of Mexico Region. There are three counties that make up the Mississippi Coastal Region: Jackson County, Harrison County and Hancock County. (1) Jackson County. (Chang, 1995 and U.S. Census Bureau, 2018) Jackson County is located on the east of the Gulf Coast toward Alabama, and was founded in 1812, according to the Jackson County Mississippi website (Jackson County Mississippi, 2018) (2) Harrison County, which county seats are Biloxi and Gulfport and is located in the middle. (3) Hancock County is located west toward Louisiana. There are a total of 12 casinos in the Mississippi Coastal Region. Table 1 provides a list of Coastal Casinos (Mississippi Gaming Commission, 2019)

Table 2 Mississippi Coastal Region Casinos

Casino Name	Casino County	Casino City
Beau Rivage Casino	Harrison County	Biloxi, MS
Boomtown Casino Biloxi	Harrison County	Biloxi, MS
Golden Nugget Biloxi	Harrison County	Biloxi, MS
Hard Rock Casino Biloxi	Harrison County	Biloxi, MS
Harrah's Gulf Coast	Harrison County	Biloxi, MS
Hollywood Casino Bay St. Louis	Hancock County	Bay St. Louis
IP Casino Resort Spa	Harrison County	Biloxi, MS
Island View Casino	Jackson County	Gulfport, MS
Palace Casino	Harrison County	Biloxi, MS
Scarlet Pearl Casino Resort	Harrison County	D'lberville, MS
Silver Slipper Casino	Hancock County	Bay St. Louis
Treasure Bay Casino	Harrison County	Biloxi, MS

The Northern Region

The Northern Region also known as the North River Region (Mississippi Gaming Commission, 2018) is an area in north Mississippi with gaming establishments in Tunica County and is the located only 30 minutes south of Memphis, TN and near the greater Arkansas area and is a part of the Mississippi Delta region. Table 3 shows all casinos located in Tunica County

Table 3 Mississippi Northern Region Casinos

Casino Name	Casino County	Casino City
1 st Jackpot Casino	Tunica County	Robinsonville, MS
Fitzgerald's Casino - Tunica	Tunica County	Robinsonville, MS
Gold Strike Casino Resort	Tunica County	Robinsonville, MS
Hollywood Casino - Tunica	Tunica County	Robinsonville, MS
Horseshoe Casino and Hotel	Tunica County	Robinsonville, MS
Isle of Capri - Lula	Tunica County	Dundee, MS
Sam's Town - Tunica	Tunica County	Robinsonville, MS

The Central Region

The Central Region also known as the Central River Region (Mississippi Gaming Commission, 2018) Casinos in the Central region make up those casinos in Washington County in Greenville, MS, Warren County, Vicksburg, MS and Adams County in Natchez, MS. Greenville has two casinos, Vicksburg has four casinos and Natchez has one commercial casino and hotel.

Table 4 Mississippi Central Region Casinos

Casino Name	Casino County	Casino City
Ameristar Casino Hotel	Warren County	Vicksburg, MS
Harlow's Casino Resort	Washington County	Greenville, MS
Lady Luck Casino	Warren County	Vicksburg, MS
Magnolia Bluffs Casino	Adams County	Natchez, MS
Riverwalk Casino	Warren County	Vicksburg, MS
Trop Casino Greenville	Washington County	Greenville, MS
WaterView Casino & Hotel	Warren County	Vicksburg

CHAPTER III - METHODOLOGY

Chapter 3 is a presentation of the methodology that was used to examine the data and conduct the analyses to respond to the research questions that were developed to address the problem of the study. The purpose of this study was to determine what impact casinos in Mississippi have on the economy of the host communities. The researcher was interested in understanding what type of social, economic, and environmental changes occur in the communities as a result of casino operations. In this quantitative research study, the data were gathered from records provided by the Mississippi Gaming Commission to test the level of change that occurred in the host communities of Mississippi casinos between 2000 and 2015, a period when Mississippi communities experienced severe economic crises due in part to natural disasters and economic recession.

In this study, the researcher evaluated four independent variables to determine the degree of difference based on organizational, technical, and environmental factors. The value of one variable can be statistically examined based on the value of two or more variables (Creswell, 2012). This research study utilized quantitative techniques to analyze the data for the determination of difference between the periods 2000 and 2015 to determine the economic impact of the gaming industry at state and local levels.

Rationale for Methodology

This research study was conducted using quantitative methods to identify the financial contributions and or consequences of entertainment activities to the gaming industry in Mississippi. The researcher utilized data collected from the Mississippi Gaming Commission with a descriptive research design. The study was conducted by

obtaining primary employment, tourism and revenue data from the Mississippi Gaming Commission. Specifically, looking at gaming revenue pre and post the economic recession; non-gaming entertainment and the impact of policy changes after a natural disaster. The research design sought to determine whether there were differences in organizational, technical, and environmental factors related to the casinos operations after the casinos experienced the natural disasters. The quantitative descriptive approach was selected because it allows the collection of data from participants who meet certain requirements. This approach also allowed the researcher to determine statistical inference about populations based on observations from a sample (Vogt, 2007).

When studying a sufficient sample of the population, this descriptive approach allows for some generalizations about the results (Ross, 2010). This research design does allow for generalizations about the larger population (Vogt, 2007).

