GAMBLING IN THE AMERICAN STATES: WHY SOME STATES ARE MORE PERMISSIVE THAN OTHERS

BY

JACQUELINE WILKS, B.A.

A thesis submitted to the Graduate School
in partial fulfillment of the requirements
for the degree
Master of Public Administration

New Mexico State University
Las Cruces, New Mexico
August 2004

"Gambling in the American States: Why Some States Are More Permissive Than Others," a thesis prepared by Jacqueline Wilks in partial fulfillment of the requirements for the degree, Master of Public Administration, has been approved and accepted by the following:

Linda Lacey
Dean of the Graduate School

William Taggart
Chair of Examining Committee

Date

Committee in Charge:

Dr. William Taggart, Chair

Dr. William Gould

Dr. Diane-Michele Prindeville

Dr. Nadia Rubaii-Barrett

DEDICATION

IN LOVING MEMORY

Margaret Nishnick Wilks

1947–2001

ACKNOWLEDGEMENTS

I would like to extend my heartfelt thanks to the faculty and staff of the Government Department of New Mexico State University. I am especially grateful to my committee chair, Dr. William Taggart, for his guidance, patience, and wisdom. I would like to thank Dr. Nadia Rubaii-Barrett for her kindness and the knowledge she so willingly shared. I am indebted to Dr. Diane Prindeville for her words of encouragement and advice. I would also like to thank Dr. Russell Winn for many enlightening conversations.

I would like to thank Mandy, my sister and friend, for her unconditional support throughout my graduate studies. I would also like to thank Hunter for always making me smile. And lastly, my thanks to William, for the love, laughter, and distractions that made this thesis possible.

VITA

November 19, 1975	Born in Washington, Pennsylvania
1998	B.S., Wofford College, Spartanburg, SC
2002-2004	Graduate Assistant, Department of Government, New Mexico State University
2003	Instructor, New Mexico State University

Professional and Honorary Societies

American Society for Public Administration

Association for Research on Nonprofit Organization and Voluntary Action

International City/County Management Association

Papers Presented

Wilks, Jacqueline and Taggart, William, March, 2004. *Gambling In The American States: Why Some States Are More Permissive Than Others*. Paper presented at the National Academy of Criminal Justice Sciences Conference, Las Vegas, NV

Wilks, Jacqueline, April, 2004. *Gambling In The American States: Why Some States Are More Permissive Than Others*. Findings presented at the Graduate Research and Arts Symposium. New Mexico State University, Las Cruces, NM.

Field of Study

Major Field: Government

Public Administration and Policy Studies

ABSTRACT

GAMBLING IN THE AMERICAN STATES:
WHY SOME STATES ARE MORE
PERMISSIVE THAN OTHERS

BY

JACQUELINE WILKS, B.A.

Master of Public Administration

New Mexico State University
Las Cruces, New Mexico, 2004
Dr. William Taggart, Chair

Recently there has been an increasing interest in the study of morality policies among political scientists. Morality policies fall into a separate class of public policy and examine some of the most contentious issues facing policy-makers today, including abortion, physician-assisted suicide, homosexual rights, and legalized gambling. This thesis contributes to the ongoing discussions surrounding morality policies and offers a more in-depth examination of public policy surrounding legalized gambling in the American states.

It is proposed that the level of legalized gambling, or gambling permissiveness, in a state will be related to four substantive areas: political characteristics, economic characteristics, social characteristics, and the availability of gaming in neighboring governmental jurisdictions. The research begins with a

review of the literature and the development of hypotheses related to each of the four substantive areas. The analysis proceeds with an examination of the bivariate relationship between each of the independent variables and gambling permissiveness. Multiple regression is then used to identify those factors which remain significant when placed into a model with other similar variables. A final model is developed using variables that retained their significance throughout the three-stage process.

The findings suggest that gambling permissiveness is related to three factors: the percentage of the state's population that is fundamental protestant, interest group density, and the availability of gaming in neighboring governmental jurisdictions. This research contributes to the growing body of literature on the determinants of public policy by providing some insight for policy makers interested in understanding the variation in gambling permissiveness.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

LEGALIZED GAMBLING IN THE AMERICAN STATES: WHY SOME STATES ARE MORE PERMISSIVE THAN OTHERS

Introduction and Brief History of Gambling

Gambling is certainly not a new phenomenon in the United States; to the contrary, it has a lengthy and lively history. In early American settlements, lotteries were an important revenue mechanism, especially for raising funds for the colonial army during the War for Independence (North American Association of State and Provincial Lotteries [NASPL], 2003). At that time, no one seemed to question the morality of gambling or government involvement in the operation of gaming activities. Lotteries were increasingly prominent in the American states during the period immediately following the adoption of the Constitution and were the source of funds for some of our most notable universities, such as Harvard, Yale, Princeton, and Columbia (NASPL, 2003). However, when states began to lose money and stories of corruption became increasingly common, most states took steps to ban not only lotteries, but other forms of gambling as well. Following a major scandal in 1883, Louisiana banned lotteries and no state sponsored lotteries would operate again until 1964 (Dunstan, 1997). In 1909, Nevada outlawed casino gambling and by the start of the next decade, virtually all forms of gambling were illegal in the American states (Rose, 1999).

Gambling was outlawed in most of the American states until the early 1930s, but the gaming industry did not cease to exist; it just moved "underground" as an illegal activity. Perhaps for this reason, among others, gambling gradually re-emerged as a legal part of American culture. During the Great

Depression, racetracks started to appear and charity bingo became a growing phenomenon (Rose, 1999). In 1931 Nevada became the first state to re-legalize casino gambling and, in 1964, New Hampshire created the first state lottery (NASPL, 2003). By the 1970s several states, including New York and New Jersey, had started state-sponsored lotteries. In 1978, New Jersey became the second state to authorize casino gambling. The first lottery spanning more than one state was established among Maine, New Hampshire, and Vermont in 1985 (Rose, 1999). Today, almost all states offer a lottery and most allow other forms of gambling as well (Bowman & Kearney, 2002). For instance, in the early 1990s, limited-stakes riverboats opened in Iowa; six months later higher-stakes riverboats opened in Illinois (Rose, 1999). Since then, a number of other states have allowed various forms of gaming and gaming-related activities.

By the beginning of the 21st century, the gambling industry had virtually transformed itself from an illegal activity to a well-accepted form of recreation. Individual states currently have varying levels of gaming from no gambling at all to extensive gaming activities (NASPL, 2003). For some states, gambling revenues represent nearly 5% of the state's total revenue (e.g., Nevada). Legalized gambling continues to expand within the states. Once restricted to Nevada and New Jersey, casino-style gambling is now available in 23 states (Bowman & Kearney, 2002).

The *International Gaming & Wagering Business Journal* reports that there are currently 21 forms of legalized gambling: charitable bingo, charitable games, card rooms, casinos and gaming, noncasino devices, Indian casinos, Indian bingo, sports betting, video lottery, keno-style games (not including keno games available in casinos), instant/pulltabs, lotto games, greyhound, jai-

alai, harness, quarter horse, thoroughbred, inter-track wagering, off-track wagering, and telephone wagering. Although each of these is a legal form of gambling, not all of them are legal in all states. Legalized gambling is expanding across the United States and the number of gaming venues continues to grow. However, the spread of legalized gambling has been inconsistent. Some states permit lotteries, but not casinos. Some states have charity bingo, but not slot machines.

There is increasing interest in understanding the factors associated with a state's permissiveness or tendency to engage in or permit legalized gaming (e.g., Berry & Berry, 1990; Filer, Moak, & Uze, 1988; Furlong, 1998). The traditional models of examining state-level policy are unable to answer why some states are more "moral" than others when it comes to gambling-related policy. This research aims to identify the factors, both internal and external, that influence the permissiveness of a state's gambling policies.

Approach and Theoretical Framework of This Study

This study seeks to identify and understand the factors that influence the amount of legalized gambling permitted in a given state. This research asks, "Why are the policies of some states more permissive than others when it comes to gambling?" More specifically, "What factors are associated with a state's propensity toward the acceptance of legalized gaming activities?"

The theoretical framework guiding this investigation stems from research in the field of public policy. Although some argue the study of public policy dates as far back as Plato's *Republic* (e.g., Dunn, 1981), the systematic examination of public policy as a concept of scholarly interest is relatively recent. Many

point to Harold Lasswell's seminal work in 1951 as the genesis, when he introduced and developed the concept of the "policy sciences" (Dye, 1966; Helco, 1972; Hogwood & Gunn, 1984). Yet, despite Lasswell's efforts to bring the policy sciences into the forefront of academia, it was not until nearly a decade later, during the time of the Johnson administration's Great Society and the upsurge of government programs in the 1960s, that it was acknowledged there was a real need for a more comprehensive understanding of what governments do regarding public policy (e.g., Robertson & Judd, 1989).

Theories and models have been developed to help in our understanding of public policy. For instance, a number of political scientists have concentrated on the process by which policy is made and the politics surrounding policy-making (e.g., Jones, 1975). Other researchers have concentrated on specific aspects of this process, such as agenda setting (e.g., Kingdon, 1995) or evaluation (e.g., Nachmias, 1980). Another group of investigators, using aggregate data and quantitative methods of analysis, have pursued a broad assortment of comparative studies examining pubic policies across political systems (e.g., Lewis-Beck, 1977; Sharkansky & Hofferbert, 1966). In many cases, policy is viewed as being dependent on differences in social, cultural, economic, political, and institutional conditions (Dawson & Robinson, 1963; Dye, 1980). The outcome of this research resulted in a number of different theories and hypotheses about the determinants of public policy.

Research on the determinants of public policy has generated a considerable body of literature, much of which is centered on the study of the American states. Although this research has much to offer, it is important to draw out and summarize a couple of general conclusions for the purposes of the present

investigation. What first started as a debate over whether it was economics or politics that best explained public policy in the states (e.g., Dye, 1966; Dye & Gray, 1980) has evolved into a general recognition that policy is shaped by a variety of factors found within the states, such as inter-party competition, political culture, political ideology, state debt, and fiscal stress (e.g., Berry & Berry, 1990; Filer et al., 1988). Further, it is suggested that it is not only internal factors that help to explain public policy differences, but also factors external to the states (see, for example, Mohr, 1969; Walker, 1969).

A second important conclusion is that researchers began to speculate that different types of polices are influenced by different factors. For example, Theodore Lowi (1972) divided public policy into three broad categories: distributive, redistributive, and regulatory. Each of these types of policies has distinguishable characteristics, which sets them apart from one another. Distributive policies, can easily be separated into smaller units in near isolation from one another (Lowi, 1972).

> Distributive issues individualize conflict and provide the basis for highly stable coalitions that are virtually irrelevant to the larger policy outcomes; thousands of obscure decisions are merely accumulated into a 'policy' of protection or of natural-resources development or of defense subcontracting. (Lowi, 1964, p. 678)

Redistributive polices and regulatory policies, on the other hand, involve a direct choice between those individuals who receive and those who do not. Redistributive polices, such as social welfare policies, often involve broader categories or social classes (Lowi, 1972). Lowi (1972) argues that these different types of policies are shaped by different political, economic, and social factors. However, Lowi's model fails to incorporate certain types of polices, including what has become known as "morality policy." Morality policies are those that

generate a conflict over an individual's core values and tend to include issues pertaining to abortion, capital punishment, gaming, gay rights, pornography, and sex-education (e.g., Meier, 1999; Mooney, 1999; Norrander & Wilcox, 1993).

Beginning in the 1970s, political scientists began to examine morality policy as a class, separate and distinct from policies that reflect political or economic interests. Morality policies are important to the study of public policy because they raise unique questions regarding how policy decisions are made. Researchers have focused on a number of different morality policies, spanning such issues as physician-assisted suicide (Glick, 1992), abortion (Norrander & Wilcox, 1993), gay marriage (Haider-Markel & Meier, 1996), the death penalty (Bowers, 1984), and gambling (Mikesell & Zorn, 1986; Sharpe, 2003). With basic values at the core of such deliberations, the study of morality policy has important implications at both the individual and the institutional level (Meier, 1994; Mooney, 2001).

Although there has been research in the area of morality policy in general (Fairbanks, 1977) and, more specifically, on lotteries (Berry & Berry, 1990) and casinos (Furlong, 1998), there is currently no research on the permissiveness of states that permit or engage in legalized gambling activities. What determines whether a state will allow gaming or gaming-related activities? What influences the type and number of gaming polices that a state adopts? There appear to be many possible explanations for why some states are more permissive than others, but these explanations are not mutually exclusive nor, taken individually, can they explain the vast differences in the likeliness of states to engage in legalized gaming activities.

The study of state politics has lagged behind research on national political processes and institutions (Jewell & Olsen, 1982). Some argue that this is not a theoretical problem, but a practical one due to the lack of necessary resources to conduct state-level research (e.g., Wright, Erikson, & McIver, 1985). At the same time, morality policy has become a topic of intense debate among investigators who study public policy in the American states.

This study will contribute to the body of literature related to morality policies in the American states. In the end, I hope to be able to offer empirical evidence as to why some American states are more permissive than others regarding legalized gambling activities.

Organization of This Thesis

This thesis is organized into a total of five chapters, including this chapter. In the next chapter, a review of the literature concerning the determinants of public policy is presented. It introduces three content areas that are useful in understanding the determinants of public policy generally, and gambling policies, specifically. The basic literature on the determinants of public policy, including political and economic factors, is presented along with a review of the literature related to morality policies. In addition, a review of the more recent literature of legalized gambling activities is presented. This review suggests a number of propositions that will be tested in the analysis.

Chapter 3 consists of the variables and the data that are used in this study, as well as the methodological approach of the study. Chapter 4 presents the findings of the study. Results are presented to better understand the variation of gambling policies within the American states. Simple statistical analyses, including multivariate techniques, are used to assess the varying levels of

permissiveness among the American states regarding legalized gambling activities. In Chapter 5, the study is summarized, conclusions are presented, and recommendations for additional research are offered.

CHAPTER TWO

GAMBLING PERMISSIVENESS IN THE AMERICAN STATES: OVERVIEW OF THE LITERATURE

The purpose of this study is to better understand the factors that influence the amount of legalized gambling within a given state. This research asks, why are the policies of some American states more permissive than others when it comes to legal gambling activities? More specifically, what factors are associated with a state's propensity toward the acceptance of legalized gaming activities?

This chapter provides an overview of selected literature related to the determinants of public policy in general and, more specifically, morality and gambling policy in the American states. To date, the gambling literature has focused primarily on those factors influencing the adoption of a lottery (e.g., Alm, McKee, & Skidmore, 1993; Berry & Berry, 1990; Filer et al., 1988; Winn & Whicker, 1989-90). A few studies have examined state casino gaming adoptions, both commercial and Indian establishments (Boehmke & Witmer, 2001; Furlong, 1998). The purpose of this chapter is to investigate this and related literature and to construct a number of hypotheses that will be evaluated subsequently in an effort to understand gambling permissiveness in the American states.

Introduction

Comparing state public policies has a long research tradition in political science, especially with regard to policies within the American states. These early investigations caused extensive deliberation over the relative influence of political and economic factors in shaping the substance of government policy. Commonly known as the "politics versus economics" debate (e.g., Dye, 1978;

Dye & Gray, 1980), early research on the determinants of public policy focused largely on political and economic factors that were narrowly defined and discussed within the confines of traditional policy areas, such as education and welfare. One important conclusion from this debate was the recognition that public policies were shaped by different factors, including both political and economic determinants (e.g., Lewis-Beck, 1977).

This debate expanded as researchers began to speculate that different types of policies were the result of different types of influences. In this regard, Lowi (1972) divided public policies into three broad categories: distributive, redistributive, and regulatory. Researchers, drawing on Lowi's typology, began looking at other less traditional policies and asking if these types of policies were the product of similar political and economic forces. In this regard, various investigators turned their attention to the study of morality policy.

