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## A public choice perspective on the progression of casino gaming

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- 1 Introduction
- 2 A public choice model
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### 1.Introduction

#### 1.1 Background of study


- ◆ Constraints and opportunities associated with the progression of an economy and its various industries have been evidently influenced by the political system and the public interests of the nation.
- ◆ Indeed, dynamic interaction between social and public interests determines the industry's evolving path, hence its changing performance over time.



### 1.Introduction

#### 1.1 Background of study


- ◆ History of the political economy study
  - ◆ Before the middle of the 20th century, economists were exclusively interested in exploring the role of government in protecting individuals and their property rights
  - ◆ From 1950s, inspired by Arrow in his *Social Choice and Individual Value* (1951), researchers began to explore the formal and informal constraints of government's decision-making process and the government failure caused
  - ◆ Currently, New Political Economy assumed that the decision making process of a government is run by self-seeking politicians, whose interests are influenced by, but not necessarily identical to various interest groups



### 1.Introduction

#### 1.1 Background of study


- ◆ Nevertheless, none of them has ever explored the public decision making process for the legalization and progress of casino gaming
  - ◆ It has been recognized as one of the faster growing global industries since the last decade of the 20th century
  - ◆ Social and public choices, and their changes may exert higher weights in influencing the practice of casino gaming than economic interests
  - ◆ Given the social interests, it is not necessarily identical to the public choices which ultimately determine the legal structure and organization of casino industry



### 1.Introduction

#### 1.2 Factors influencing the public choice of casino gaming

- ◆ Casino gaming is subject to the public choice on its legitimacy in the first place, which further shapes its layout
  - ◆ An attractive proposition of casino gaming is the attempt to grasp the explicit and considerable volume of economic returns, as well as to propel the development and redevelopment of various related sectors in the local economy
  - ◆ However, an unique attribute of casino gaming is that in the process of providing related gambling services to the general public, various averse social impacts (including social costs) may be associated



## 1. Introduction

### 1.1 Background of study

- ◆ The public choice of casino gaming in any one jurisdiction may also be influenced by the related public decisions in the neighboring regions/nations
  - ◆ For example, following the successful experiences as reported by Las Vegas since its liberalization by the end of the 1960s, Atlantic City legalized its casino gaming in 1976
  - ◆ Thereafter, more and more states in the US chose to legalize their own casinos, partly on the purpose to cannibalize the citizens' gambling expenditures spent in other out-of-state casinos



## 1. Introduction

### 1.2 Factors influencing the public choice of casino gaming

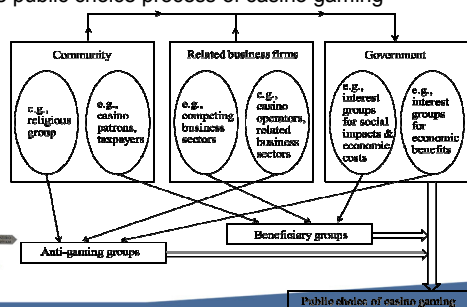
- ◆ It is evident that while public choice is in principle reflecting the social preference, it is not a static state and could be varied over time when either (or both) the internal or (and) external settings changed.
  - ◆ Following the Macao Special Administrative Region (SAR) Government of China liberalized its casino industry in 2002, and the Singapore Government formally approved its casino bill in 2005, it is evident that the related changes in the public interests towards casino gaming are diffusing to other Asian nations.



## 1. Introduction

### 1.2 Factors influencing the public choice of casino gaming

- ◆ Generally speaking, three major groups may participate in the public choice process of casino gaming



## 2. A public choice model

- ◆ It is assumed that in the political process which determines the public choice of casino gaming, there are two major groups in actions – the anti-gaming (A) and the beneficiary group (B)
  - ◆ It is assumed that there are  $a$  people in group A, and  $b$  people in group B.
  - ◆ If casino gaming is legalized, the income redistributed to each group are defined as

$$R_A = Z_A^G - Z_A^0 \quad \text{and} \quad R_B = Z_B^G - Z_B^0$$



## 2. A public choice model

- ◆ Generally speaking, legalization/liberalization of casino gaming increase the monetary income of the local economy to both group A and group B
  - ◆ New business opportunities are generated
  - ◆ The government may lower the direct and indirect taxations imposed to its citizens, as well as subsidize and provide more public services
- ◆ Non-monetary terms like the ethical and religious concerns may also take effect in the legalization process