Population

Casinos were selected from the list of Mississippi casinos in the database of the Mississippi Gaming Commission. The study was conducted by obtaining primary employment, tourism and revenue data from the Mississippi Gaming Commission for the period from 2000-2015. The study specifically looked at gaming revenue pre and post the economic recession; non-gaming entertainment and the impact of policy changes after a natural disaster.

Sample

This research study used convenience sampling procedures to select participants (casinos) for the study. The convenience random sampling procedure was appropriate for representing the data for the target population (Vogt, 2007). A complete list of potential participating casinos was generated from data provided by the Mississippi Gaming Commission. The researcher used convenience sampling to select the 11 sample casinos.

Instrumentation

The data collection instrument was the Mississippi Gaming Commission database that allowed secondary data collection. The researcher operationalized four independent variables of interest to measure the differences in levels between the pre and the post periods.

Data Collection Procedures

The researcher collected the data on the Mississippi casinos from the Mississippi gaming Commission. Data relating to the area of interest for this study were selected and prepared for analysis. Statistical analyses were conducted to gain information about individual characteristics of the casinos and to respond to the research questions posed.

Data Analysis Procedures

Each of the four variables of interest, casino characteristics, characteristics of casinos before and after the US financial meltdown and Hurricane Katrina, revenues and finances of casinos before and after the US Financial Meltdown and Hurricane Katrina, and operating expenses of casinos before and after the US financial meltdown and Hurricane Katrina were represented by a corresponding, testable research question (hypothesis). Descriptive statistics were completed with the questions. Additionally, the

paired t-test was leveraged to examine the differences between the pre and post measures, differences between the pre financial meltdown and the natural disaster period and the post financial meltdown and the natural disaster period in the operations at the Mississippi casinos.

CHAPTER IV - RESULTS

Chapter 4 is a presentation of the results of the analyses that were computed to address the problem of the study. The purpose of this study was to determine what impact casinos in Mississippi have on the economy of the host communities. The researcher was interesting in understanding what type of social, economic, and environmental changes occur in the communities as a result of casino operations. Four research questions were developed to address the problem of this study. The specific research questions examined in this study included the following:

1. What changes occurred in the characteristics of Mississippi Casinos as measured by the number of employees, square footage, and other activities, between 2005 and 2015 after the financial meltdown and Hurricane Katrina?
2. Is there a significant difference between the characteristics of casinos before and after US financial meltdown and Hurricane Katrina (2005-2015)?
3. Is there a significant difference between the revenues and finances of casinos before and after US financial meltdown and Hurricane Katrina (2005-2015)?
4. Is there a significant difference between operating expenses of casinos before and after US financial meltdown and Hurricane Katrina (2005-2015)?

The tables that follow serve to present the results of the analyses that were computed to address the research questions. Research question one asked: What changes occurred in the characteristics of Mississippi Casinos as measured by the number of employees, square footage, and other activities, between 2005 and 2015, with a specific look at 2005 and 2015, after the financial meltdown and Hurricane Katrina? The data in Tables 5, 6 and 7 serve to respond to research question one. In comparing the data in

these tables it is evident that all of the casinos listed witnessed a reduction in the number of employees during this period. At the same time, most of them increased gaming square footage, and some of them adjusted their services to include more eating facilities, meeting rooms, and RV parking.

Table 5 2005 Mississippi Casino Characteristics

Q1 2005 Property Data				
North River Region	Number of Employees	Gaming Sq. Footage	Other Sq. Footage	Activities in Addition to Gaming
Bally's - Robinsonville	742	40,000	149,358	Restaurants, Entertainment & Hotel
Fitzgerald's - Robinsonville	914	38,088	522,912	Hotel and Restaurant.
Gold Strike - Robinsonville	1.394	50,486	1,347,597	Restaurants, Millennium Theater, Arcade, and Hotel.
Grand Casino - Tunica	2.255	136,000	204,000	Restaurants, RV Park, Arcade, Golf Course, Kid's Quest, and Clay Shooting.
Harras's - Tunica	711	35,000	151,924	Live Entertainment, Restaurants, and golf.
Hollywood - Robinsonville	957	54,000	337,613	Restaurants, RV Park, Arcade, Hotel, and Pool.
Horseshoe - Robinsonville	2.232	63,000	222,500	Live Entertainment, Restaurants, Health Club, and Blues Museum
Isle of Capri - Lula	777	63,500	65,000	Movies, Concerts, Dining, Pools and Exercise Facility.
Sam's Town - Tunica	1.149	74,210	21,790	Entertainment Center, Restaurants & Western Emporium.
Sheraton - Robinsonville	727	32,800	121,000	Restaurants, Ballroom, & Spa
Region Totals	11.858	587,084	3,143,694	