Tatalovich, Smith and Bobic (1994) explain that "issues of moral conflict are not easily assimilated into theories and models based upon economic and class interests" (p. 2). As a result, investigators have begun to examine morality policy as a class, separate and distinct from policies that reflect political or economic interests alone. Christopher Mooney (1999) defines morality policy as one in which at least a "significant minority of citizens have a fundamental, first-principled conflict with the values embodied in some aspect of morality policy" (p. 675). Morality policies—abortion, capital punishment, legalized gambling, LGBT (lesbian, gay, bisexual, and transgender) rights, pornography, sex-education, and physician-assisted suicide—are among the most controversial and widely discussed issues facing policy-makers today (Haider-Markel & Meier, 1996; Mooney, 1999; Norrander & Wilcox, 1993).

Gambling, unlike other "vices" such as illicit drugs, prostitution, and alcohol consumption, has managed to gain remarkable social and political acceptance. Gambling clearly falls into the category of morality policy, but its impact on the financial and economic conditions of a state can not be ignored. Since the 1970s, gambling has established itself as a significant social and economic presence in one form or another throughout much of the United States (Eadington, 1999). Despite gains in political and social acceptance, gambling has experienced different levels of acceptance and legality in the American states.

The literature addressing the determinants of public policies offers a number of possible explanations as to why some states are more permissive than others when it comes to gambling policies. Historically, gambling has existed on the fringes of legal and social acceptability. The United States has a tradition of allowing certain forms of gambling while prohibiting others. To some extent, even some forms of illegal gambling have been tolerated. The spread of legalized gambling has been inconsistent and has not gone without its share of scrutiny or prohibition; however, it is unclear why the spread of legalized gambling has been unpredictable. Gambling scandals have, no doubt, contributed to varying levels of social acceptance and political regulation. In addition, changes in the political landscape and the economic conditions within states have also resulted in a diversity of gambling policies.

The remainder of this chapter draws on different bodies of literature related to the determinants of public policy, which will be used to construct a number of hypotheses regarding gambling permissiveness. The hypotheses in this section are organized into four broad categories or clusters: (a) political

conditions, (b) economic conditions, (c) social conditions, and (d) availability of gaming in neighboring states. Figure 1 depicts the four categories presumed to influence gambling permissiveness. Each of these categories serves as a guide to understanding the variation in policies regarding legalized gambling policies within the American states. The exploratory nature of this research project lends itself to include more, rather than fewer hypotheses. However, because the research on the determinants of public policy is so broad, this thesis will examine the literature selectively as it relates specifically to gambling policy.

This review suggests a total of 21 hypotheses that may improve our understanding of this policy variation. A labeling system is employed to facilitate the tracking of hypotheses from the different cluster areas. For example, hypotheses related to political conditions are labeled as HP1, HP2, and so on. Hypotheses related to economic conditions are labeled HE1, HE2, and so on, while HS labels are used for social conditions, and HA labels are used for hypotheses related to availability.

Political Conditions

Early research on the determinants of public policy concentrated on the importance of political characteristics in explaining content variation in American public policy (Dawson & Robinson, 1963; Key, 1949; Lockard, 1959). Since then, scholars have considered a number of political variables for their impact on various public policies. For the purposes of this thesis, the following political variables have been identified for their potential influence on gambling permissiveness: political party control and inter-party competition, interest group strength, public and elite opinion, and political culture (Benton, 1983; Berry & Berry, 1990; Bowman & Kearney, 2002; Cnudde & McCrone, 1969;

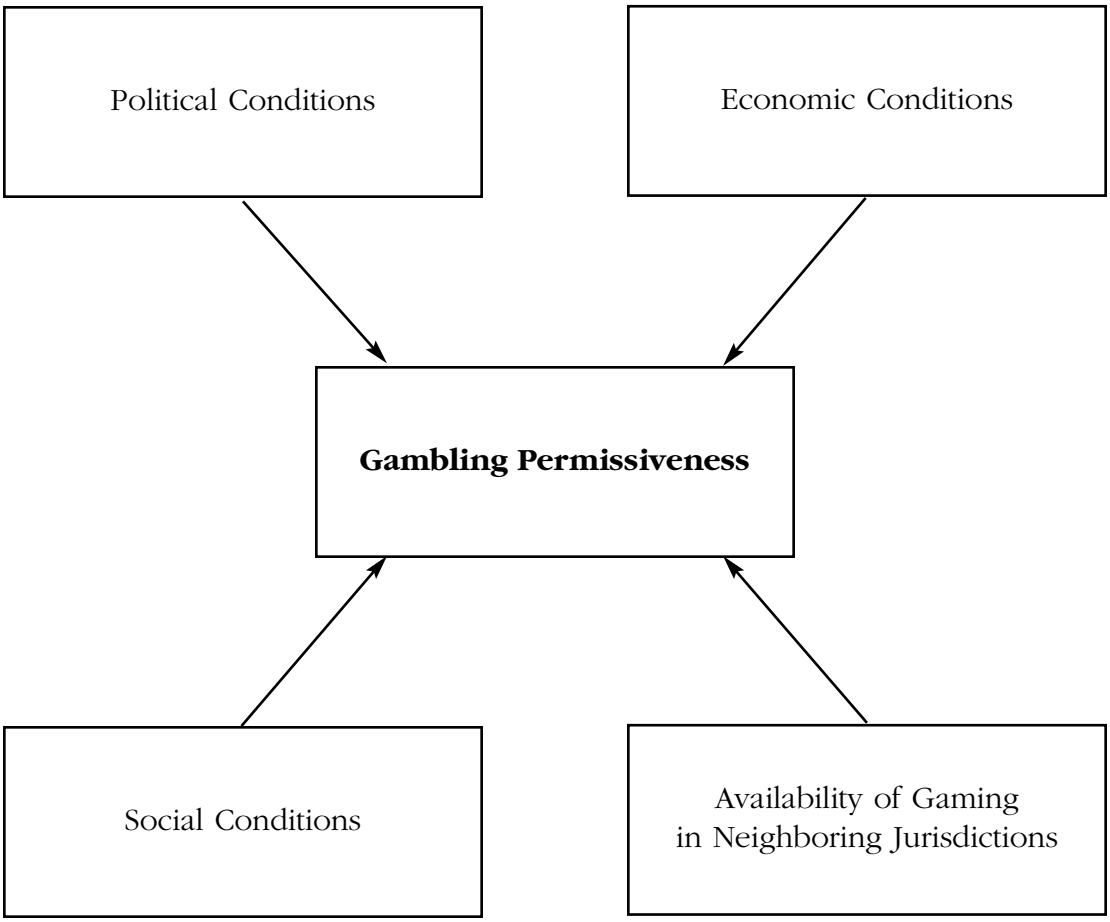

Figure 1. Determinants of Gambling Permissiveness

Dawson & Robinson, 1963; Dunn, 1981; Dye, 1966, 1978, 1987; Fairbanks, 1977; Hofferbert, 1966; Key, 1956; Nice, 1980). Further, it is important to note that many of these political conditions have been found to be significant in shaping a broad range of morality policies in the states (e.g., Fairbanks; Mooney & Lee, 2000; Nice, 1992).

Culture, Ideology and Region

Political culture and ideology have been identified as factors that help to explain various morality policies within the American states. For example, Bohm, Flanagan, and Harris (1991) found that ideologically liberal states tend to strongly oppose capital punishment. Similarly, Hamm (1989) observed that ideology was related to legislative positions on prison policies. In his study, Hamm reported that political liberals supported a reduction in the prison population, but conservatives did not. Taggart and Winn (1993) established a link between ideology and state policies regarding incarceration. They reported that liberal states have lower levels of incarceration than conservative states. Policies to allow physician-assisted suicide have been attempted in three states in the last 15 years (California, Washington, and Oregon). These states tend to be liberal on personal freedom and individual rights (Glick & Hutchison, 1990). Similarly, Norrander and Wilcox (1993) maintain that states that have, historically, enacted liberal polices also tend to pass liberal abortion policies.

Political culture and ideology are two distinct, although related, concepts. Culture, simply put, refers to the ways in which members of a society obtain and then pass along their attitudes and values. Political culture is the set of ideas that Americans share widely about who should govern, for what ends, and by what means (Dye, 1999).

Political culture is considered to be an important determinant of public policy outcomes, including morality polices. In his groundbreaking research, Daniel Elazar (1967) defined political culture as "the particular pattern or orientation to political action in which each political system is embedded" (p. 84). Elazar (1972) identified three subcultures that, when combined, form the American political culture: individualistic, moralistic, and traditionalistic. The individualist subculture relies heavily on the marketplace, with the role of government limited to keeping the marketplace functioning properly. The moralistic subculture is at the opposite spectrum from individualistic. Moralistic subcultures emphasize the commonwealth of all citizens and the role of government is to further the public interest. The traditionalist subculture falls in the middle of the spectrum between the individualistic and moralistic subcultures. Government, in the traditionalist subculture, is to maintain the existing social and economic hierarchy, supporting the status quo. Political culture captures the variation in partisan affiliations and ideology that is not already explained by social, economic, or historical factors (Dye, 1991).

States, regardless of the type of political culture, may differ in their ideological predispositions (Dye, 1991). States may be "liberal" or "conservative" and these ideologies can be measured in a number of ways. Erikson, McIver, and Wright (1987), for example, examined the results of national opinion polls for six years (1976–1982) and then reported the results of how respondents identified themselves along the liberal-moderate-conservative continuum in individual states. They found that there is an apparent regional pattern of ideologies, with states in the South and Mountain regions being conservative,

while states in the Atlantic, upper Midwest, and Pacific regions tend to be more liberal (Erikson, Wright, and McIver, 1993, pp. 77–78).

Efforts have been made to measure the political culture of states and the ideological orientation of their citizens (e.g., Erikson, 1976; Nice, 1980). Other studies have attempted to estimate citizen preferences at the state level by examining the relationship between socioeconomic conditions and issue preferences from national surveys (e.g., Pool, Abelson, & Popkin, 1965; Weber & Shaffer, 1972). For example, congressional district measures of liberalism or conservatism have been identified using presidential election returns (e.g., Nice, 1980; Schwarz & Fenmore, 1977). Other measures of liberalism/conservatism have been gauged by state policies. However, scholars have criticized that these approaches "necessarily makes major unverified assumptions" (Wright et al., 1985, p. 470). Wright et al. instead, construct a measure of liberalism based on public opinion polls from 1974–1982.

Berry, Ringquist, Fording, and Hanson (1998) examined the influence of state government ideology and of citizen ideology, on state policy outcomes. Berry et al. (1998) characterized state government ideology by focusing on the party in control of a single institution (e.g., the governor) and assuming that Democrats are liberal and Republicans are conservative (see also Hedge & Scicchitano, 1994). Counting the number of seats that a particular party controls then creates a measure of state government ideology (Berry & Berry, 1990; see also Scholz & Wei, 1986).

Medoff (2002) evaluated states' ideology along a conservative-liberal continuum, defining political ideology as that which "links beliefs about facts or values with attitudes about issues, positions, policies, and actions" (p. 147). He

found that "there are distinct regional differences in ideology" (p. 145). Simply put, Medoff asserted that the Northeast and Pacific regions tend to be very liberal, the South and Mountain regions tend to be very conservative, and the Midwest region is relatively moderate.

Erikson et al. (1987) suggested that states' political culture is also captured by attitudes of the public and politicians, the kinds of people involved in state government, and the actions of state government. Their study examined political culture defined by state public opinion as summarized in party identification and ideological identification. For the purposes of their study, Erickson et al. defined political culture as only "that portion of state public opinion that cannot be accounted for by the group characteristics of the state electorate" (p. 798).

Region is often used as a surrogate measure for political culture and ideology due to the difficulties associated with measuring culture and ideology. Region is typically defined in broad categories such as Northeast, South, Midwest, and West, and accounts for the demographic, economic, and historical context of a particular area. Winn and Whicker (1989-90) found that region is significantly related to lottery adoption, with states in the Northeast and Midwest being most likely to adopt lotteries, and states in the South and Mountain region were the least likely to adopt lotteries.

Given this information, the following hypotheses are presented:

HP1: States having a moralistic political culture will have more permissive gambling policies than states with either a individualistic or traditionalist political culture.

HP2: States with a more liberal political ideology will have more permissive gambling policies.

HP3: States in the South will be less permissive toward gambling than states outside the Southern region.

Inter-party Competition and Voter Turnout

Inter-party competition provides a link between citizens and their policy makers. V.O. Key (1956) made one of the earliest assumptions that the greater the inter-party competition, the more liberal the policy. The relationship between inter-party competition and social welfare policies was examined by Dawson and Robinson in 1963. Their findings were consistent with those of Hofferbert (1966) who found that the greater the competition between political parties, the higher the expenditures on welfare policies. Including party competition as a determinant of gambling permissiveness is also appropriate in that it supports Gray's (1973) work, which found a relationship between party competition and the early adoption of a new policy.

Voter turnout, combined with inter-party competition, has been considered to be a determining factor in public policy outcomes. Sharkansky and Hofferbert (1969) reported that political factors such as party competition and voter turnout explain more of the variation in welfare policies than in other types of public policies. Since these early studies, a considerable number of scholars have examined the impact of party competition and voter turnout (e.g., Dye, 1984; Jennings, 1979; Hutcheson & Taylor, 1973).

Policies that involve a moral component, such as gambling, tend to invoke a high level of partisan conflict (Meier, 1994). Mooney and Lee (1995) argue that morality policies are less likely to be implemented in a competitive political system due to the possible negative electoral consequences. Hence,

pro-gambling polices will be more likely to be enacted when there is a less competitive political system.

HP4: States with a less competitive political system will have more permissive gambling policies.

HP5: States with higher voter turnout will be more permissive with their gambling policies.

Party Control and Unified Government

Party affiliation has a long tradition as an important determinant in the policy-making process (Erikson et al., 1993). The Democratic party has traditionally favored higher social spending. One might assume then that Democratic states would have more liberal policies while Republican states have more conservative policies. However, Winn and Whicker (1989-90) did not find a significant relationship between party dominance and lottery adoption. They did report that states with Republican control of the Senate were more likely to adopt lotteries. Perhaps this is so because of the unique economic implications gaming policies have on states. Gambling offers an alternative to raising taxes and has been successful in generating employment (Brinner & Clotfelter, 1975).

Morality policies may present conflicts that fall along partisan divisions, pitting members of the two major parties in debate over which particular value position will prevail. This might suggest that the presence or absence of a divided government, rather than party control, would impact gambling policy (Wilks & Taggart, 2004). Berry and Berry (1990) argue that the presence of a divided government would make it harder to stimulate policy change, as opposed to introducing policy changes under a unified government where the governorship and both houses of the legislature are controlled by the same

political party. They hypothesize that "when a single political party controls the governorship and both houses of the legislature, the probability that a state will adopt a lottery is greater than when the government is under divided party control" (p. 403). Alm et al. (1993) found similar results. After controlling for neighboring lottery competition, population, and religious factors, Alm et al. found that political factors—Democrat-controlled government and referenda opportunities—do make a difference.

The research on unified versus divided government is unclear in the literature related to gambling policies. However, it is evident in the general public policy literature that the type of government does impact public policy outcomes (Berry & Berry, 1990). Therefore, a relationship is posited between unified/divided government and gambling policies, although, at this point, direction is not indicated.

HP6: States where the Democratic party controls the governorship and both houses of the state legislature will be more permissive than states with unified Republican control or where there is a divided government.

HP7: The type of government, unified or divided, will be related to the level of gambling permissiveness within the state.

Economic/Financial Conditions

Richard Dawson and James A. Robinson (1963) offered the first evidence that political factors may not actually account for as much variation in redistributive polices (e.g., welfare policies) as earlier believed. Although their study was consistent with Key (1949) and Lockard (1959) who found that the more inter-party competition, the more liberal the policies a political system would espouse, they also found that socio-economic factors, such as per capita

income, urbanization, and industrialization were just as, if not more, important in explaining the types of polices found within a political system.

Poor economic conditions tend to lead to stressed financial conditions within a state and often require policy makers to seek alternative solutions. Commercial gaming activities, including state-sponsored lotteries, pari-mutuel betting, and casinos are activities that, through their legalization, have supported economic development (Brinner & Clotfelter, 1975).