## 2. A public choice model

### 2.1 The beneficiary group model

- ◆ It is firstly assumed that the expected benefit of group B to participate in the legalization process can be separated into two terms
  - ◆ The expected utility when group B win ( $U_B^G$ )
    - ◆ It is comprised of both monetary and nonmonetary terms
 
$$U_B^G = Z_B^G + E_B$$
  - ◆ The voting taste ( $t_B$ )
    - ◆ It is independent from the voting result



## 2. A public choice model

### 2.1 The beneficiary group model

- The emotional benefit of group B could simply be expressed as the happiness/emotional benefit of gamble, the easy access to good quality service, etc

- Indeed, it could be stimulated by government signaling: If the government provides more clear signals for casino legalization, group B may be more inclined to participate in the voting process

$$E_B = F(s) \text{ and } \frac{\partial E_B}{\partial s} > 0$$

- If casino is prohibited, however, there will be no income redistribution and the income/emotional benefit of group B will retain at the original level

$$U_B^0 = Z_B^0$$



## 2. A public choice model

### 2.1 The beneficiary group model

- Suppose that there are already  $i$  persons in group A and  $j-1$  persons in group B who will participate in the voting process, the possibility that the casino will be legalized (i.e., group B win) is

$$P_B(i, j-1)$$

- The expected benefit of an extra person in group B when s/he participate or not

	Possible results of casino legislation	
	Casino prohibition	Casino legalization
participate	$(1 - P_B(i, j))(U_B^0 + t_B - c_j)$	$P_B(i, j)(U_B^G + t_B - c_j)$
does not participate	$(1 - P_B(i, j-1))U_B^0$	$P_B(i, j-1)U_B^G$



## 2. A public choice model

### 2.1 The beneficiary group model

- Consequently, the person will only participate in the process if

$$\Delta P_B(R_B + E_B) + t_B > c_j$$

- The group leaders (i.e., the related governors) of group B need to choose  $j$  to maximize the group's expected utility

$$\max V = b[P_B(i, j)U_B^G + (1 - P_B(i, j))U_B^0] + jt_B - C_B$$



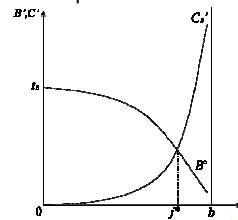
## 2. A public choice model

### 2.1 The beneficiary group model

- The first order condition of group B's maximization is given by

$$V' = b(R_B + E_B)\left(\frac{\partial P_B}{\partial j}\right) + t_B - \frac{\partial C_B}{\partial j} = 0$$

- Hence the equilibrium state is



## 2. A public choice model

### 2.2 The anti-gaming group model

- Different from group B, individuals in group A concern more on the emotional/ethical benefits s/he can obtain from casino prohibition, and ignore the monetary benefit when casino is legalized

- Their utility on the expected income redistribution of casino legalization is zero

$$U(R_A) = 0$$

- They will obtain positive emotional benefit when casino is prohibited as they are strictly preferred casino prohibition to legalization.

$$U_A^0 = Z_A^0 + E_A \text{ and } U_A^G = Z_A^0 + U(R_A) = Z_A^0$$



## 2. A public choice model

### 2.2 The anti-gaming group model

- The expected benefit of an extra person in group A is

	Possible results of casino legislation	
	Casino prohibition	Casino legalization
participate	$P_A(i, j)(U_A^G + t_A - c_i)$	$(1 - P_A(i, j))(U_A^G + t_A - c_i)$
does not participate	$P_A(i-1, j)U_A^0$	$(1 - P_A(i-1, j))U_A^0$