Table 6 2015 Mississippi Casino Characteristics

Q1 2015 Property Data				
<i>North River Region</i>	<i>Number of Employees*</i>	<i>Gaming Sq. Footage</i>	<i>Other Sq. Footage</i>	<i>Activities in Addition to Gaming</i>
Bally's Tunica Casino	350	46,535	153,543	Hotel, Buffet, Gift Shop, Steak House
Fitzgerald's Casino - Tunica	587	38,457	309,200	Dining at the Steakhouse, Riverview Buffet and Indulge Cafe.
Gold Strike Casino Resort	1333	54,205	1,346,253	Stage Bar, Ten 10, Buffett Americana, Atrium cafe, Food Court, Millennium Theatre and Chicago Steakhouse
Hollywood Casino - Tunica	135	55,000	260,831	RV Park, Indoor Pool
Horseshoe Casino and Hotel	1458	63,000	222,500	Restaurants, bars, swimming pool, showroom
Isle of Capri – Lula	433	63,500	65,000	Dining Concerts Gift Shop
Resorts Tunica Hotel & Casino	427	42,902	331,311	Hotel, Steak House, Gift Shop, Buffet, Meeting Rooms
Sam's Town - Tunica	547	66,000	30,000	RV park with 62 spaces
Tunica Roadhouse Casino	484	31,000	121,000	Gift shop, swimming pool, bar, restaurant
Region Totals	5754	460,599	2,839,638	

*Includes hotel workers Q1

Research question two asked: Is there a significant difference between the characteristics of casinos before and after US financial meltdown and Hurricane Katrina (2005-2015)? The paired samples t-test was computed to address this question. The data in Table 5 and Table 6 serve to present the comparisons between the characteristics of the casinos in 2005 and in 2015.

Table 7 examines characteristic of the Mississippi casinos for the period before the financial meltdown and the period after the financial meltdown. As seen in the table, the mean number of employees was reduced, while the mean number of slot games and the mean number of table games was increased.

Table 7 Comparison of Characteristics of Casinos Before and After US Financial Meltdown

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Number of Employees in 2005	576.3	13	404.4	112.2
	Number of Employees in 2015	181.0	13	464.9	128.9
Pair 2	Number of Slot Games in 2005	378.3	10	402.5	127.3
	Number of Slot Games in 2015	1114.3	10	312.1	98.7
Pair 3	Number of Table Games in 2005	29.5	10	25.5	8.1
	Number of Table Games in 2015	37.2	10	25.3	7.9

Table 8 is a presentation of the paired samples t-test computed to compare differences in the characteristics of casinos before and after US financial meltdown. As seen in the table, significant difference was found between the number of slot games in 2005 and the number of slot games in 2015 ($p < .05$).

Table 8 Paired Samples T-test-Comparison of Characteristics of Casinos Before and After US Financial Meltdown (2005-2015)

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Number of Employees in 2005 - Number of Employees in 2015	395.3	745.6	206.8	-55.2	845.9	1.912	12	.080
Pair 2	Number of Slot Games in 2005 - Number of Slot Games in 2015	-735.9	560.9	177.4	-1137.3	-334.7	-4.149	9	.002*
Pair 3	Number of Table Games in 2005 - Number of Table Games in 2015	-7.7	27.5	8.7	-27.3	11.9	-.887	9	.398

Research question three asked: Is there a significant difference between the revenues and finances of casinos before and after US financial meltdown (2005-2015)? The paired samples t-test was computed to address this question. The data in Table 5 and Table 6 serve to present the comparisons between the revenues and finances of the casinos in 2005 and in 2015.

Table 9 examines revenues and finances of the Mississippi casinos for the period before the financial meltdown and the period after the financial meltdown. As seen in the table, the mean gross revenue, capital investment, in state expenses, in-state expenses, land expenses, and facility expenses were increased.

Table 9 Comparison of Revenues and Finances of Casinos Before and After US Financial Meltdown

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Gross Revenue 2005	166033491.3	29	152697526.2	28355218.8
	Gross Revenue 2015	251636635.0	29	127385387.3	23654872.6
Pair 2	Capital Investment 2005	1219324310.9	28	523967486.3	99020547.4
	Capital Investments 2015	1705240218.3	28	856090125.8	161785826.6
Pair 3	In State 2005	-325377972.9	22	320080836.7	68241463.7
	In State 2015	141848374.0	22	99435578.9	21199736.7
Pair 4	Out of State 2005	318137.8	29	3698413.7	686778.2
	Out of State 2015	90366.2	29	163037.7	30275.3
Pair 5	Land 2005	8162756.2	22	7626897.2	1626059.9
	Land 2015	9013499.8	22	8421792.3	1795532.1
Pair 6	Facility 2005	-232624472.1	22	223003604.1	47544528.1
	Facility 2015	96097400.7	22	89204846.3	19018537.2

Table 10 is a presentation of the paired samples t-test computed to compare differences in the revenues and finances of casinos before and after US financial meltdown. As seen in the table, significant difference was found between the capital investment in 2005 and capital investment in 2015 ($p < .05$); significant difference was found between in-state expenses in 2005 and in-state expenses in 2015 ($p < .05$); significant difference was found between land use expenses in 2005 and land use in 2015 ($p < .05$); significant difference was found between facility expenses in 2005 and facility expenses in 2015 ($p < .05$).