Wealth

The relative importance of economic conditions can be found throughout the literature regarding the determinants of public policy. State wealth influences both a state's demand and its capacity to address social and economic problems (Berry & Berry, 1990; Mooney & Lee, 1995). Berry and Berry hypothesize that one of the obstacles to the adoption of a lottery is insufficient funds to sustain the gambling activity. Although studies have indicated that while lotteries tend to be regressive in nature (e.g., Suits, 1977), individuals from middle- and upper-income classes tend to participate in lotteries most often (Mikesell & Zorn, 1986, p. 315). Therefore, the amount of discretionary income available to citizens may be related to public policy outputs, including gambling policy. The general contention is that gambling is more acceptable in areas where discretionary income is higher (Eadington, 1999).

Hofferbert (1966) analyzed the relationship between industrialization and welfare polices in the American states. He hypothesized that the more industrialized a state, the higher its welfare orientation. Hofferbert's proposition suggests a direct positive relationship between the level of economic development and the tendency of state policy makers to support more liberal policies.

In a 1977 study, David Fairbanks found a significant relationship between industrialization and different types of morality polices. This study included gambling, but was much more limited in scope. Fairbanks found that urbanization was inversely related to gambling and liquor laws (p. 718). Hence, the following hypotheses are suggested:

HE1: States with higher per capita income will have more permissive gambling policies than states with lower per capita income.

HE2: States with higher amounts of discretionary income available to citizens will have more permissive gambling policies than states with less discretionary income.

HE3: States with higher levels of industrialization will have more permissive gambling policies than states with lover levels of industrialization.

Fiscal Stress

Berry and Berry (1990) argued in their study of state-sponsored lottery adoptions that since there is an enormous amount of opposition to new taxes, state lotteries and other gambling activities tend to be popular ways to increase revenues (see also Mikesell & Zorn, 1986). Lotteries provide additional funds that a state may need for various services, but involves less political risk than instituting a new tax or increasing current taxes.

Similarly, states with less budgetary flexibility will have additional incentives to consider gaming as an alternative revenue source. Winn and Whicker (1989-90) argued that a state will be more likely to adopt a lottery when it has strict balanced-budget requirements that prohibit deficits to be carried over into the next fiscal year.

HE4: States with higher degrees of budgetary flexibility will have less permissive gambling policies than states with less budgetary flexibility.

Taxation and Debt

Filer et al. (1988) examine the impact of tax capacity and tax burden within a state, and the type and content of public policy it generates. They assert that different levels of taxation and government spending affect the political process through which elected officials try to reconcile citizen demands for more and better services with the costs of those services. They argue that in states where taxes have reached "critically high" levels, additional tax increases would jeopardize their voter base (p. 265).

Gambling and gambling-related activities have been used by many state governments to raise the necessary resources needed to pay for various public services and recreational activities that were in the past supported by general tax revenues (Sharpe, 2003; Worsnop, 1994). According to the National Conference on State Legislatures (2004), state-supported lotteries have been used to support public education, art programs, and affordable housing.

Winn and Whicker (1989-90) examined various indicators of a state's financial condition. They found a positive relationship between taxing and the adoption of a state-sponsored lottery indicating that states with higher taxes will look for alternative revenue mechanisms.

HE5: States experiencing a decline in their taxing capacity will have more permissive gambling policies than states that are not experiencing a decline in their taxing capacity.

HE6: States with more short-term debt will have more permissive gambling policies than states with less short-term debt.

Social Conditions

Prior research has largely centered on the determinants of morality policy that reflect the conventions of comparative state policy studies (Fairbanks, 1977;

Meier & McFarlane, 1992; Mooney & Lee, 1995). Morality policy tends to be driven by the mass media, public opinion, and the strength of interest groups (Fairbanks, 1977; Glick, 1992; Meier & Johnson, 1990; Mooney & Lee, 1995; Morgan & Meier, 1980). Therefore, elected officials are more likely to be aware of their constituencies and, depending on other political conditions (such as proximity of elections), respond to these forces when making policy decisions (Meier, 1994).

Alm et al. (1993) recognize that the "public opposition to lotteries reflects overall attitudes toward gambling, and these attitudes are reflected in a variety of socio-demographic factors, such as the age structure of the population in the state, the religious mix, and income levels" (p. 466). Alm et al. use a number of demographic measures in their study: (a) population of the state, (b) percent change in population, (c) population density, (d) percent of the state's population that is over the age of 65, and (e) percent of the state's population that is Catholic.

Urbanization

Urbanization was found by Walker (1969) to be correlated with state innovation scores. He argued that resources are generally concentrated in urban areas which then encourage states to become more "adaptive and sympathetic to change, and thus the first to adopt new programs" (p. 884).

HS1: States that are more urbanized will have more permissive gambling policies than rural states.

Interest Groups

Interest group activity has proven to be another factor in both the development and the content of public policies. Early studies suggest that some

organizations emerge to represent the latent interests of individuals (e.g., Olsen, 1965). Plotnick and Winters (1985) argue that as an American state increases in population size, urbanization, and economic and social differentiation, organizations will develop to represent these various interests.

Interest groups have been identified though a number of studies as determinants in a variety of morality policies ranging from policies regarding gay and lesbian rights to lottery adoption to abortion (Berry & Berry, 1990; Haider-Markel & Meier, 1996; Norrander & Wilcox, 1993). Since these types of policies only affect a limited number of individuals at any one time, those who are involved typically have a very strong vested interest in their position (Mooney, 2001).

One group with an interest in gambling policy is Native American tribal governments. Boehmke and Witmer (2001) note that the proliferation of casino-style Indian gaming in recent years is an indication of the relative strength of American Indians as an interest group.

HS2: States with more Native American tribal governments will have more permissive gambling policies than states with fewer Native American tribal governments.

Political Structure

The United States offers a political structure that provides numerous opportunities for individuals to engage in political activities. Mooney (2001) suggests that morality policies are more common in the American states because the political structure and the "venues in which morality policy advocates can pursue political satisfaction" (p. 16).

Therefore, the more open the political system, the more likely debates over morality policies will never be resolved, keeping these types of policies on

the political agenda. Gray and Lowery (1999) draw from two different properties of interest groups: system density and system diversity. While these two concepts have been commonly used throughout the literature regarding interest groups, Gray and Lowery argue the measures have not been well defined and, therefore, they examine multiple measures of each. They hypothesize that states with higher percentages of institutional interests will have narrower forms of policy advocacy.

HS4: States with an open political system will have more permissive gambling policies than states with a closed political system.

Religiosity

There have been conflicting reports as to the influence various types of religious groups have on morality polices such as the lottery or other forms of gambling. Religious institutions are often seen as the source for developing individual attitudes and values of their members, thereby constituting one of the bases for preference formation in the community, especially with regard to morality policy (Meier, 1994). Within the scope of morality policy, basic moral values influence whether or not a policy will be adopted. Thus, studies using measures of religious affiliation and public opinion have been conducted to empirically study morality policy (Berry & Berry, 1990; Fairbanks, 1977; Mooney & Lee, 1995; Nice, 1992). Since the United States is one of the most religious countries in terms of attendance and devotion (Wald, 1992), the fundamental clash of first principles is likely to occur.

In a study about abortion laws, Medoff (2002) used a surrogate measure of percent of the state's population belonging to the Roman Catholic Church arguing that the "percentage of Catholics will be directly related to a state's

restrictive abortion policy" (p. 485). More generally, Norrander and Wilcox (1993) report an association between the number of Catholics in a state and more conservative morality policies.

The perception of gambling as an immoral or sinful activity is one of the reasons some religious institutions forbid it or strongly advise against it (Cotton, 1996). Alm et al. (1993) argue that fundamental religious organizations will be more likely to oppose any form of gambling, including the lottery; however, Catholics are more tolerant of gaming activities and may even promote such games as bingo. Specifically, Alm et al. found that states with a larger Catholic population have a higher probability of enacting a lottery. Alternatively, Berry and Berry (1990) found that the greater the proportion of a state adhering to fundamentalist Protestant religions, the lower the probability the state will adopt a lottery.

The state of Utah has unique social characteristics that lend itself to a third hypothesis. Nearly 67% of all citizens residing in the state of Utah are Mormon. When evaluating gambling permissiveness, Utah becomes an outlier since its religion outright forbids gambling. Therefore, a dummy variable representing Utah has been created to capture the impact of the large Mormon population.

HS5: The percentage of Catholics in a state will be positively related to gambling permissiveness.

HS6: The percentage of fundamentalist Protestants within a state will be negatively related to gambling permissiveness.

HS7: The state of Utah will be less permissive than other states.

Availability of Gaming in Neighboring Jurisdictions

Another factor possibly influencing permissiveness is the availability of gaming in neighboring governmental jurisdictions. The modernization of transportation allows citizens to move from one state to another with relative ease. In addition, traveling to Canada is fairly simple. Visas are not required for U.S. citizens to enter Canada; only proof of citizenship and photo identification are necessary. According to the United States Department of State (2003), millions of American citizens visit Canada each year.

Early studies on the diffusion of innovation (Gray, 1973; Walker, 1969) indicate that states are influenced by the actions of their neighbors. Several morality policies have been examined with this approach, including abortion policy (Meier & McFarlane, 1992), lottery adoptions (Berry & Berry, 1990; Pierce & Miller, 2001), and physician-assisted suicide (Glick, 1992).

With respect to gambling, availability in neighboring governmental jurisdictions is especially important in that it reflects potential loss of revenue by states when residents travel outside state borders to gamble. Berry and Berry (1990) found that a state is far more likely to adopt a lottery when its neighboring states had already done so. This logic is extended to include Canada and Mexico as competing governmental jurisdictions for gambling revenues due to the simplicity of traveling and to the proximity of Canadian jurisdictions to states along the northern U.S. border or southern states that border Mexico. In addition to potential revenue losses, states look to the policies of their neighbors and measure their successes or failures.

For these reasons, it is then expected that gambling permissiveness will be positively related to the extent of gambling that is available in neighboring states.

HA1: The availability of gaming in neighboring states will be positively related to gambling permissiveness.

HA2: The availability of gaming in neighboring Canadian provinces will be positively related to gambling permissiveness.

HA3: States that border Mexico will have more permissive gambling policies than states that do not border Mexico.

Summary

Quantitative investigations examining the determinants of public policy have evolved from a simple debate of "politics versus economics." Researchers have found that other factors, including social conditions and demographics, help to explain some of the variation in public policy. Using this literature, a total of 21 hypotheses have been developed. Table 1 presents and summarizes these hypotheses about gambling permissiveness related to political conditions, economic conditions, social conditions, and the availability of gaming in neighboring governmental jurisdictions.

From the literature discussed above, a few general inferences can be made regarding gambling permissiveness. First, while political variables continue to provide valuable insight into the content of public policies in general, the literature suggests that they have less importance when examining morality policies. Instead, social factors, particularly religion, may provide a better understanding of gambling policy variation. Second, while gambling policy does share similar characteristics with other morality policies (e.g., abortion, same-sex marriage, physician-assisted suicide, death penalty, etc.), it

Table 1

Summary of Hypotheses Related to Gambling Permissiveness

Hypothesis	Description
	Political Conditions
HP1	States having a moralistic political culture will have more permissive gambling policies than states with either a individualistic or traditionalist political culture.
HP2	States with a more liberal political ideology will have more permissive gambling policies.
HP3	States in the South will be less permissive towards gambling than states outside the southern region.
HP4	States with a less competitive political system will have more permissive gambling policies.
HP5	States with higher voter turnout will be more permissive with their gambling policies.
HP6	States where the Democratic party controls the governorship and both houses of the state legislature will be more permissive than states with unified Republican control or where there is a divided government.
HP7	The type of government, unified or divided, will be related to the level of gambling permissiveness within the state.
	Economic Conditions
HE1	States with higher per capita income will have more permissive gambling policies than states with lower per capita income.
HE2	States with higher amounts of discretionary income available to citizens will have more permissive gambling policies than states with less discretionary income.
HE3	States with higher levels of industrialization will have more permissive gambling policies than states with lover levels of industrialization.

Table 1 (continued)

Hypothesis	Description
HE4	States with higher degrees of budgetary flexibility will have less permissive gambling policies than states with less budgetary flexibility.
HE5	States experiencing a decline in their taxing capacity will have more permissive gambling policies than states that are not experiencing a decline in their taxing capacity.
HE6	States with more short-term debt will have more permissive gambling policies than states with less short-term debt.
	Social Conditions
HS1	States that are more urbanized will have more permissive gambling policies than rural states.
HS2	States with more Native American tribal governments will have more permissive gambling policies than states with fewer Native American tribal governments.
HS3	States with an open political system will have more permissive gambling policies than states with a closed political system.
HS4	The percentage of Catholics in a state will be positively related to gambling permissiveness.
HS5	The percentage of fundamentalist Protestants within a state will be negatively related to gambling permissiveness.
HS6	The state of Utah will be less permissive than other states.
	Availability of Gaming
HA1	The availability of gaming in neighboring states will be positively related to gambling permissiveness.
HA2	The availability of gaming in neighboring Canadian provinces will be positively related to gambling permissiveness.
HA3	States that border Mexico will have more permissive gambling policies than states that do not border Mexico.

also has a compelling economic component that cannot be ignored. Finally, the literature suggests gambling permissiveness is influenced by the availability of gambling in neighboring states, Canadian provinces, and Mexican states. Taken together, these factors may suggest that gambling permissiveness is not a direct result of any one group of variables, but rather a combination of variables from each of the four broad categories introduced earlier in this chapter. Thus, from the literature reviewed, a new model for understanding gambling permissiveness is proposed.

CHAPTER THREE

RESEARCH METHODOLOGY

To assess the validity of the 21 hypotheses formulated in the previous chapter on state gambling policies, bivariate and multivariate regression analyses of secondary aggregate data for the American states are conducted. This chapter outlines the research methodology used in the current analysis, including a description of the variables and the statistical techniques used to assess relationships among gambling permissiveness and 33 independent variables representing the 21 hypotheses.

This paper utilizes the American state as its unit of analysis for a number of reasons. First, the American states offer a convenient unit with readily available secondary data. Second, the policies of the American states are easily compared to one another. Third, due to the similar nature of the institutional framework of the American states, there is more measurement control. According to Dawson and Robinson (1963), the American states:

> … share a common institutional framework and general cultural background, but they differ in certain aspects of economic and social structure, political activity, and public policy. Therefore, they provide a large number of political and social units in which some important variables can be held constant while others are varied. (p. 271)

Fourth, there is a long tradition in the policy determinants literature of using the state as the unit of analysis (e.g., Dye, 1984; Lewis-Beck, 1975; Sharkansky & Hofferbert, 1969). Finally, and perhaps most importantly, state governments make the vast majority of the laws concerning gambling, and as a result, have the greatest impact on the availability of gaming in the United States.

Research Design

The general model guiding this analysis is composed of a single dependent variable—gambling permissiveness—and four categories of independent variables. In Chapter 2, Figure 1 introduced and developed a theoretical model derived from the literature on public policy in general, and morality policy in particular. The dependent variable, state gambling permissiveness, is constructed through an additive index ranging hypothetically from 0 (no gambling permitted) to 21 (all forms of legal gambling permitted). The four arenas represented by the independent variables are: political, economic/financial, social, and availability of gambling in neighboring governmental jurisdictions.

To assess the utility of the model as it has been presented in the previous chapter, a correlational design is employed using data from a number of secondary sources. A correlational design is used to identify if there is a linear relationship between variables. Although it cannot establish causation between independent and dependent variables, a correlational design can be used to examine covariation between gambling permissiveness and certain independent variables. This type of design helps to establish temporal ordering since each independent variable is measured before the dependent variable. In addition, the issue of nonspuriousness is addressed through the use of numerous independent variables; while causation can not be established, the inclusive nature of the research design helps to eliminate many rival explanations.