- Consequently, the extra person will only participate in the process if

$$\Delta P_A E_A + t_A > c_i$$



## 2. A public choice model

### 2.2 The anti-gaming group model

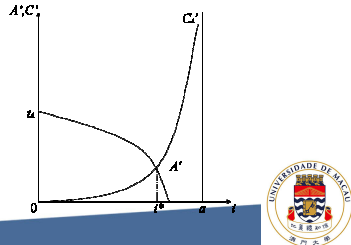
- The governors who want to prohibit casino gaming will choose  $i$  to maximize the group's expected utility

$$\max W = a[P_A(i, j)U_A^0 + (1 - P_A(i, j))U_A^G] + it_A - C_A$$

- The first order condition of group A's maximization is

$$W' = aE_A\left(\frac{\partial P_A}{\partial i}\right) + t_A - \frac{\partial C_A}{\partial i} = 0$$

- The equilibrium state is



## 2. A public choice model

### 2.2 The anti-gaming group model

- If each voter involved in the casino legalization process can spend identical expenditures on political pressure and is weighted equally, the legislation result of casino gaming is then decided by the comparison of  $i$  and  $j$ 
  - If  $i > j$ , the anti-gaming group has more power to lobby the government and casino is more probably be prohibited
  - If  $i < j$ , more individuals in the beneficiary group decided to participate in the process, casino may be legalized
- Exemptions may exist when the beneficiary group can have more discourse power in the government through lobbying

## 3. Evidences and discussions

State	Year legalized	Mode of legalization		
		Legislative action	Referendum	Local option vote
Nevada	1931	✓		
New Jersey	1976	✓	✓	
Iowa	1989	✓		✓
South Dakota	1989	✓	✓	✓
Colorado	1990	✓	✓	
Illinois	1990	✓		
Mississippi	1990	✓		✓
Louisiana	1991	✓		✓
Indiana	1993	✓		✓
Missouri	1993	✓	✓	✓
West Virginia	1994	✓		✓
Michigan	1996	✓	✓	
Pennsylvania	2004	✓		
Kansas	2007	✓		✓
Maryland	2008		✓	

- It's clear that the legislative result of casino gaming is more commonly relied on the government (i.e., legislative action) and the interest groups (i.e., local option vote)

## 3. Evidences and discussions

- However, the public choice is more probably departed from social choice in casino legalization through legislative action
  - Nevada legalized casino gaming in 1931 with legislative action to stimulate its economy
    - But the organized crime is flourished thereafter, and hence casino faced numerous pressures both from the community and from the federal government to be banned
    - It has continuous support from the state government and its legal status can be sustained

The legislative action of casino legalization mainly demonstrates that the "small group" is able to press the government and hence the public choice

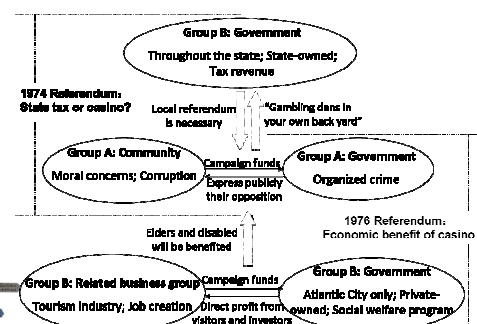
## 3. Evidences and discussions

### 3.1 New Jersey's case

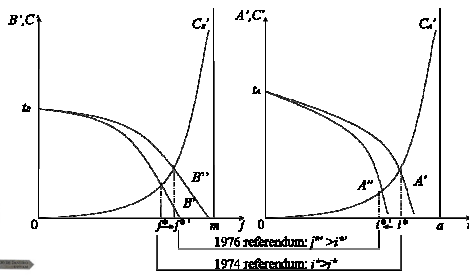
- In 1974, the governors who support to legalize casino in Atlantic City placed a casino proposal, on the New Jersey general election ballot
  - It would have permitted state-owned casino throughout the state
  - The general public may still held a negative image to casino gaming
- After their defeat in 1974, supporters of casino gaming placed another referendum in 1976 that would permit private-owned casino in Atlantic City only

## 3. Evidences and discussions

### 3.1 New Jersey's case



### 3. Evidences and discussions 3.1 New Jersey's case



### 3. Evidences and discussions 3.1 New Jersey's case

- It's clear that the expected monetary benefit played a more concentrated role in deciding the casino legalization result, such as in the 1976 referendum, which may induce the departure of public choice (e.g., casino legalization) from social choice (e.g., prevailed negative image of casino gaming)
- Nevertheless, if the expected benefit is not clearly stated, which may partly due to the absent of government signaling, the voting taste/emotional concern turns to be the key factor and hence the public choice (e.g., casino prohibition in the 1974 referendum) would be identical to the social choice