Table 10 Paired Samples T-test-Comparison of Revenues and Finances of Casinos Before and After US Financial Meltdown

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Gross Revenue 2005 - Gross Revenue 2015	-85603143	246813768	45832166	-179486080	8279793	-1.87	28	.072
Pair 2	Capital Investment 2005 - Capital Investments 2015	-4859159073	800277724	151238274	-796231213	-175600601	-3.2	27	.003*
Pair 3	In State 2005 - In State 2005	-4672263460	419516415	89441200	-653229505	-281223188	5.224	-21	.000*
Pair 4	Out of State 2005 - Out of State 2015	227771	3647733	677367	-1159751	1615295	.336	28	.739
Pair 5	Land 2005 - Land 2015	-850743	794895	169472	-1203180	-498306	5.020	-21	.000*
Pair 6	Facility 2005 - Facility 2015	-328721872	312208450	66563065	-467147344	-190296400	4.939	-21	.000*

*Denotes significance

Research question four asked: Is there a significant difference between operating expenses of casinos before and after US financial meltdown and Hurricane Katrina? The paired samples t-test was computed to address this question. The data in Table 7 and Table 8 serve to present the comparisons between the revenues and finances of the casinos in 2005 and in 2015.

Table 11 examines operating expenses of the Mississippi casinos for the period before the financial meltdown and the period after the financial meltdown. As seen in the table, the mean gaming equipment expenses, payroll, operating expenditures, advertising

expenses, and advertising expenses increased, while donations and public service expenses decreased.

Table 11 Comparison of Operating Expenses of Casinos Before and After US Financial Meltdown

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Gaming Equipment 2005	-24061115.0	29	37753273.8	7010606.9
	Gaming Equipment 2015	12092744.4	29	10380797.4	1927665.7
Pair 2	Payroll 2005	57321082.9	29	24980702.5	4638800.0
	Payroll 2015	60562690.7	29	31443486.3	5838908.83
Pair 3	Operating Expenditures 2005	88223380.1	29	79783335.9	14815393.6
	Operating Expenditures 2015	214086682.7	29	107592819.3	19979484.9
Pair 4	Advertising 2005	5467060.8	29	3505738.2	650999.2
	Advertising 2015	9222589.5	29	3814594.7	708352.4
Pair 5	Donations/Public Service 2005	73114.8	29	55953.7	10390.3
	Donations/Public Service 2015	57608.1	29	25140.8	4668.5
Pair 6	Other 2005	-67574815.9	22	70042363.4	14933082.0
	Other 2015	23288201.7	22	9839866.4	2097866.6

Table 12 is a presentation of the paired samples T-test computed to compare differences in the operating expenses of casinos before and after US financial meltdown. As seen in the table, significant difference was found between the gaming equipment expenses in 2005 and gaming equipment expenses in 2015 ($p < .05$); significant difference was found between operating expenditures in 2005 and operating expenditures in 2015 ($p < .05$); significant difference was found between advertising expenses in 2005

and advertising expenses in 2015 ($p < .05$); significant difference was found between other expenses in 2005 and other expenses in 2015 ($p < .05$).

Table 12 Paired T-test-Comparison of Operating Expenses of Casinos Before and After US Financial Meltdown (2005-2015)

	Paired Differences					t	df	Sig. (2-tailed)		
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
				Lower	Upper					
Pair 1	Gaming Equipment 2005 - Gaming Equipment 2015	-36153859	47898629	8894552	-54373523	-17934195	-	28	4.065	.000*
Pair 2	Payroll 2005 - Payroll 2015	-3241607	34051740	6323249	-16194197	9710981	-.513	28		.612
Pair 3	Operating Expenditures 2005 - Operating Expenditures 2015	-125863302	161668711	30021126	-187358791	64367813	-	28	4.192	.000*
Pair 4	Advertising 2005 - Advertising 2015	-3755528	6887682	1279010	-6375462	-1135594	-	28	2.936	.007*
Pair 5	Donations/Public Service 2005 - Donations/Public Service 2015	15506	80274	14906	-15028	46041	1.040	28		.307
Pair 6	Other 2005 - Other 2015	-90863017	60202496	12835215	-117555309	64170725	-	21	7.079	.000*

*Denotes significance

This investigation also involved an examination of Quarter 1 data that included the period January 1 – March 31 for the years 2000 and 2015. The ravages the natural disasters inflicted on the gaming industry were accompanied by numerous landscape alterations that impelled casino name changes as well as the decision by some casino management to liquidate and go out of business. It is important to note that the total number and names of casinos that existed in 2000 were no longer the same for the inquiry of 2015 data. The differences and name changes are a result of the destruction and losses attributed to the economic and financial crises that erupted during the period of natural disasters, primarily Hurricane Katrina.

Because of the difficulty in matching the casinos exactly by name for comparison purposes, the region data and the state data comparisons for the periods 2000 and 2015 became more meaningful and reliable to get a realistic image of the changes that resulted. The review was completed on data available only for casinos existing in 2000 for which there was an exact match in 2015. An important change that occurred during this examination period (2000 and 2015) was a name change for the region that was called the South River Region in 2000. In 2015, the former South River Region that included casinos, Vicksburg, Natchez, and Greenville was renamed the Central Region. Data that was reported there are matching casinos names. The data relating to the overall region, however, become more meaningful as being representative of the financial and economic description of the entire region.

The data examined in this study include variables that were available for the casinos in the three regions for the years targeted for the study which were 2000 and 2015. This information and comparisons are presented in the tables that follow examining the data for

the three regions representing Mississippi’s casino industry for the year’s 2000 and 2015, Mississippi Coastal Region Casinos, Mississippi Northern Region Casinos, and Mississippi Southern Region Casinos

Table 13 is a presentation of the description of the Mississippi Central Region Casinos regarding four variables of interest, total employees, average number of slot games, average number of table games, and total square footage. As seen in the table, three of the casinos located in the Northern Region contained comparative data for the two years of interest 2000 and 2015. The table indicates that there was a decrease in the total number of employees, a decrease in the number of slot games, except for small increases at Ameristar Casino and Isle of Capri, and a decrease in the number of table games. The three casinos showed an increase in total square footage.