The analysis involves a three-stage process and will involve the use of various statistics to evaluate the relationship between variables. The first stage includes bivariate correlations of all the independent variables and each of the independent variables with gambling permissiveness. This first step serves a

two-fold purpose. First, it identifies those independent variables that are correlated with gambling permissiveness. These variables will then be retained in the second stage of the analysis. Second, bivariate correlations help to identify the independent variables that may be highly correlated with one another. Knowing which variables are highly correlated with one another will help to make decisions regarding which variables to retain for further analysis and to avoid future multicollinearity problems. Pearson's correlation coefficient will be used to assess the importance of the relationship between independent variables.

The second stage uses those variables that were retained from the initial analysis. Variables are grouped by category and then evaluated using multiple regression techniques. For example, the first multivariate analysis consists only of those political variables identified as being important in the first stage. The second multivariate analysis consists of only variables from the economic category, and so on. The objective of this step is to identify those variables that were correlated with gambling permissiveness in the original correlation matrix and to see if they retain their importance and explanatory value when compared to similar types of measures. It is expected that at least one variable from each group of variables will retain its importance for inclusion in the final stage.

A forward stepwise regression technique was chosen for the second stage of the analysis. For some research questions, it is appropriate to enter independent variables one at a time based on criteria previously established (Nie, Hull, Jenkins, & Bent., 1975, p. 345). Forward stepwise regression is often used when a researcher is trying to isolate a subset of variables that will produce the best predictability results.

The third stage of the analysis involves the use of those variables retained from the second stage. In this final stage, gambling permissiveness will be regressed on these remaining variables simultaneously. This method is appropriate since important variables separated by cluster have already been identified in the previous stages of the analysis. The enter method will take all these variables into consideration and develop a model based on how these variables interact with one another.

Two tests of goodness of fit will be used during the final two stages of the analysis. First, the slope and its standard error will be examined. As with convention, a relationship between the independent and dependent variables can be assumed if the slope is at least twice the size of its error. The second measure of goodness of fit is the coefficient of multiple determination, or R^2. The coefficient of determination indicates how much variation in the dependent variable is explained by each independent variable. In addition to tests of goodness of fit, an examination of the standardized slope estimates or ß (beta) weights will be conducted. The examination of the ß weights will indicate the relative importance of the variables. The explanatory power of a variable is revealed by how large the ß weight is for that variable.

At this point, a few notes regarding statistical issues should be addressed. Regression techniques are typically reserved for variables measured at the interval level. The dependent variable, gambling permissiveness, is measured at the ordinal level, as are some of the independent variables. However, the use of more appropriate measures of association did not lead to conclusions different than those presented in the analysis. Given the number of categories for the

dependent variable and the sheer number of independent variables being evaluated, regression-based techniques appeared to offer the best approach.

Variables

The majority of the data in this analysis spans a 20-year time frame from 1980 to 2000, resulting in lengthy time lags for a few of the independent variables. The dependent variable, gambling permissiveness, is measured in 2003. Much of the data used in this analysis relies on the U.S. Census; given this, the variables are measured in 2000. Additionally, some of the variables are measured over time. For example, averages for some variables, such as citizen and government ideology, disposable income, state debt, and number of years with a budget surplus were used. An average helps to smooth out abrupt changes sometimes evident when looking at different time points. Other variables, such as urbanization and per capita income are highly correlated over time and, therefore, are only measured at one time point. Finally, some variables are measured in different time periods due to availability issues. For example, the Holbrook and Van Dunk (1993) measure of political competition is for the years 1982-1986; this data was not available for later years. Regardless of when they were measured or over what time period, all the variables used in this analysis are measured prior to the dependent variable.

The data used in this analysis are for the 50 American states. However, it is anticipated that a few of the states may be deleted from the analysis for a number of reasons. First, as will be explained, neither Hawaii nor Utah allow any forms of gambling. Utah also creates challenges in the analysis due to its unique religious composition, with 67% of its population adhering to the Mormon religion, which forbids gambling (American Religion Data Archive,

2002). Alaska has the next fewest number of legal gambling activities with only three permitted by law. Finally, there are missing data for a few of the variables to be examined, including the states of Alaska and Hawaii.

Dependent Variable: Gambling Permissiveness

The dependent variable in this study is state gambling permissiveness. Permissiveness, for the purposes of this study, is operationalized by using information on 21 forms of legalized gambling published by the *International Gaming Wagering Business Journal* (McQueen, 2003), one of the gambling industry's primary professional journals. Charitable bingo is permitted by the most number of states at a high of 46, while jai-alai is legal in only four states. Less popular games including quarter horse betting, numbers games, harness racing, and Indian bingo fall near the middle.

Gambling activities are divided into three general types: general games, lottery-operated games, and parimutuel wagering. Table 2 presents a list of states and whether or not they permit each form gambling that falls into the general games category. Table 3 presents a list of states and whether or not they permit each form of gambling that falls into the lottery-operated games category. Finally, Table 4 presents a list of states and whether or not they permit each form of gambling that falls into the parimutuel wagering category. The last columns of Tables 2 through 4 indicates the total number of gambling activities a state permits within the general games, lottery-operated games, and parimutuel wagering categories, respectively.

Legalized sports betting is included in this analysis, although the Bradley Act issued a federal ban on sports betting in 1992. However, Delaware, Montana, Nevada, and Oregon were "grandfathered in" and allowed to continue

Table 2

States Permitting General Games (1 = yes)

State	Charity Bingo	Charity Games	Indian Casino	Indian Bingo	Casino & Gaming	Card Rooms	Non-Devices	Sports Betting	Total
AL	1	-	-	1	-	-	-	-	2
AK	1	1	-	1	-	-	-	-	3
AZ	1	1	1	1	-	-	-	-	4
AK	-	-	-	-	-	-	-	-	0
CA	1	1	1	1	-	1	-	-	5
CO	1	1	1	1	1	1	-	-	6
CT	1	1	1	1	-	-	-	-	4
DE	1	1	-	-	-	-	-	-	2
FL	1	1	1	1	-	1	-	-	5
GA	1	-	-	-	-	-	-	-	1
HI	-	-	-	-	-	-	-	-	0
ID	1	1	-	1	-	-	-	-	3
IL	1	1	-	-	1	-	-	-	3
IN	1	1	-	-	1	1	-	-	4
IA	1	1	1	1	1	-	1	-	6
KS	1	1	1	1	-	-	-	-	4
KY	1	1	-	-	-	-	-	-	2
LA	1	1	1	1	1	-	1	-	6
ME	1	1	-	1	-	-	-	-	3
MD	1	1	-	-	-	1	1	-	4
MA	1	1	-	-	-	-	-	-	2

Table 2 (continued)

State	Charity Bingo	Charity Games	Indian Casino	Indian Bingo	Casino & Gaming	Card Rooms	Non-Devices	Sports Betting	Total
MI	1	1	1	1	1	-	-	-	5
MN	1	1	1	1	-	1	-	-	5
MS	1	1	1	1	1	-	-	-	5
MO	1	1	-	1	1	-	-	-	4
MT	1	1	1	1	1	1	1	1	8
NE	1	1	1	1	-	-	-	-	4
NV	1	-	1	1	1	1	1	1	7
NH	1	1	-	-	-	-	-	-	2
NJ	1	1	-	-	1	1	-	-	4
NM	1	1	1	1	-	-	1	-	5
NY	1	1	1	1	-	-	-	-	4
NC	1	-	1	1	1	-	-	-	4
ND	1	1	1	1	-	1	-	1	6
OH	1	1	-	-	-	-	-	-	2
OK	1	1	-	1	-	-	-	-	3
OR	1	1	1	1	-	1	-	1	6
PA	1	1	-	-	-	-	-	-	2
RI	1	1	-	-	-	-	-	-	2
SC	1	-	-	-	-	-	-	-	1
SD	1	1	1	1	1	1	-	-	6
TN	-	-	-	-	-	-	-	-	0

Table 2 (continued)

State	Charity Bingo	Charity Games	Indian Casino	Indian Bingo	Casino & Gaming	Card Rooms	Non-Devices	Sports Betting	Total
TX	1	1	-	1	-	-	-	-	3
UT	-	-	-	-	-	-	-	-	0
VT	1	1	-	-	-	-	-	-	2
VA	1	1	-	-	-	-	-	-	2
WA	1	1	1	1	1	1	-	-	6
WV	1	1	-	-	-	-	-	-	2
WI	1	1	1	1	-	-	-	-	4
WY	1	1	-	1	-	-	-	-	3
Total	46	41	22	30	14	13	6	4	

Table 3

States Permitting Lotto-Operated Games (1 = yes)

State	Instant Pulltabs	Lotto Games	Numbers Games	Grey-hound	Keno Games	Video Lottery	Jai-Alai	Total
AL	-	-	-	1	-	-	-	1
AK	-	-	-	-	-	-	-	0
AZ	1	1	1	1	-	-	-	4
AK	-	-	-	1	-	-	-	1
CA	1	1	1	-	1	-	-	4
CO	1	1	-	1	1	-	-	4
CT	1	1	1	1	-	-	1	5
DE	1	1	1	-	-	1	-	4
FL	1	1	1	1	1	-	1	6
GA	1	1	1	-	1	-	-	4
HI	-	-	-	-	-	-	-	0
ID	1	1	1	1	-	-	-	4
IL	1	1	1	-	-	-	-	3
IN	1	1	1	-	-	-	-	3
IA	1	1	1	1	-	-	-	4
KS	1	1	1	1	1	-	-	5
KY	1	1	1	-	-	-	-	3
LA	1	1	1	-	-	-	-	3
ME	1	1	1	-	-	-	-	3
MD	1	1	1	-	1	-	-	4
MA	1	1	1	1	1	-	-	5

Table 3 (continued)

State	Instant Pulltabs	Lotto Games	Numbers Games	Grey-hound	Keno Games	Video Lottery	Jai-Alai	Total
MI	1	1	1	-	1	-	-	4
MN	1	1	1	-	-	-	-	3
MS	-	-	-	-	-	-	-	0
MO	1	1	1	-	1	-	-	4
MT	1	1	-	-	-	-	-	2
NE	1	1	-	-	1	-	-	3
NV	-	-	-	1	-	-	1	2
NH	1	1	1	1	-	-	-	4
NJ	1	1	1	-	-	-	-	3
NM	1	1	1	-	-	-	-	3
NY	1	1	1	-	1	1	-	5
NC	-	-	-	-	-	-	-	0
ND	1	1	-	-	-	-	-	2
OH	1	1	1	-	-	-	-	3
OK	-	-	-	-	-	-	-	0
OR	1	1	1	1	1	1	-	6
PA	1	1	1	-	1	-	-	4
RI	1	1	1	1	1	1	1	7
SC	1	1	1	-	-	-	-	3
SD	1	1	1	1	-	1	-	5
TN	1	-	1	-	-	-	-	2

Table 3 (continued)

State	Instant Pulltabs	Lotto Games	Numbers Games	Grey-hound	Keno Games	Video Lottery	Jai-Alai	Total
TX	1	1	1	1	-	-	-	4
UT	-	-	-	-	-	-	-	0
VT	1	1	1	1	-	-	-	4
VA	1	1	1	-	-	-	-	3
WA	1	1	-	-	1	-	-	3
WV	1	1	1	1	1	1	-	6
WI	1	1	1	1	-	-	-	4
WY	-	-	-	-	-	-	-	0
Total	40	39	35	19	16	6	4	

Table 4

States Permitting Parimutuel Wagering

State	Thor. bred	Inter-Track	Quarter Horse	Harness Racing	Off-Track	Telephone	Total
AL	1	1	1	1	-	-	4
AK	-	-	-	-	-	-	0
AZ	1	1	1	-	1	-	4
AK	1	1	1	-	-	-	3
CA	1	1	1	1	1	1	6
CO	1	1	1	-	1	-	4
CT	1	1	1	1	1	1	6
DE	1	1	1	1	-	-	4
FL	1	1	1	1	-	-	4
GA	-	-	-	-	-	-	0
HI	-	-	-	-	-	-	0
ID	1	1	1	-	-	1	4
IL	1	1	1	1	1	-	5
IN	1	1	1	1	1	-	5
IA	1	1	1	1	-	-	4
KS	1	1	1	1	-	-	4
KY	1	1	1	1	1	1	6
LA	1	1	1	1	1	1	6
ME	1	1	-	1	1	-	4
MD	1	1	-	1	1	1	5
MA	1	1	1	1	-	1	5

Table 4 (continued)

State	Thor. bred	Inter-Track	Quarter Horse	Harness Racing	Off-Track	Telephone	Total
MI	1	1	1	1	-	-	4
MN	1	1	1	1	-	-	4
MS	-	-	-	-	-	-	0
MO	1	1	1	1	1	-	5
MT	1	1	1	1	1	-	5
NE	1	1	1	-	-	-	3
NV	1	-	1	1	1	1	5
NH	1	1	-	1	-	1	4
NJ	1	1	-	1	1	1	5
NM	1	1	1	-	-	-	3
NY	1	1	1	1	1	1	6
NC	-	-	-	-	-	-	0
ND	1	1	1	1	1	1	6
OH	1	1	1	1	1	1	6
OK	1	1	1	1	1	-	5
OR	1	1	1	-	1	1	5
PA	1	1	1	1	1	1	6
RI	1	1	-	1	-	-	3
SC	-	-	-	-	-	-	0
SD	1	1	1	-	1	-	4
TN	1	1	1	1	1	-	5

Table 4 (continued)

State	Thor. bred	Inter-Track	Quarter Horse	Harness Racing	Off-Track	Telephone	Total
TX	1	1	1	-	1	-	4
UT	-	-	-	-	-	-	0
VT	1	1	-	1	-	-	3
VA	1	1	1	1	1	1	6
WA	1	1	1	1	1	-	5
WV	1	1	1	1	-	-	4
WI	1	1	1	1	-	-	4
WY	1	1	1	1	1	1	6
Total	43	42	37	34	26	17	

operating sports betting since it was already legal under state law. It is interesting to note that at the time of this writing, a few states, including New Jersey and California, have begun to question the legality of this ban (Rose, 1999).

Table 5 presents a summary of the types of games by state, with the last column representing each state's total gambling permissiveness score. The development of an index is a common measurement strategy (e.g., Taggart & Winn, 1991). An index allows the researcher to condense a number of dichotomous variables into a range of ordinal data. Gambling permissiveness scores are constructed by adding together the number of legal forms of gambling as reported by McQueen (2003). Each state is given a "1" if that type of gambling is legal and a "0" if it is not. Each score is then added together creating a composite score of legal gambling activities. One of the advantages to using an index is that it has more statistical flexibility.

Figure 2 presents a map of the American states indicating the number of legal gambling activities. Oregon is the most permissive state, allowing 17 of the 21 forms of legal gambling activities. Closely following are California, Connecticut, Louisiana, Montana, New York, South Dakota, and Washington, allowing 15 forms of legalized gambling activities. At the other extreme, Hawaii and Utah allow no forms of gambling, and Alaska permits only three forms. The average number of legal gambling activities is 10.68 with a standard deviation of 4.0.