### 3. Evidences and discussions 3.2 Taiwan's case

- In 2009, Taiwanese government passed a new casino regulation, which stated that legalized casino can be built on offshore islands with the passage of local referendum
- Following this new regulation, Penghu was the first to hold a referendum on a tourist casino proposal in 2009, although it was then defeated by the local voters.
- In 2012, however, Matsu proposed another casino plan and was able to be passed

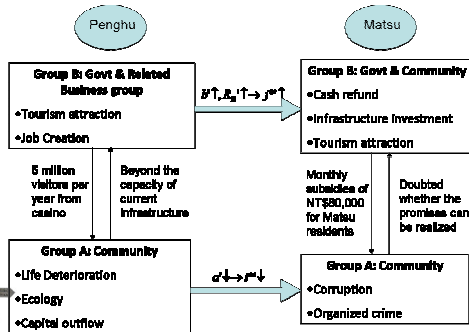


### 3. Evidences and discussions 3.2 Taiwan's case

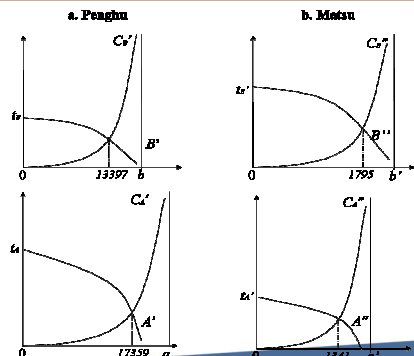
- Penghu has a well-established infrastructure and industry base with abundant natural resources
- Nevertheless, because of the global financial tsunami, the local government suffered from a financial deficit
- Hence the government would like to legalize casino to foster the economic growth by attracting tourists and creating new jobs
- Matsu has a less developed infrastructure
- But its geographic advantage made it possible to attract Chinese gamblers as a casino destination
- Different from Penghu, the referendum in Matsu stated clearly the community's benefit from legalized casino



### 3. Evidences and discussions 3.2 Taiwan's case



### 3. Evidences and discussions 3.2 Taiwan's case



### 3. Evidences and discussions 3.2 Taiwan's case

- ◆ The two referendums in Penghu and Matsu indicated that, other than the expected benefit, the group size is also important in the progress of casino legalization
  - ◆ If the expected benefit can be spread more widely in the community, such as the case in Matsu, the beneficiary group's size can be increased, which may provide a solid base for the potential supporters
  - ◆ If, on the contrary, the expected benefit of casino gaming is concentrated on a certain group, as the case in Penghu, the majority may just comply the conventions to play against casino



### 4. Conclusions and remarks

- ◆ With reference to public choice theory, especially the group's voting behavior, this paper is able to formulate a theoretical framework on the progression of casino gaming, which is further examined by the experience in New Jersey and Taiwan.
- ◆ The progression of casino gaming represents a compromise of both monetary and non-monetary interests and their changes over time, instead of a sole economic consequence



### 4. Conclusions and remarks

- ◆ The motivation to participate in casino legalization process is varied across different groups
  - ◆ The beneficiary group, which includes the governors, the casino operators, the related tourism industries, etc, are mainly concerned with the direct economic benefit from casino gaming
  - ◆ While the anti-gaming group, which is comprised of church groups, religious groups, local service industries, etc, are motivated, to a large scale, by the emotional and ethical concerns



### 4. Conclusions and remarks

- ◆ The experiences in New Jersey and Taiwan not only verified the aforementioned model, but also provided valuable policy suggestions
  - ◆ It implied that it's an efficient strategy for the government, especially for those countries that have a large religious people and conservatives, to state clearly the expected benefit of the mass community with casino legalization
  - ◆ It's evident that the more people aware what they will benefit from casino gaming, the more support the government will have

It's crucial for the further researches to develop specific models, which is suitable to a given region, with reference to its specific characters



Thank you !