Table 13 Mississippi Central Region Casinos, Comparison of Q1 Regional Data 2000 & 2015

Casino	Total Employees			Avg # Slot Games			Avg # Table Games			Total Sq. Ft		
	2000	2015	Difference	2000	2015	Difference	2000	2015	Difference	2000	2015	Difference
Ameristar Casino Hotel	1079	749	-330	1,340	1,527	+187	50	27	-23	100,820	332,918	+232,098
Isle of Capri Casino – Natchez	823	221	-602	750	759	+9	28	6	-22	54,900	96,246	+41,346
Lady Luck Casino	375	274	-101	666	530	-136	16	7	-7	34,261	30,000	+4,261
Region Totals	4185	2741	-1441	6,181	5,839	-346	166	109	-57	567,298	782,731	+215,433

Table 14 is a presentation of the description of the Mississippi Coastal Region Casinos regarding four variables of interest, total employees, average number of slot games, average number of table games, and total square footage. As seen in the table, six of the casinos located in the Coastal Region contained comparative data for the two years

the areas of interest 2000 and 2015. The table indicates that there was a decrease in the total number of employees, a decrease in the number of slot games, a decrease in the number of table games, and a decrease in total square footage in the three coastal Region casinos examined in this research.

Table 14 Mississippi Coastal Region Casinos, Comparison of Q1 Regional Data 2000 & 2015

Casino	Total Employees			Avg # Slot Games			Avg # Table Games			Total Sq. Ft		
	2000	2015	Difference	2000	2015	Difference	2000	2015	Difference	2000	2015	Difference
Beau Rivage Casino	2909	1405	-1504	1,997	1,907	-90	88	83	-5	2221669	2179327	-42342
Boomtown Casino – Biloxi	1031	408	-623	1,159	948	-211	28	16	-12	133000	90785	-42215
Treasure Bay Casino	1033	530	-503	938	817	-121	56	26	-30	310000	55673	-254327
Region Totals	16717	8862	-7855	17,227	13,543	-3,684	629	437	-192	4271749	5284447	+1012698

Table 15 is a presentation of the description of the Mississippi Northern Region Casinos regarding four variables of interest, total employees, average number of slot games, average number of table games, and total square footage. As seen in the table, six of the casinos located in the Northern Region contained comparative data for the two years of interest 2000 and 2015. The table indicates that there was a decrease in the total number of employees, a decrease in the number of slot games, and a decrease in the number of table games. There were three casinos that showed an increase in total square footage in the Northern Region casinos.

Table 15 Mississippi Northern Region Casinos, Comparison of Q1 Regional Data 2000 & 2015

Casino	Total Employees			Avg # Slot Games			Avg # Table Games			Total Sq. Ft		
	2000	2015	Difference	2000	2015	Difference	2000	2015	Difference	2000	2015	Difference
Bally's Tunica Casino	779	343	-436	1,301	949	-352	49	16	-33	137,000	200,078	+63,078
Fitzgerald's Casino - Tunica	994	501	-493	1,213	1,027	-186	34	20	-14	561,000	347,657	-213,343
Gold Strike Casino Resort	1,264	1,148	-116	1,490	1,359	-121	50	60	+10	1,347,597	1,400,458	+52,861
Hollywood Casino - Tunica	1,186	74	-1,112	1,489	1,094	-395	50	20	-30	337,513	315,831	-21,682
Horseshoe Casino and Hotel	2,590	1,412	-1,178	1,596	1,115	-481	61	77	+16	225,500	285,500	+60,000
Sam's Town - Tunica	1,252	467	-785	1,482	1,007	-475	49	20	-29	761,141	96,000	-665,141
Region Totals	14,005	5,234	-8,771	17,033	8,950	-8,083	542	265	-277	4,382,961	3,300,237	-1,062,724
State Totals	34,907	16,837	-18,070	40,441	28,332	-12,109	1,337	811	-526	9,222,008	9,958,581	+736,573

Figure 2 is a presentation of the Mississippi total number of employees assigned to the casinos in existence in the year 2000 and 2015, the target years of this investigation. As is seen in the figure, by the year 2015, the total number of employees decreased from 2000.