At this point, a note on the validity of the dependent variable, gambling permissiveness is necessary. Gambling permissiveness is an additive index that measures the number of legal forms of gambling activities in a state. The measure intentionally examines the willingness of a state to permit legalized

Table 5

State Gambling Permissivness Score by Category of Gaming

State	General Games	Lotto-Operated Games	Parimutuel Wagering	Gambling Permissiveness Score
AL	2	1	4	7
AK	3	0	0	3
AZ	4	4	4	12
AK	0	1	3	4
CA	5	4	6	15
CO	6	4	4	14
CT	4	5	6	15
DE	2	4	4	10
FL	5	6	4	15
GA	1	4	0	5
HI	0	0	0	0
ID	3	4	4	11
IL	3	3	5	11
IN	4	3	5	12
IA	6	4	4	14
KS	2	5	4	11
KY	2	3	6	11
LA	6	3	6	15
ME	3	3	4	10
MD	4	4	5	13

Table 5 (continued)

State	General Games	Lotto-Operated Games	Parimutuel Wagering	Gambling Permissiveness Score
MA	2	5	5	12
MI	5	4	4	13
MN	5	3	4	12
MS	5	0	0	5
MO	4	4	5	13
MT	8	2	5	15
NE	4	3	3	10
NV	7	2	5	14
NH	2	4	4	10
NJ	4	3	5	12
NM	5	3	3	11
NY	4	5	6	15
NC	4	0	0	4
ND	6	2	6	14
OH	2	3	6	11
OK	3	0	5	8
OR	6	6	5	17
PA	2	4	6	12
RI	2	7	3	12
SC	1	3	0	4
SD	6	5	4	15

Table 5 (continued)

State	General Games	Lotto-Operated Games	Parimutuel Wagering	Gambling Permissiveness Score
TN	0	2	5	7
TX	3	4	4	11
UT	0	0	0	0
VT	2	4	3	9
VA	2	3	6	11
WA	6	3	5	14
WV	2	6	4	12
WI	4	4	4	12
WY	3	0	6	9

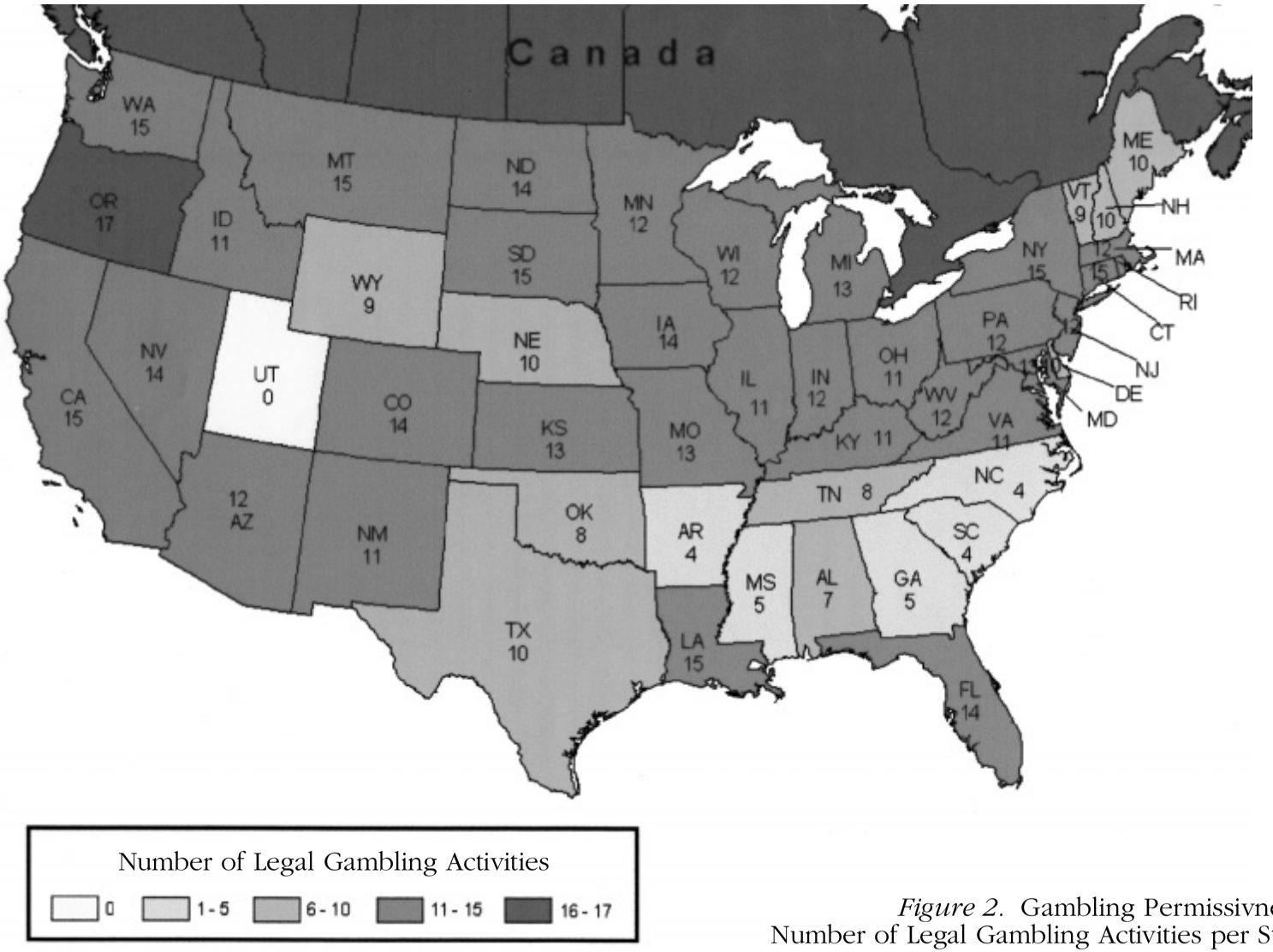

Figure 2. Gambling Permissivness: Number of Legal Gambling Activities per State

gambling by adding the number of legal gambling activities together to form an index. The gambling permissiveness score is an ordinal measure constructed by adding together the number of legalized gambling activities within a given state. However, even though two states may have the same permissiveness score, they may not necessarily permit the same forms of gambling. For example, both Alabama and Tennessee have a gambling permissiveness score of 7, but they do not permit the same types of games.

The distinction between gambling permissiveness and gambling pervasiveness is essential to this research project. For example, when considering gambling availability, many individuals immediately think of Las Vegas, Nevada, or Atlantic City, New Jersey. While these cities may have the most concentrated levels of gambling as measured by the sheer number of venues where one can play the lottery, gamble at a casino, or play slot machines, they are not considered to be the most permissive according to how gambling permissiveness is operationalized in this analysis. Nevada only permits 14 forms of gambling and New Jersey permits only 12 forms of legal gaming activities.

A distinction should also be made regarding legally available games versus illegal or underground games. For example, Hawaii does not permit any forms of legalized gambling, but according to the Honolulu Police Department web site, a number of illegal forms of gambling (e.g., caracruz, cockfighting, casino-type games, video poker and slot machines, sports betting, and internet gambling) are present on the islands.

Independent Variables

As presented in Chapter 2, this study examines the impact of 21 hypotheses, organized into four broad categories, on gambling policies in the

American states. Each variable within the four categories (political, economic, social, and availability) is operationalized using at least one measure; however, for some variables, multiple measures are employed. Hence, a total of 34 measures are used in the present analysis, which are summarized in Table 6.

Political Variables

This category incorporates variables related to political culture, institutional and citizen ideology, political competition, voter turnout, and type of government (unified/divided).

Political culture is evaluated using Sharkansky's 1966 measure. Sharkansky modifies Elazar's original scale and expands the three categories of culture into a 9-point scale. Political culture is then measured as moralistic (1.00) and traditionalist (9.00) at the extreme ends of the scale and individualistic in the middle, with combinations of subcultures in between.

The impact of ideology is examined using four different measures. The measure of state ideology developed by Erikson et al. (1985) is employed in this analysis. In their measure, they use public opinion polls from 1967 to 1982 to construct the means between liberals and conservatives, with lower scores associated with conservatives and higher scores with liberals. Measures for institutional and citizen ideology are taken from the original study by Berry et al. (1998) examining American ideology from 1960–1993 and the update that followed (Berry, Ringquist, Fording, & Hanson, 2001). The average institutional and citizen ideology for the years 1991–2000 are used in this analysis. The fourth variable, policy liberalism (Gray, 2004), is an index based on five indicators on which liberals and conservatives typically differ including gun control, abortion, welfare, tax progressivity, and right-to-work laws (p. 5). According to

Table 6

Summary of Independent Variables

Hypothesis	(Dir.)	Variable	Date	Source
		Political Variables		
HP1	(+)	Political Culture (n = 48)	1969	Sharkansky, 1966
HP2a	(+)	Political Ideology (Liberalism)	1976-1982	Erikson et al.,1985
HP2b	(+)	Average Institutional Ideology	1991-2000	Berry et al., 1998
HP2c	(+)	Average Citizen Ideology	1991-2000	Berry et al., 1998
HP2d	(+)	Policy Liberalism	2000	Gray, 2004
HP3	(-)	Region (Southern/non-Southern)		Compiled by author
HP4a	(+)	Ranney Index (n = 49)		Bibby & Holbrook, 2004
HP4b	(+)	Political Competition Index	1982-1986	Holbrook & Van Dunk, 1993
HP4c	(+)	Two-Party Competition (n = 48)	1968-1995, 1996-2000	Hamm & Moncrief, 2000
HP5	(+)	Voter Turnout	1994-1997	Bibby & Holbrook, 2000
HP6	(+)	Unified Government, Democrat	1991-2000	Compiled by author using Statistical Abstract, 1996 & 2002
HP7	(+)	Unified Government, Either	1991-2000	Statistical Abstract, 1996 & 2002

Table 6 (continued)

Hypothesis	(Dir.)	Variable	Date	Source
		Economic Variables		
HE1a	(+)	Per Capita Income	1999	U.S. Census, 2000
HE1b	(+)	Change in Per Capita Income	1989-1999	U.S. Census, 2000
HE2a	(+)	Average Disposable Income	1991-2000	Bureau of Economic Analysis, 2002
HE2b	(+)	Disposable Income	1999	Bureau of Economic Analysis, 2002
HE3	(+)	Non Agricultural Employment	2000,est.	U.S. Census, 2000
HE4	(+)	Balanced Budget Requirement	2000	Book of the States, 2000
HE5	(+)	Tax Effort to Capacity	1987-1991	Berry & Fording, 1997
HE6a	(+)	Average State Debt	1991-2000	Book of the States, 1990-2002
HE6b	(+)	Change in State Debt	1991-2000	Book of the States, 1990-2002
		Social Variables		
HS2	(+)	Population Density	2002	U.S. Census, 2000 (est)
HS3a	(+)	# of Federally Recognized Indian Tribes	2000	Bureau of Indian Affairs
HS3b	(+)	Number of Gaming Tribes	2000	National Indian Gaming Comm.

Table 6 (continued)

Hypothesis	(Dir.)	Variable	Date	Source
HS4a	(+)	Impact of Interest Groups	1990s	Gray, Hanson, & Jacob, 1999
HS4b	(+)	Interest Group Density	1990	Gray & Lowery, 1999
HS4c	(+)	Interest Group Diversity	1990	Gray & Lowery, 1999
HS5	(+)	Percent Catholic	2000	Amer. Religion Data Archive, 2002
HS6	(-)	Percent Fundamentalist	2000	Amer. Religion Data Archive, 2002
		Availability of Gaming Variables		
HA1	(+)	Average Border State Score	2003	Compiled by author using using McQueen, 2003
HA2	(+)	Average Border Province Score	2003	Compiled by author using using McQueen, 2003
HA3	(+)	Mexican Border	2003	Compiled by author

the policy liberalism index, lower scores are associated with liberals and higher scores are associated with conservatives. The design of this measure is somewhat counterintuitive and is opposite of the liberalism index constructed by Erikson et al. (1985). Therefore, for the purpose of this study, the policy liberalism index is coded in the opposite direction, with lower scores reflecting a conservative ideology and higher scores reflecting a liberal ideology.

Region is a variable that reflects a number of different ideas including culture, ideology, and religion and is speculated to influence public policies. A dichotomous variable of South/non-South is used to measure region. The 11 states considered to be part of the South (Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia) are coded as "1" and all others as "0."

Political competition is measured in three ways. First, the Ranney index, a commonly used indicator of party competition in government, is based on three dimensions: the proportion of votes won by each party in state legislative and gubernatorial races, the duration of party control, and the proportion of time that the legislature and governorship are held by different parties. The index ranges from 0 (indicating total Republican control) to 1 (indicating total Democratic control). States with a score around .50 are considered to be the most competitive. The Ranney competition index is usually folded in a way that lower scores reflect less competition, regardless of which party is in control, and higher scores reflect greater competition. Bibby and Holbrook (2004) use the Ranney index approach and update the measure for the years 1999–2002. Interparty competition scores from Bibby and Holbrook includes scores for 49 states; Nebraska is excluded because it has nonpartisan state legislative elections.

Party competition tends to be relatively stable over time (Bibby & Holbrook, p. 89).

The second measure, developed by Holbrook and Van Dunk (1993), offers an alternative measure to the Ranney index. Holbrook and Van Dunk based their indicator of political competition on district-level outcomes of state legislative elections (1982–1986). Higher levels of party competition are reflected in higher values. Data for Louisiana was not available, and Nebraska is excluded due to nonpartisan elections.

The third measure of political competition is taken from Hamm and Moncrief (2004). Party competition is defined as having a reasonable chance of winning the contested legislative seat. The level of political competition is measured between 1996 and 2002.

Voter turnout is measured by the average rates for voter turnout (1994–1997) for all state offices (Bibby & Holbrook, 2004, p. 93). Voter turnout is a function of a number of factors within a state. Patterns of voter turnout are influenced by the wealth of the voters, education levels, and political efficacy (Bibby & Holbrook).

In this analysis, party control and unified government are measured in two ways. First, by the numbers of years between 1991 and 2000 that Democrats control the state houses, senates, and governorships. Second, a composite measure of the number of years a state has had unified government (either Democrat or Republican) is constructed using information on party control from the Book of the States (1990–2002).

Economic Variables

This group includes variables that attempt to capture the economic conditions of the state including information on income, disposable income, industrialization, balanced budget requirements, taxing capacity, and short-term debt.

The use of income as an independent variable is found throughout the determinants literature. Income is thought to influence state policy, measured most often by per capita income. In this analysis, the variables "per capita income" measured in 1999 and "change in per capita income" from 1989–1999 are from the 1990 and 2000 U.S. Census. The data for per capita income in 1999 ranges from a low of $20,900 (Mississippi) to a high of $40,702 (Connecticut) with a mean income of $27,972. The amount of disposable income of its citizens is also used as an indicator of the wealth of a state. Two measures of disposable income are used in this analysis: average disposable income (1990–2000) and disposable income in 1999. Data on per capita disposable income are taken from the Bureau of Economic Analysis (2002). Industrialization is measured by the percentage of individuals employed in non-agricultural occupations and is taken from the 2000 U.S. Census.

Budget flexibility is measured by whether or not a state has a balanced budget requirement. The balanced budget requirement is an index ranging from 0 to 2, with 0 indicating there is no balanced budget requirement, 1 indicating that either the legislature or the governor must pass a balanced budget, and 2 meaning that both the governor and the legislature must pass a balanced budget. The balanced budget requirement may be either a statutory or constitu-

tional provision, but for the purpose of this study, a distinction between the two is not drawn.

Fiscal stress is evaluated in two ways. First, using data on tax effort and tax capacity from Berry and Fording (1997), an average measure of effort to capacity is constructed. This measure captures how close a state is to their taxing capacity. Second, data regarding short-term state debt (1991–2000) is used. Two measures related to state debt are considered. First, an average measure of state debt for the years 1991–2000 is used to help control for any dramatic changes from one year to the next. A second measure of state debt, change in state debt from 1991–2000, is also used in the analysis.

Social Variables

This category of independent variables includes information on urbanization (population density), number of federally recognized Indian tribes and number of gaming tribes, interest groups, and religion.

Urbanization is a common measure of the state of the economy, but is also has important social implications. The extent that a state is urbanized is considered to influence the demand for public services and the types of policy used to respond to these demands. Urbanization is measured by persons per square mile (density) and is taken from the 2000 U. S. Census.

The presence or absence of Native American tribal governments is expected to be related to gambling permissiveness. This is measured in two ways: number of federally recognized Indian tribes, and the number of gaming tribes within a state. Data regarding these variables was collected from the Bureau of Indian Affairs and the National Indian Gaming Commission.

Interest group activity is speculated to be related to gambling permissiveness. Three measures of interest group activity are used in this analysis. The first variable, developed by Gray, Hanson, and Jacob (1999), evaluates interest group activity in the late 1990s. Overall impact of interest group activity is coded as "5" for dominant, "4" for dominant/complementary, "3" for complementary, "2" for complementary/subordinate, and "1" for subordinate. Five states fall into the dominant category, 25 states fall into the complementary category, 16 states fall into the complementary category, and four states fall into the complementary/subordinate category. No states were in the subordinate category. The other two measures, interest group diversity and interest group density, are taken from Gray and Lowry's 1999 study of state interest group systems. Diversity captures the range of interests that are represented in the state. The measure employed in this analysis is the percent of institutional interest groups in a state's interest organization. Density is measured as the number of interest organizations in relation to society.

Religious preferences are considered an important determinant of morality policies, including gambling. Three religious groups in particular are postulated to impact gambling permissiveness: Catholics, fundamentalist Protestants, and Mormons. Information regarding religious preference is gathered from the American Religion Data Archive (2002). Religious preferences are relatively stable over time and therefore only one year of data is used in this analysis. The Mormon religion forbids gambling, but the highest number of members from the Mormon religion are found in Utah. Not wanting to exclude a case based on religion alone, a dummy variable for Utah was used in the analysis.

Availability of Gaming Variables

The final set of variables thought to influence the level of permissiveness in state gambling policies is the availability of gambling in neighboring governmental jurisdictions. As noted, each state has a permissiveness score based on the number of legal gambling activities (Table 4). An average border state score is operationalized by adding the number of legal gambling activities available in states that share a common geographic border with any given state, divided by the number of border states.

The average Canadian province score is created in a similar fashion (McQueen, 2003). The types of gambling available in Canada do not match perfectly the types of gambling in the American states. However, the total Canadian province score is calculated by adding together the number of forms of gambling available in each province. For states that border Canada, the number of legal gambling activities available in each Canadian border province is divided by the number of provinces that border a state, creating an average Canadian Border Score.

A third measure of availability identifies those states that border Mexico. Since specific information regarding the type and number of legal forms of gambling in Mexican states is not readily available, a dummy variable is used for states that border Mexico (1 = yes, 0 = no).

Summary

This chapter outlines the data and methods used in this analysis. First, the research design was presented followed by a general overview of the variables used in the analysis. Second, gambling permissiveness was introduced and described as the dependent variable of interest. Finally, the independent

variables thought to influence the level of gambling permissiveness were presented and described in their respective categories.

CHAPTER FOUR

FINDINGS

This chapter presents the results of the analysis as outlined in the previous chapter. The first step is an examination of the simple correlations between the independent variables. Next, the bivariate results are presented for the variables in each of the four dimensions of the model: political, economic, social, and availability of gaming. Guided by the results from the bivariate analysis, multiple regression is then used to analyze each of the four substantive areas. The last step involves estimating a final model utilizing the results from the four cluster multiple regression analyses.

Correlations

Bivariate Analysis by Cluster Area

The simple correlations between independent variables are presented first. The purpose of evaluating these simple correlations is to identify those variables that are highly correlated with one other in order to disentangle multicollinearity issues that might arise later in the analysis. Variables that are highly correlated with one another are essentially measuring the same concepts.

To better organize the information, correlations between independent variables are examined in clusters according to the four substantive areas. This is followed by an examination of high correlations between variables across clusters, which only involves a few variables.

Political Variables

The simple correlations for all the political variables are presented in Table 7. As reported, political culture is highly correlated ($R > .6$) with a

Table 7

Pearson's Zero-Order Correlation Coefficients (R) Between Independent Political Variables (N = 50, unless otherwise noted)

Variable		HP2a	HP2b	HP2c	HP2d	HP3	HP4a	HP4b	HP4c	HP5	HP6	HP7
HP1	Political Culture Index (n = 48)	-.283	.142	-.369	-.407	.713	.018	-.732	-.383	-.723	.584	.244
HP2a	Erikson Liberalism Index (n = 48)	–	.417	.597	.637	-.305	.255	.361	-.138	.024	-.094	-.349
HP2b	Institutional Ideology		–	.660	.534	.083	.286	-.040	-.089	-.169	.497	-.126
HP2c	Citizen Ideology			–	.703	-.280	.175	.366	-.031	.091	.085	-.164
HP2d	Policy Liberalism (n = 48)				–	-.395	.323	.450	-.136	.296	-.134	-.416
HP3	Region					–	-.005	-.537	-.164	-.489	.520	.252
HP4a	Ranney Index						–	.252	.030	.092	-.100	-.448
HP4b	Van Dunk Competition (n = 48)							–	.383	.537	-.544	-.405
HP4c	Two-Party Competition (n = 49)								–	.444	-.158	.037
HP5	Voter Turnout									–	-.469	-.262
HP6	Unified Democrat Govt. (n = 49)										–	.595
HP7	Unified Either Government (n = 49)											–

number of variables including voter turnout, region, and the Van Dunk measure of political competition. Not surprisingly, these other variables are also correlated with one another. Of all the political variables, culture appears to be correlated with a number of other measures included in this cluster.

Economic Variables

The results of the bivariate correlations between economic variables are presented in Table 8. Per capita income (1999) is highly correlated with a number of economic variables including change in per capita income (1989-1999), average disposable income (1991-2000), and disposable income (1999). Income is also correlated with measure of fiscal stress, including tax effort to capacity and average state debt. Average state (1991-2000) debt and change in state debt are also highly correlated. Many of the economic variables are measured at both a single point in time and as either an average of a 10-year period or a change over 10 years. These variables are, understandably, highly correlated with one another as they are measuring similar concepts. The cross-sectional variables and the longitudinal variables each have different advantages and disadvantages. Cross-sectional variables ignore changes over time, while the longitudinal variables included in this analysis track changes over time, but are not consistently measured. A number of considerations regarding which of the variables to include and which to dismiss will be discussed later.

Social Variables

The results of the bivariate correlations between social variables are presented in Table 9. As noted, the two religious variables are highly correlated (R = -.589). As the sign indicates, there is an inverse relationship between the

Table 8

Pearson's Zero-Order Correlation Coefficients (R) Between Independent Economic Variables (N = 50)

Variable		HE1b	HE2a	HE2b	HE3	HE4	HE5	HE6a	HE6b
HE1a	Per Capita Income	.787	.979	.995	-.011	-.095	.512	.539	.509
HE1b	Change in Per Capita Income	–	.676	.777	.179	-.050	.285	.399	.427
HE2a	Average Disposable Income		–	.986	-.104	-.092	.549	.517	.466
HE2b	Disposable Income			–	-.033	-.095	.535	.506	.474
HE3	Non-Agricultural Employment				–	-.054	-.300	.028	.099
HE4	Balanced Budget					–	.005	-.187	-.175
HE5	Effort to Capacity						–	-.003	.012
HE6a	Average State Debt							–	.935
HE6b	Change in State Debt								–

Table 9

Pearson's Zero-Order Correlation Coefficients (R) Between Independent Social Variables (N=50)

Variable		HS2a	HS2b	HS3a	HS3b	HS3c	HS4	HS5
HS1	Population Density	-.136	-.251	.170	.150	-.064	.576	-.364
HS2a	Federally Recongnized Indian Tribes	–	.176	-.062	-.006	.223	-.179	-.040
HS2b	Gaming Tribes		–	-.066	.135	.053	-.076	.069
HS3a	Interest Group Conc. in early 1990s			–	.359	.305	.028	-.292
HS3b	Interest Group Density				–	.460	.056	-.129
HS3c	Interest Group Diversity					–	-.123	.084
HS4	Percent Catholic						–	-.589
HS5	Percent Evangelical							–

percent of Catholics in state and the percent of the population that adheres to fundamental Protestant religions. Unlike many of the variables in the political or economic clusters, the variables within the social cluster—with the exception of religion—do not seem to be tapping the same concepts.

Availability of Gaming Variables

Finally, the results of the bivariate correlation between variables representing the availability of gambling are examined in Table 10. None of the variables in this cluster are highly correlated with one another.

Bivariate Correlations Across Clusters

In addition to the high correlations between variables in the same substantive cluster, a few high correlations emerge when looking across clusters. Correlations greater than .6 between variables in different substantive areas are presented in Table 11. Although a number of variables were moderately correlated across clusters, only a few highly correlated variables deserve mention. Political culture, in addition to being correlated with other variables in the political cluster, is also correlated with percent of the population that is evangelical Protestant. Not surprisingly, region is also highly correlated with percent of the population that is evangelical Protestant. The Erikson et al. liberalism index (1993) is correlated with average disposable income, while average citizen ideology is correlated with the change in per capita income.

Table 10

Pearson's Zero-Order Correlation Coefficients (R) Between Independent Availability of Gaming Variables (N=50)

Variable		HA2	HA3
HA1	Average Border State Score	.292	.037
HA2	Average Border Province Score	–	-.147
HA3	Mexico Border		–

Table 11

Bivariate Correlations Greater Than .6 Between Independent Variables Across Clusters (N = 50)

Variables	*R*
Political Culture and Percent Evangelical	.730
Erikson Liberalism Index and Average Disposable Income	.619
Citizen Ideology and Policy Liberalism	.703
Percent Evangelical and Region	.686

Bivariate Correlations with Gambling Permissiveness

The next step in the analysis involved examining the bivariate correlations with the dependent variable, gambling permissiveness. The results for the bivariate correlations with gambling permissiveness are presented in Table 12.

Based on these simple correlations, a few general comments can be made regarding the hypotheses presented in Chapter 2. Overall, variables in the political cluster performed well. Political culture, the Van Dunk measure of political competition, and the Erikson liberalism index performed the best with a correlation of .452, .454 and .438, respectively. Two of the four measures of political ideology were correlated with gambling permissiveness. The Erikson measure of liberalism performed the best (.438) with the policy liberalism measure following closely (.353). Surprisingly, region was only moderately correlated with gambling permissiveness (-.384). Variables measuring political competition were, with the exception of the Van Dunk political competition measure (.454), weak to moderately correlated with gambling permissiveness. The results from the bivariate analysis did not produce support for the hypothesis regarding voter turnout. Variables measuring party control and unified/divided government were correlated in the opposite direction as postulated. Similar results were found by Berry and Berry (1990) in their study of lottery adoptions.

Four of the nine variables representing three of the six economic hypotheses were correlated with gambling permissiveness. The hypotheses regarding per capita income, disposable income, and state debt were supported by the bivariate analysis. Both measures of per capita income were related to gambling permissiveness, although change in per capita income performed

Table 12

Pearson's Zero-Order Correlational Coefficients (R) Between State Gambling Permissiveness and Study Conditions (N = 50, unless otherwise noted)

Variable		*R*
	Political Variables	
HP1	Political Culture Index (*n* = 48)	-.452
HP2a	Erikson Liberalism Index (*n* = 48)	.438
HP2b	Insititutional Ideology, 10-year Average	-.054
HP2c	Citizen Ideology, 10-year Average	.233
HP2d	Policy Liberalism (*n* = 48)	.353
HP3	Region	-.384
HP4a	Ranney Competition Index	.238
HP4b	Van Dunk Political Competition Index (*n* = 49)	.454
HP4c	Level of Two-Party Competition, 1996-2000 (*n* = 48)	.075
HP5	Voter Turnout	.211
HP6	Unified Democrat Government (*n* = 49)	-.331
HP7	Unified Government (*n* = 49)	-.349
	Economic Variables	
HE1a	Per Capita Income	.326
HE1b	Change in Per Capita Income	.418
HE2a	Average Disposable Income	.268
HE2b	Disposable Income	.315
HE3	Percent Non-Agricultural Employment	-.074
HE4	Balanced Budget Requirement	-.053

Table 12 (continued)

Variable		*R*
HE5	Effort to Capacity	.104
HE6a	Average State Debt	.296
HE6b	Change in State Debt	.236
	Social Variables	
HS1	Population Density	.163
HS2s	Federally Recognized Indian Tribes	-.186
HS2b	Gaming Tribes	.303
HS3a	Interest Group Concentration	-.044
HS3b	Interest Group Density	.341
HS3c	Interest Group Diversity	-.186
HS4	Percent Catholic	.414
HS5	Percent Evangelical Protestant	-.371
	Availablility of Gaming Variables	
HA1	Average Border State Score	.620
HA2	Average Border Province Score	.218
HA3	Mexico Border	.098

slightly better (.418 vs. .326). Alternatively, the cross-sectional measure of disposable income performed slightly better than the longitudinal variable. Expectations regarding industrialization, budgetary flexibility, and taxing capacity were not met in the bivariate analysis.

In general, variables in the social characteristic cluster performed better than variables in the other substantive areas. Five of the nine measures included in this bivariate analysis are correlated with gambling permissiveness, lending support to three of the five hypotheses. The number of Native American tribes engaged in gaming activities was correlated with gambling permissiveness (.303), but the number of federally recognized Indian tribes was not. Variables representing the hypothesis regarding interest groups, in general, did not perform as well. Only interest group density was correlated with gambling permissiveness (.341). Religion, as measured by the percent of the population that is Catholic and the percent of the population that is fundamental Protestant, did correlate with gambling permissiveness, thereby lending support to their respective hypotheses.

As expected, the availability of gambling in neighboring governmental jurisdictions does influence gambling permissiveness. The average border state score was highly correlated with gambling permissiveness (.620). The other two hypotheses regarding the availability of gambling did not perform as well. These results may be in part due to the nature of the data used in this stage of the analysis. While the average border province score was constructed in a similar fashion as the average border state score, the forms of gambling are not exactly the same. In addition, the variable used to evaluate the impact of states bordering Mexico is a simple binary variable representing whether or not a state

borders Mexico. More detailed information about the types of gambling permitted in each of the Mexican states may have yielded different results.

Multivariate Analysis by Substantive Area

The next stage in the analysis is a multivariate analysis of variables from each of the cluster or substantive areas. Each substantive area is evaluated independently as an attempt to identify those variables that may help to explain gambling permissiveness. Some variables that are highly correlated with a similar measure are not included in this step. As these decisions are made, they will be discussed in the narrative.

A forward stepwise procedure is used to evaluate the potential explanatory value of each of variables located within each substantive area. This type of approach is sometimes referred to as a "cluster analysis" (Adelheid & Pexman, 1999). Cluster analysis refers to "a variety of techniques used to determine the underlying structure, natural grouping, or conceptual scheme of a set of entities by illustrating which of those entities are most closely related based on a set of descriptors" (p. 47).

Multivariate Analysis of Political Variables

Based on the correlations between the independent variables and gambling permissiveness, seven measures were available for the multivariate analysis of political variables on gambling permissiveness: political culture, the Erikson et al. liberalism index, Gray's policy liberalism, region, Van Dunk's measure of political competition, unified Democrat government, and unified government.

Political culture is retained for a number of reasons. First, political culture is a common variable used throughout the public policy determinants literature. Second, based on the simple correlations, political culture was found to be highly correlated with four of the six variables from the political cluster. In addition, as a continuous measure, political culture offers richer explanation of political inclinations than a dichotomous or dummy variable, such as region.

Both the Erikson et al. measure of liberalism and the Gray policy liberalism index were correlated with gambling permissiveness, but it seemed most appropriate to retain the latter of the two measures. The Gray measure of policy liberalism uses indicators measured between 1995 and 2001, while the Erikson et al. measure is constructed from public opinion polls taken between 1974 and 1982. Gray (2004) notes that an updated version of Erikson et al. measure has been developed; however, it was not readily available for this thesis research.

Of the four variables related to political competition, only the Van Dunk measure was correlated with gambling permissiveness. However, while a stronger correlation exists between the Van Dunk measure than the Ranney index (which was only weakly correlated) and gambling permissiveness, it seemed most appropriate to use the folded Ranney index in the next stage of the analysis. The folded Ranney index has been subjected to close scrutiny by a number of researchers (Barrilleaux, 1986; King, 1988; Paterson & Calderia, 1984; Tucker, 1982, as cited in Holbrook & Van Dunk, 1993) and remains the most widely used indicator of political competition. While the alternative measure for political competition offered by Holbrook and Van Dunk explains more of

the variance in gambling permissiveness in the multivariate analysis, the information is dated and may not accurately reflect partisan competition today.