Figure 2. Comparison of State Casino Employee Data—2000 and 2015

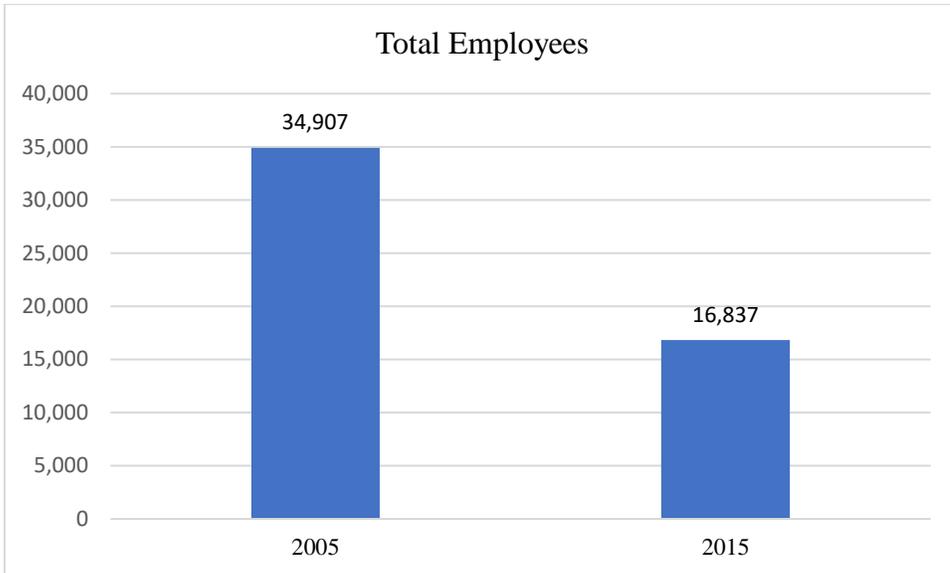


Figure 3 is a presentation of the number of state slot games conducted at the casinos in existence in the year 2000 and 2015, the target years of this investigation. As is seen in the figure, by the year 2015, the number of slot games conducted in casinos decreased from 2000.

Figure 3. Comparison of State Casino Slot Games Data—2000 and 2015

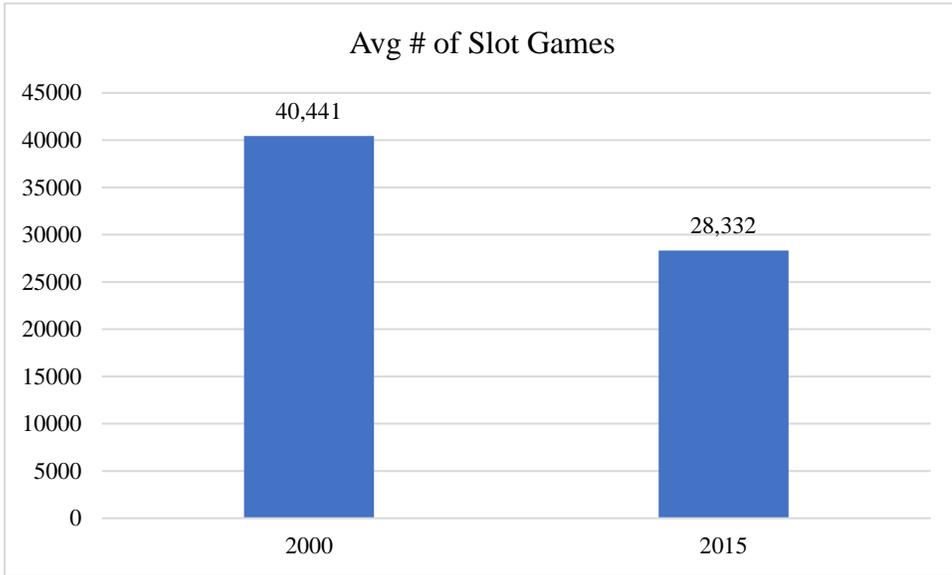


Figure 4 is a presentation of the number of table games conducted at the casinos in existence in the year 2000 and 2015, the target years of this investigation. As is seen in the figure, by the year 2015, the number of table games conducted in the casinos decreased from 2000.

Figure 4. Comparison of State Casino Table Games Data—2000 and 2015

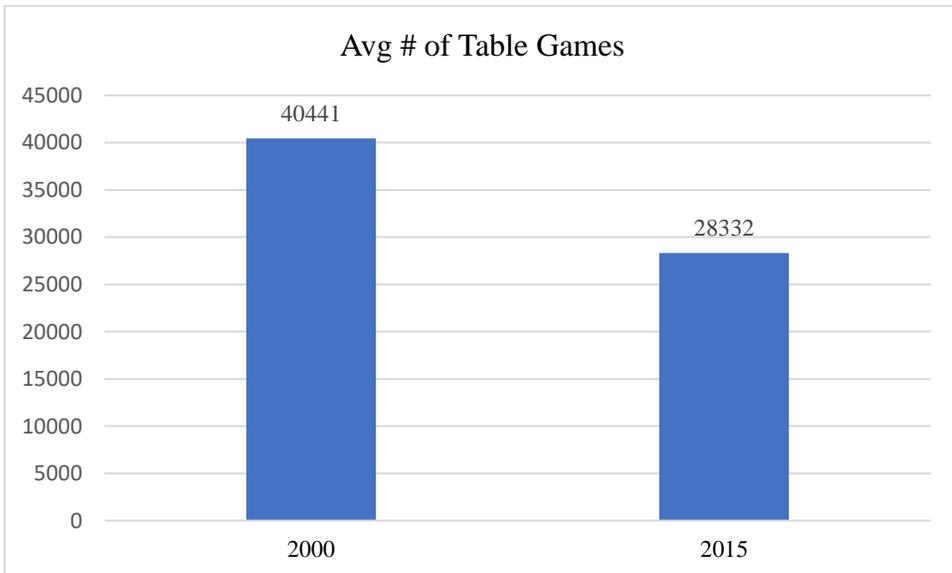
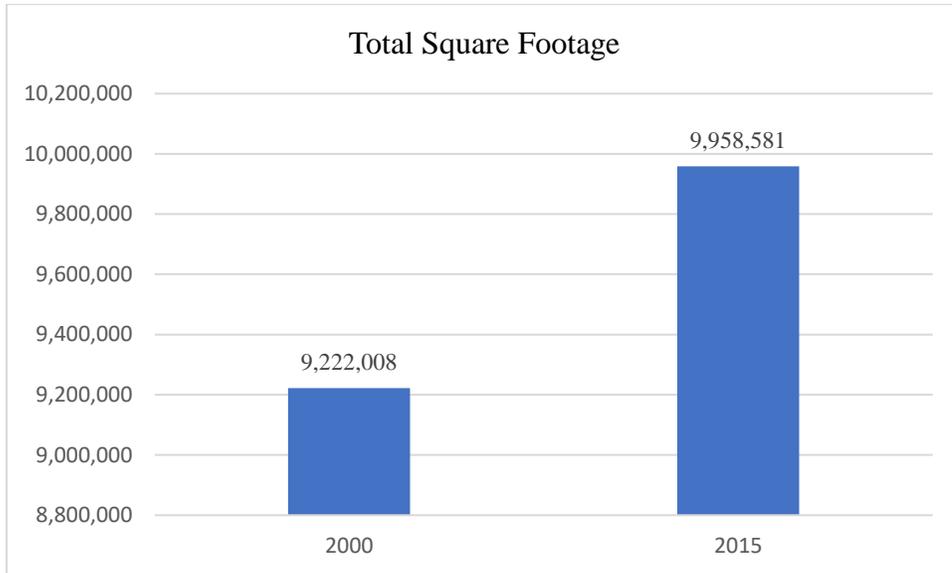


Figure 5 is a presentation of the Mississippi total square footage assigned to the casinos in existence in the year 2000 and 2015, the target years of this investigation. As is seen in the figure, by the year 2015, the total square footage allocated for casinos increased from 2000.

Figure 5. Comparison of State Casino Square Footage Data—2000 and 2015



CHAPTER V– SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 is a presentation of the summary, conclusions, and recommendations. The purpose of this study was to determine what impact casinos in Mississippi have on the economy of the host communities. The researcher was interesting in understanding what type of social, economic, and environmental changes occur in the communities as a result of casino operations.

Four research questions were developed to address the problem of this study. The specific research questions examined in this study included the following:

1. What changes occurred in the characteristics of Mississippi Casinos as measured by the number of employees, square footage, and other activities, between 2005 and 2015 after the financial meltdown and Hurricane Katrina?
2. Is there a significant difference between the characteristics of casinos before and after US financial meltdown and Hurricane Katrina (2005-2015)?
3. Is there a significant difference between the revenues and finances of casinos before and after US financial meltdown and Hurricane Katrina (2005-2015)?
4. Is there a significant difference between operating expenses of casinos before and after US financial meltdown and Hurricane Katrina?

Summary

Research question one asked: What changes occurred in the characteristics of Mississippi Casinos as measured by the number of employees, square footage, and other activities, between 2005 and 2015 after the financial meltdown and Hurricane Katrina? All of the casinos listed witnessed a reduction in the number of employees during this period. At the same time, the majority of them increased gaming square footage, and

some of them adjusted their services to include more eating facilities, meeting rooms, and RV parking.

Research question two asked: Is there a significant difference between the characteristics of casinos before and after US financial meltdown (2005-2015) and Hurricane Katrina? The number of employees was reduced, while the number of slot games and the number of table games was increased. In comparing differences in the characteristics of casinos before and after US financial meltdown, significant difference was found between the number of slot games available in the casinos in 2005 and the number of slot games available in 2015.

Research question three asked: Is there a significant difference between the revenues and finances of casinos before and after US financial meltdown (2005-2015) and Hurricane Katrina? The gross revenue, capital investment, in state expenses, in-state expenses, land expenses, and facility expenses were increased during this period. In comparing differences in the revenues and finances of casinos before and after US financial meltdown, significant difference was found between the capital investment in 2005 and capital investment in 2015; significant difference was found between in-state expenses in 2005 and in-state expenses in 2015; significant difference was found between land use expenses in 2005 and land use in 2015; and significant difference was found between facility expenses in 2005 and facility expenses in 2015.

Research question four asked: Is there a significant difference between operating expenses of casinos before and after US financial meltdown and Hurricane Katrina? The gaming equipment expenses, payroll, operating expenditures, advertising expenses, and advertising expenses increased, while donations and public service expenses decreased.

In comparing differences in the operating expenses of casinos before and after US financial meltdown, significant difference was found between the gaming equipment expenses in 2005 and gaming equipment expenses in 2015; significant difference was found between operating expenditures in 2005 and operating expenditures in 2015; significant difference was found between advertising expenses in 2005 and advertising expenses in 2015; and significant difference was found between other expenses in 2005 and other expenses in 2015.