Understandably, the two variables related to the control of government—unified Democrat government and unified government—are highly correlated with each other (.595). Since the literature surrounding the impact of party control on morality policies is unclear, the variable for unified government (either Democrats or Republicans) is employed. The use of this variable enables the analysis to evaluate the impact of the type of government (unified or divided) rather than focusing on party control.

Hence, four variables are retained for further analysis: political culture, Gray's policy liberalism index, the Ranney index, and unified government. These variables were entered into a multivariate analysis using the stepwise technique with gambling permissiveness as the dependent variable. By doing this, the impact of each political independent variable on gambling permissiveness could be evaluated. With this type of procedure, the variable that explains the greatest amount of variation is entered first, followed by other variables until no other variables remain that contribute to the explained variation of the model.

The analysis was conducted in a number of iterations due to concerns regarding the impact of missing case and a problem with outliers. First, all four variables were used in the multivariate analysis (n = 47). Political culture was the only variable that was included in the forward stepwise regression. However, in this model, Utah was discovered to be a statistical outlier. Therefore, the model was re-estimated, omitting Utah (n = 46). The second model produced similar results, with only political culture providing some

explanation to the extent of gambling permissiveness. When dropping Utah, however, the adjusted R^2 improved from .191 to .358, while the standard error of the estimate decreased from 3.258 to 2.612.

A final multivariate analysis was conducted using the three political variables with the highest correlations: political culture, policy liberalism, and the folded Ranney political competition index (n = 48). Again, political culture is the only variable that remains an important explanatory variable in the model. The results for the third model are presented in Table 13. The variable for unified government was dropped from the analysis for two reasons. First, in the initial two models, unified government did not add to the overall explanatory value of the model. Second, Nebraska does not have partisan elections, and the model loses a case by including this variable.

Multivariate Analysis of Economic Variables

Based on the strength of the correlations of the economic variables and gambling permissiveness, four variables—representing three measures of economic characteristics of a state—are available for the multivariate analysis of economic: per capita income, change in per capita income, disposable income, and average state debt. Two of the variables are cross-sectional measures and two are measured longitudinally. In order to evaluate the impact of the hypotheses related to per capita income, disposable income, and state debt, longitudinal measures are employed. Therefore the following variables were used in the multivariate analysis: change in per capita income (1989-1999), average disposable income (1991-2000), and average state debt (1991-2000).

Table 13

Forward Stepwise Regression Results:
Gambling Permissiveness as a Function of Political Culture (n = 48)

	ß	Standard Error	Standardized Slope	*p*
HP1 Political Culture	-0.752	0.148	-.602	.000
(constant)	15.085	0.839		.000
Adjusted R^2	.349			
Standard Error of the Estimate	2.606			

Note. Variables available: political culture, policy liberalism, and Ranney competition index.

These three variables were entered into a multivariate analysis using the step-wise technique with gambling permissiveness as the dependent variable.

Table 14 presents the multiple regression analysis of the economic variables. As noted in the table, only the change in per capita income helps to explain gambling permissiveness. The other two variables did not add to the overall model and were not retained.

Multivariate Analysis of Social Variables

Of the nine measures available for the multivariate analysis of social variables, four were correlated with gambling permissiveness: the number of gaming tribes in a state, interest group density, percent Catholic, percent evangelical Protestant. When combined in a multivariate analysis with other social variables, the percent of the population that is Catholic loses its explanatory value. This may be due to the competition with the other religious variables in the analysis, particularly the percent of the population that is fundamental Protestant. Thus, the model was re-estimated excluding Catholic percent of population, yet it did not yield results that were statistically different from the original model. Table 15 presents the results from the multiple regression analysis of gambling permissiveness and these three social variables which account for approximately 43% of the variation in gambling permissiveness.

Multivariate Analysis of Availability of Gaming Variables

Of the three variables used to evaluate the importance of availability of gambling in neighboring governmental jurisdictions, only one–average border state score–was correlated with gambling permissiveness. Table 16 presents the

Table 14

Forward Stepwise Regression Results:
Gambling Permissiveness as a Function of Change in Per Capita Income
(N = 50)

	ß	Standard Error	Standardized Slope	*p*
HE1b Change in Per Capita Income	-0.752	0.148	.418	.000
(constant)	0.322	3.289		.922
Adjusted R^2	.158			
Standard. Error of the Estimate	3.673			

Note. Variables available: Per capita income, disposable income, and state debt.

Table 15

Forward Stepwise Regression Results:
Gambling Permissiveness as a Function of Selected Social Variables (N = 50)

		ß	Standard Error	Standardized Slope	*p*
Utah		-11.747	3.119	-.415	.000
HS5	Percent Evangelical	-0.156	0.041	-.428	.000
HSb2	Number of Gaming Tribes	0.199	0.083	.264	.020
HS3c	Interest Group Density	0.002	0.001	.223	.050
(constant)		11.309	0.986		.000
Adjusted R^2		.428			
Standard Error of the Estimate		3.027			

Note. Variables available: Percent evangelical Protestant, Native American gaming tribes, and interest group density.

Table 16

Forward Stepwise Regression Results:
Gambling Permissiveness as a Function of Availability of Gaming in Neighboring Juisdiction Variables (N = 50)

	ß	Standard Error	Standardized Slope	*p*
HA1 Average Border State Score	0.802	0.146	.620	.000
(constant)	2.281	1.599		.160
Adjusted R^2	.371			
Standard Error of the Estimate	3.173			

results from the bivariate multiple regression analysis of availability of gambling and gambling permissiveness.

Summary of Multivariate Substantive Analysis

A summary of the second stage of the analysis is presented in Figure 3. Each variable that was correlated in the multivariate analysis by substantive area is included in the figure. This includes: change in per capita income, percent of the population that is evangelical Protestant, interest group density, number of gaming tribes, average border state score, political culture, and Utah.

Multivariate Analysis: Final Model

These resulting variables and their impact on gambling permissiveness were estimated in three different models, shown in Table 17.

Model 1 includes all seven variables, but has missing data for political culture (n = 48). Model 2 excludes the state of Utah and the dummy variable (n = 47). In both Model 1 and Model 2, two variables retain their importance: the percent of the population that is evangelical Protestant, and interest group density. In Model 3, a slightly different pattern emerges. Political culture is highly correlated with the average border state score (-.732) and is omitted from the third model. In this model, both the percent of the population that is fundamental Protestant and interest group density remain important explanatory variables.

However, when the variable for political culture is omitted, average border state score emerges as an important exploratory variable. This result may be in part a function of the dependent variable. While the literature suggests that political culture is an important explanatory variable, the average

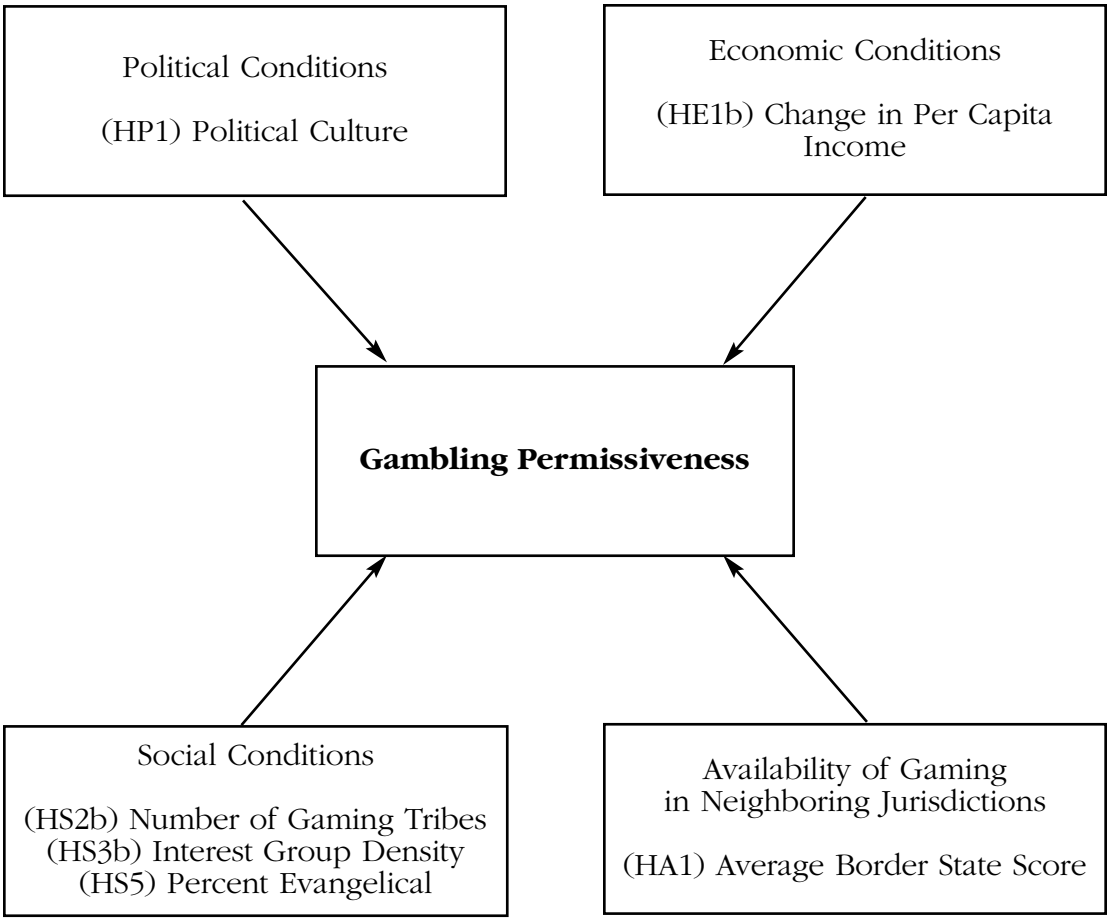

Figure 3. Variables Available for the Final Model

Table 17

Multiple Regression Results: Gambling Permissiveness as a Function of Selected Political, Economic, Social and Availability of Gaming Variables

		Model 1[a] (*n* = 48)		Model 2[b] (*n* = 47)		Model 3[c] (*n* = 49)	
		ß	Std. Slope	ß	Std. Slope	ß	Std. Slope
HE1b	Change in Per Capita Income	0.000	.009	0.000	.010	0.000	.051
HS5	Percent Evangelical Protestant	-0.105	-.326	-0.105	-.361	-0.029	-.231
HS3c	Interest Group Density	0.002	.222	0.002	.248	0.002	.258
HS2b	Number of Gaming Tribes	0.103	.155	0.103	.174	0.081	.116
HA1	Average Border State Score	0.277	.175	0 .277	.196	0.657	.549
HP1	Political Culture	-0.184	-.134	-0.184	-.148		
Utah		-12.669	-.510				

(constant)	9.129*	9.129	2.482
Adjusted R2	.579	.481	.596
Standard Error of the Estimate	2.327	2.327	2.373

[a]All variables, excludes Alaska and Hawaii; includes dummy variable for Utah. [b]All variables, excludes Alaska, Hawaii, Utah. [c]Excludes political culture and Utah.

border state score appears to be a surrogate measure for political culture since bordering states have similar culture and similar levels of gambling permissiveness. The average border state score is essentially the gambling permissiveness score of neighboring states. One might argue then that it is more appropriate to use political culture instead of average border state score, but when political culture is used, the model loses two cases (Alaska and Hawaii). However, when political culture is excluded from the analysis, Louisiana becomes a statistical outlier, perhaps due, in part, to the fact that Louisiana is surrounded by southern states, each of which has relatively low gambling permissiveness scores. Therefore, Model 3 provides the best model for understanding gambling permissiveness in the American states.

Summary

The analysis began by evaluating the simple correlations between variables in each of the substantive areas and with gambling permissiveness, followed by a multivariate analysis of variables that were highly correlated with gambling permissiveness by substantive area. Finally, the analysis develops three models for understanding gambling permissiveness in the American states. The findings from the bivariate analysis and the first multivariate analysis by cluster suggest that variables from the four substantive areas impact gambling permissiveness when evaluated individually and when controlling for other similar variables. However, a different pattern emerges when important variables from each of the substantive areas are combined into a final model. The results from the final model suggest that gambling permissiveness can best be explained by social characteristics within a state, specifically the interest group density and the percent of the population that adheres to fundamental

Protestant religions, and the availability of gambling in surrounding governmental jurisdictions. A discussion of these results will be presented in Chapter 5.

CHAPTER FIVE

CONCLUSION: UNDERSTANDING GAMBLING PERMISSIVENESS IN THE AMERICAN STATES

The purpose of this thesis was to identify and understand the variation in the permissiveness of state gaming policies. More specifically, the goal was to isolate those factors associated with a state's propensity to engage in or permit legalized gambling activities. It was proposed that the level of gambling permissiveness would be related to four substantive areas: political characteristics, economic characteristics, social characteristics, and the availability of gambling in neighboring governmental jurisdictions.

The thesis began by reviewing selected literature related to the determinants of public policy in general and gambling policy in particular. From this literature, 21 specific hypotheses, spanning the four substantive areas, were formulated regarding the internal and external determinants of gambling permissiveness. Thirty-four measures representing the 21 hypotheses were examined using bivariate correlations and multivariate regression techniques. Table 18 lists a summary of the findings concerning the 21 hypotheses developed in Chapter 2.

During the bivariate stage, preliminary support for 6 of the 21 hypotheses was found. These included political culture, region, per capita income, all three measures of religion, and availability of gaming in neighboring governmental jurisdictions. There were mixed results for six hypotheses, with some of the measures correlating to gambling permissiveness. Two hypotheses were supported in the bivariate stage, but in the opposite direction than hypothesized: unified Democratic government, and unified government. No support was found for seven of the hypotheses, specifically voter turnout, industrialization,

Table 18

Support for Hypothesis Throughout the Three Stages of the Analysis

Hypothesis	Stage 1				Stage 2	Stage 3
	Bivariate Support	Mixed Results	Supported in Opposite Direction	No Support	Multiple Regression by Cluster	Final Model
			Political Conditions			
HP1	X				X	
HP2		X				
HP3	X					
HP4		X				
HP5				X		
HP6			X			
HP7			X			
			Economic Conditions			
HE1	X				X	
HE2		X				

Table 17 (continued)

Hypothesis	Stage 1				Stage 2	Stage 3
	Bivariate Support	Mixed Results	Supported in Opposite Direction	No Support	Multiple Regression by Cluster	Final Model
HE3				X		
HE4				X		
HE5				X		
HE6		X				
			Social Conditions			
HS1		X				
HS2		X			X	
HS3		X			X	X
HS4	X				X	
HS5	X				X	X

Table 17 (continued)

Hypothesis	Stage 1				Stage 2	Stage 3
	Bivariate Support	Mixed Results	Supported in Opposite Direction	No Support	Multiple Regression by Cluster	Final Model
			Availability of Gaming			
HA1	X				X	X
HA2				X		
HA3				X		
TOTALS	6	7	2	6	7	3

budgetary flexibility, taxing capacity, availability of gaming in Canada, and availability of gaming in Mexico.

At the multivariate stage by substantive area, seven hypotheses received support when controlling for other similar variables. At least one hypothesis in each of the four substantive areas had support at this stage of the analysis.

These findings suggest that political conditions, economic conditions, social conditions and the availability of gaming, when controlling for other similar variables, do indeed impact a state's gambling permissiveness. In the final model, three hypotheses are supported from two of the cluster areas: number of gaming tribes, interest group density, and percent of the population that adheres to fundamental Protestant religions. A discussion of these results follows.

Political Characteristics

Throughout the determinants of public policy literature, political characteristics have been identified as having impact on policy outputs generated by political systems. Many of the same political characteristics have also been found to be significant in shaping a broad range of morality policies as well. To some extent, the findings regarding political characteristics are consistent with early research; at the bivariate stage, four of the seven hypotheses were supported. Political culture, as expected, was significantly correlated with gambling permissiveness. The moralistic subculture values the commonwealth of all citizens, with the role of government being to further the public interest. States with a moralistic subculture (e.g., California, Oregon, Washington) tend to be more liberal on individual freedoms and personal rights. Not surprisingly, these states were among the most permissive with their gaming policies. As

with political culture, there is a distinct regional pattern that emerges when examining gambling permissiveness. Clearly, southern states have less permissive gambling policies than states in the Northeast or in the Pacific Northwest. Results concerning the impact of region are consistent with other studies of morality policies in the American states (Norrander & Wilcox, 1999; Pierce & Miller, 1999).