The second phase of the study investigated the years of 2000 and 2015. The results were interesting in that the trends in employment were similar to the years of 2005 and 2015. The analysis for the years 2000 and 2015 investigated each gaming region separately. In the Central Region, the researcher found a decrease in the total number of employees, a decrease in the number of slot games, with the exception of the minor increases at Casinos Ameristar and Isle of Capri, and the Central region also saw a decrease in the number of table games and an increase in total square footage. The second region examined was the Coastal Region and the Coastal Region showed similar results as the Central Region. In the Coastal Region it was found that there was a decrease in the total number of employees, and a decrease in the number of slot and table games. However, for the Coastal region it was interesting that the region showed a decrease in total square footage of the Casinos investigated in the study. The final region observed was the Northern Region. The findings for this region showed that there was a decrease in the total number of employees, a decrease in the number of slot games, and a decrease in the number of table games. There were three casinos that showed an increase in total square footage in the Northern Region casinos.

Conclusions

The findings of this study contribute to the academic literature in that they provide a current analysis of the long-term economic impacts of casino development in their respective communities. This dissertation examined shortcomings in the gaming industry in Mississippi by researching the gaming market in Mississippi and focusing on the long-term economic impact, particularly examining and comparing the economic and environmental impact of the development/installation of casinos on their host communities. The closure retrenchment of casinos due to economic recession and natural disasters also have an impact on the lives and livelihood of communities surrounding these casinos.

An important theme, which is central to this study, is the impact casinos have on employment in host gaming communities. Garret (2004) had suggested that there is a significant relationship between casino development and employment. The results of this study revealed that all of the casinos examined during the period before and after the financial meltdown, witnessed a reduction in the number of employees during this period. According to Hicks (2014) and Geisler & Nichols (2016), employment has often been regarded as the economic indicator of growth and development.

While the Mississippi casinos reduced their workforce, the majority of them were busy increasing gaming square footage, and some of them adjusted their services to include more eating facilities, meeting rooms, and RV parking. When Rephann et al. (1999) examined the regional economic effects of casino development, they reported that casino riverboat counties experience significantly larger employment and income than other host casino counties, and the question they were concerned with the most was

whether the employees who were being hired were local residents or outsiders. That question is important because growth depends on the skill set of workers in the host gaming community, as employment outside of local gaming does not benefit local residents. Garret (2004) reported that there is a relationship between casinos and employment and concluded that the impact of employment is difficult to quantify, depending on whether or not the casino is in a rural or metropolitan area. Garrett (2004) believed that competition may hinder the growth of gaming in rural areas.

This study also found significant difference in capital investment, in-state expenses, land-use expenses and facility expenses. In addition, there the study revealed that significant difference was found between the number of slot games available in the casinos in 2005 and the number of slot games available in 2015. This finding of growth is not consistent with Walker and Johnson (2007) who examined eleven states and found that the casino gaming industry does not significantly impact economic growth and that growth can remain stagnant overtime.

The study also found that there was significant difference between the gaming equipment expenses in 2005 and gaming equipment expenses in 2015, operating expenditures in 2005 and operating expenditures in 2015, advertising expenses in 2005 and advertising expenses in 2015, other expenses in 2005 and other expenses in 2015. However, as Walker (1996) suggested, in order to fully understand the complexity and limitations of cost-benefit analysis, it is better to examine the impacts of policy changes that may have occurred in Mississippi relating to the gaming industry during this period (Walker, 2007).

A thorough examination of these results would provide valuable information that has the potential to facilitate future preparation and planning for casino development and improvement. This process can also facilitate an awareness of the financial impact of certain activities and demands that casino developers advocate for the implementation of a well-controlled project management strategy. The results can also shed light on the government influence on casino development and the amount of additional revenue attributed to entertainment activities that are collected during the casino operations, or the amount of consumer entertainment spending that will occur in the casino environment. The results also provided information on the addition on entertainment activities and other services to the casinos list of activities which can be a source for the critical information necessary to estimate consumer entertainment spending at Mississippi casinos and the impact of adaptability in legislation during times of economic recession and natural disaster. While employment is a key variable, there are other factors that will need to be researched and collected to provide a gain an understanding of the true economic health of the Mississippi casinos.

For casino gambling to continue as a positive economic generator for the state of Mississippi, it is necessary for policy-makers and other stakeholders to invest in training mechanisms such as courses in Hospitality Management for those who reside within the community thus investing in local employment and provide economic outcomes that can benefit local residents, as recommended by Rephann et al. (1999). Mississippi has an opportunity to lead the way in job creation and employment opportunities for Mississippi residents through creation and management of the casinos. Geisler & Nichols (2016) are convinced about the impacts of casinos on employment and income. They examined six

riverboat gaming states and concluded that counties that have casinos saw an increase in income as well as the employment and unemployment of neighboring counties (Geisler & Nichols, 2016).

Recommendations for Further Study

A study should be conducted to examine factors that influence the economic health of casinos in Mississippi. A study should also be conducted to investigate the type of investments and preparation made by colleges and universities to prepare students for employment in the casino industry. More research needs to be done from a holistic perspective about the development of casinos as part of the community in addition to an investment vehicle for corporate interests. A symbiotic relationship exists between a casino and its community and the value of the relationship remains to be earnestly considered in the decision-making processes of casino developers. A lesson can be learned from Mother Nature in this regard. While the casino industry considers in large measure that gaming industry exists solely and abjectly separate from the public that supports it, Mother Nature does not see it this way. Casinos are part of a larger system of human structures and functions. When gale force winds waded obliterated the gulf coast, they made no distinctions between casinos and their neighborhoods. Casino developers, legislations, and affiliated stakeholders need to take this same tack.

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