In a similar fashion, liberal political ideology was also postulated to impact gambling permissiveness. Of the four measures of ideology, two were significant: Erikson's liberalism index, and policy liberalism (Gray, 2004). Each of these measures examines political ideology in slightly different manners. Erikson and his colleagues (1985) use public opinion polls, while Gray (2004) constructs an index from policy indicators—issues that liberals and conservatives tend to disagree upon (gun laws, abortion laws, eligibility rules for TANF, whether or not a state has right-to-work laws, and tax progressivity). As noted earlier, the Gray (2002) measure was selected over the Erikson measure due to the timeframe in which the data was collected; however, the updated version of the Erikson measure may prove to be more useful. Gambling is an issue that is very salient to the public. Citizens tend hold strong opinions regarding gambling and measures that directly capture recent public opinion may produce different results.

Political competition was postulated to have a strong influence on morality policies in general, including gambling policies. According to Meier (1994), policies that involve a moral component, such as gambling, tend to invoke partisan conflict. The results of this analysis did not support that conclusion. While the Ranney index was weakly correlated with gambling permissiveness, it

loses its significance when combined with and controlling for other political variables. A different measure of political competition developed by Holbrook and Van Dunk (1993) appeared to explain more of the variation in gambling permissiveness than similar measures. As noted earlier, though, their measure is dated and thus may not accurately reflect partisan competition today. An updated version of their measure may provide valuable insight and perhaps even confirm the argument by Mooney and Lee (1995) that morality policies will be more likely to be implemented in less competitive systems.

Hypotheses related to party control and type of government failed to garner support as originally postulated. Berry and Berry (1990) offer an explanation as to why party control may not impact the adoption of a lottery:

> … we do not expect that governments controlled by Democratic parties should be more (or less) likely to adopt than those controlled by Republican parties. This is because the lottery is likely to induce a mixed ideological response from both conservatives and liberals. (p. 413)

In their study, Berry and Berry (1990) did not include party control, but rather focused on whether or not a state had a divided or unified government. They hypothesized that a unified government was more likely to adopt a lottery; however, their results indicated that a divided government would be more likely to adopt a lottery. Similar results were found in this study.

Economic Characteristics

Overall, the economic measures did not perform as well as variables in other substantive areas. It was postulated that the general economic conditions of a state would be related to gambling permissiveness, with greater economic stresses allowing for more permissive gambling policies. When evaluated separately, a few of the measures of the state of the economy did relate to

gambling permissiveness. These included measures related to per capita income, disposable income, and state debt.

Dye (1966) found a statistically significant relationship between gambling policy, which he measured as the percent of state revenue derived from gambling policy, and three measures related to the economy. He found urbanization, industrialization, and income to have statistically significant relationships with gambling policy. Clearly, the results from this analysis are not consistent with Dye's findings. Two possible explanations exist for the difference. First, the dependent variable—gambling permissiveness—is defined in this analysis as the number legalized gambling activities a state permits, unlike Dye's evaluation based on the state's revenue. Second, the overall number of legalized gambling activities has significantly increased since Dye's 1966 study.

The findings from this analysis were, however, consistent with research by Berry and Berry (1990) on lottery adoptions. Two measures of wealth—per capita income and change in per capita income—had positive coefficients, which indicate that low state personal income creates less permissive gambling policies. This may be due to the inability of a state to sustain various forms of gambling, or the hesitation of policymakers to appear to be instituting a regressive tax on the poor. In any case, more permissive gambling policies are found in states with more personal income.

The findings regarding the impact of economic variables are also inconsistent with Alm et al. (1993). They found that fiscal stress indicators including short-term state debt and a decline in income levels affect the probability that a lottery will be adopted. In fact, the early stages of the analysis indicate that a decline in income will result in states becoming less permissive, not more.

However, Almet al. also note that the importance of economic factors has decreased since the early enactments of the lottery, while other factors such as political and socio-economic conditions have gained impact on recent lottery adoptions. This trend can be seen in the results of this study as well, although more empirical evidence using longitudinal data on the various forms of legalized gambling should be conducted before making assumptions.

According to Furlong (1998), casino adoptions differ from state lottery adoptions in that they appear to be driven by internal determinants, rather than a mix of internal and external influences. In his study of casino adoptions, Furlong found four predictors of casino gaming adopters were related to the political feasibility and the economic characteristics of a state: moderate aggregate state ideology, 1990 per capita tax rankings, longitudinal changes in state per capita taxes, and longitudinal changes in state job growth (p. 371). Perhaps different measures of economic conditions in this study would have yielded different results.

Social Characteristics

Throughout the literature on morality policy, researchers have identified characteristics that make morality policy different from non-morality policies. Morality polices tend to include fewer technical issues, which make it easier for more people to be informed about them. Proponents of morality policies use simple statements to understand and validate a particular policy value (Haider-Markel & Meier, 1996), which may lead to greater levels of citizen participation (Gormley, 1983). Additional factors have also been identified as partial explanations of morality policy, including religious fundamentalism (Wald, 1992). Perhaps this can explain the difference in interest group influence between

morality policies and other non-morality policies (e.g., those based in economics). This analysis produced results supporting this supposition. The percent of the population adhering to religious fundamentalist beliefs was negatively correlated with gambling permissiveness. A similar hypothesis by Berry and Berry (1990) regarding the impact of religious fundamentalist populations on lottery adoptions was also found.

Public opposition to gambling is the result of the net effects of socio-demographic factors within a population (Alm et al., 1993). Opposition to gambling can be found in the texts of many religious groups, including Christianity and Mormonism. The Bible does not expressly forbid gambling, but according to some, there are a number of biblical principles that should make Christians hesitate to participate in gambling (e.g., Bechtle, 2004; Reno, 2003). The Mormon religion outrightly forbids gambling (Shelar, 2000).

Religion remained an important factor throughout the entire analysis. Three variables were used to capture religious preferences: percent of the population that is Catholic, percent of the population that is evangelical Protestant, and Utah (a dummy variable for the Mormon religion). In the end, only one was used. The dummy variable for Utah was dropped, since Utah became a statistical outlier with a gambling permissiveness score of 0, and the importance of Catholicism was no longer evident when placed into a multivariate analysis with the Protestant percent of the population.

In addition to religious bodies mobilizing their congregations in opposition of gambling, various interest groups also have influence over the number and type of gambling activities within a state. Clotfelter and Cook (1990) noted that the industry that supplies the lottery with its machines, accounting services,

etc., is becoming more and more effective as an interest group in support of lotteries. This may be true for other forms of gambling as well. The results in this analysis support that proposition, albeit in an indirect manner. The variable for interest group density was significant at all stages of the analysis. It was correlated with gambling permissiveness and also remained significant when controlling for other social variables. Interest group density was also significant in the final model. Interest group density is a rather general measure of the impact of interest group power within a state. Direct measures specific to either proponents of gambling (e.g., business providing goods or services to the gaming industry) or opponents to gambling (e.g., number and strength anti-gambling interest groups) were not readily available.

A study by Thomas and Hrebenar (2004) lists the most influential interest groups in the American states in 2002. This information is aggregated for all 50 states, but can nonetheless provide some insight into the possible influence that gaming interests may have on gambling permissiveness. In 1985, gaming ranked 36th in influence of interest groups. By 2002, gaming interests moved up in the ranking to 21. Perhaps gaming interests have become more influential due to the increased presence of lotteries, racetracks, and other gambling venues in the states.

Two measures of Native American tribal governments were used in this analysis, with mixed results. One of the measures—the number of federally recognized Indian tribes—was not correlated with gambling permissiveness, while the other—the number of gaming tribes—remained significant throughout the analysis.

Availability of Gambling

The availability of gaming in neighboring governmental jurisdictions was postulated to have a significant impact on gambling permissiveness. The results of the model validate that proposition. Three measures of availability were employed in the analysis: The average border state score, the average Canadian province score, and a dichotomous variable that measured whether or not a state bordered Mexico were used to evaluate the impact of gaming availability. Of the three, only the average border state score was significantly correlated with gambling permissiveness. The measure for Canadian provinces, while constructed in the same manner as average border state score, was based on different types of games being available. The measure for evaluating the impact of the availability of gambling in Mexico is rather crude, since specific information regarding the types of gambling permitted in each of the Mexican states was not readily available. Perhaps a better measure would have yielded different, even significant, results. The average border state score remained significant throughout the analysis, and the results were consistent with the Berry and Berry (1990) and Alm et al. (1993) studies of lottery adoptions.

Discussion of Final Model

The final model is the result of winnowing down 34 measures thought to influence gambling permissiveness though the use of various statistical techniques. Variables that remained significantly correlated or had some compelling reason to be retained were used in the final model. The final model consisted of five variables: change in per capita income, number of Native American gaming tribes, evangelical Protestant percent of the population, interest group density, and average border state score. Of these five, three variables explain

approximately 60% of gambling permissiveness: percent of the population that is evangelical Protestant, interest group density, and average border state score.

As noted earlier, political culture and average border state score were highly correlated with one another. Concerns with multicollinearity and problems with missing data led to the removal of political culture from the final model, but the importance of culture should not be dismissed. Political culture encompasses the historical aspects of a state that may help to explain gambling permissiveness, including elite and citizen ideology, religious preferences, and attitudes toward government.

Again, one of the most startling aspects of this model was the failure of the economic variables. However, this may suggest that while the legalization of gambling may have obvious economic characteristics, gambling policy is reflected more accurately by social characteristics and the availability of gambling in neighboring governmental jurisdictions.

Limitations, Lessons, and Areas for Future Research

The results presented in this thesis should be considered with care. Additional work in this important policy area is necessary to better understand the determinants of gambling permissiveness. The dependent variable was created using a simple additive index where each form of gambling was equally weighted. Differences exist between the categories of games, and these differences suggest a fuller explanation of the level of permissiveness. Further examination of each of the three categories of gaming (general games, lottery-operated games, and parimutuel wagering) may provide a richer understanding of gambling permissiveness in the American states. In addition, there is also varia-

tion between a single type of game in different states, including rules regarding wagers placed on a bet.

As noted above, a number of measurement issues must also be considered when evaluating the utility of the model presented. While all independent variables were measured prior to the dependent variable, many were measured at different points in time and for different lengths of time. This was partly a function of the nature and availability of the data used in the analysis; some of the data was simply not available, while other measures were available but measured at different time points than desired. In addition, a few of the variables had simple binary measures (e.g., region, and gaming in Mexico).

A note should also be made regarding the techniques used in this analysis. The dependent variable, gambling permissiveness, was constructed using an additive index resulting in an ordinal level measure. Multiple regression techniques assume interval level data, but were nonetheless used in this analysis. Pearson's zero-order correlation coefficients for gambling permissiveness and the independent variables were used in an effort to keep the analysis controllable. The use of more appropriate measures of association did not produce results different from those presented in this analysis.

It is also important to reiterate the difference between gambling permissiveness and gambling pervasiveness. This research examined the variation in gambling permissiveness, a concept operationalized by the number of forms of legalized gambling activities. Gambling pervasiveness, or the concentration of gambling in a given state, was not the focus of this study. However, an examination of gambling pervasiveness may contribute further to our understanding of gambling policy in the American states.

Despite these limitations, the empirical evidence presented in this thesis offers support for the initial model of gambling permissiveness. The model presents evidence for both internal determinants, including the religious composition and interest group density, as well as external influences, such as the availability of gambling in neighboring jurisdictions

These results of this research add to the growing body of literature surrounding morality policy by providing a starting point for understanding gambling permissiveness in the American states. The final model developed a rather simple explanation of what factors account for the variation in gambling permissiveness, and, at the same time rejected some of the commonly held beliefs regarding why some states have more permissive gambling policies than others. However, there is still much more research to be done in an effort to understand gambling permissiveness in the American states.

BIBLIOGRAPHY

Adelheid, A. M., & Pexman, P. (1999). *Presenting your findings: A practical guide for creating tables*. Washington, DC: American Psychological Association.

Alm, J., McKee, M., & Skidmore, M. (1993). Fiscal pressure, tax competition and the introduction of state lotteries. *National Tax Journal*, *46*, 463-476.

American Religion Data Archive (2002). *Religious congregation membership state report*. Retrieved January 24, 2004, from http://www.arda.tm

Bardes, B., Shelley, M., & Schmidt, S. (2004). *American government and politics today: The essentials*. Belmont, CA: Wadsworth Publishing.

Bechtle, J. (2004). *Should Christians be involved with lotteries or other forms of gambling?* Retrieved May 21, 2004, from http://www.christiananswers.net

Benton, J. (1983). Dimensions of public spending. *Policy Studies Journal*, *12*, 233-246.

Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *American Political Science Review*, *84*, 395-415.

Berry, F. S., & Berry W. D. (1994). The politics of tax increases in the states. *American Journal of Political Science*, *38*, 855-859.

Berry, W., & Fording, R. (1997). Measuring state tax capacity and effort. *Social Science Quarterly*, *78*, 158-66.

Berry, W., Ringquist, E., Fording, R., & Hanson R. (1998). Measuring citizen and government ideology in the American states, 1960-93. *American Journal of Political Science*, *42*, 327-348.

Berry, W., Ringquist, E., Fording, R., & Hanson R. (2001). Measuring citizen and government ideology in the American states (Update, Study No. 1208). Retrieved in August 2003 from University of Michigan, Inter-university Consortium for Political and Social Research web site: http://webapp.icpsr.umich.edu/cocoon/ICPSR-PRINT-STUDY/01208.xml

Bibby, J., & Holbrook, T. (2004). Parties and elections. In V. Gray & R. Hanson (Eds.), *Politics in the American states: A comparative analysis* (pp. 62-99). Washington, DC: Congressional Quarterly Press.

Boehmke, F., & Witmer, R. (2001). *State and American Indian negotiation of gaming compacts: an event count analysis*. Paper prepared for presentation at the annual meeting of the Iowa Conference of Political Scientists.

Bohm, R. T., Flanagan, T., & Harris, P. (1991). Current death penalty opinion in New York State. *Albany Law Review*, *54*, 819-843.

Book of the States (1990-2002). Lexington, KY: Countil of State Governments.

Bowman, A., & Kearney, R. (2002). *State and local government*. Boston: Houghton Mifflin.

Bowers, W. J. (1984). *Legal homicide: Death as punishment in America, 1864-1982*. Boston: Northeastern University Press.

Brinner, R. E., & Clotfelter, C. (1975). An economic appraisal of state lotteries. *National Tax Journal*, *28*, 395-404.

Bureau of Economic Analysis (2002). Retrieved February 17, 2004, from http://bea.doc.gov

Clotfelter, C., & Cook, P. (1990). On the economics of state lotteries. *Journal of Economic Perspectives*, *4*(4), 105-119.

Cnudde, C., & McCrone, D. J. (1969). Party competition and welfare policies in the American states. *American Political Science Review*, *63*, 858-866.

Cooke, R., & Mangalmurti, S. (1991). *State lotteries: Seducing the less fortunate*. Chicago: Heartland Institute.

Cotton, I. (1996). Unreality bites. *New Statesman and Society*, *9*(388), 85-92.

Dawson, R., & Robinson, J. (1963). Inter-party competition, economic variables, and welfare policies in the American states. *Journal of Politics*, *25*, 265-289.

Dunn, W. (1981). *Public policy analysis*. Englewood Cliffs, NJ: Prentice Hall

Dunstan, R. (1997). *Gambling in California*. Sacramento, CA: California Research Bureau.

Dye, T. (1966). *Politics, economics, and the public*. Chicago: Rand McNally.

Dye, T. (1978). *Policy analysis: What governments do, why they do it, and what difference it makes*. Tuscaloosa, AL: University of Alabama Press.

Dye, T. (1980). Taxing, spending, and economic growth in the American states. *Journal of Politics*, *42*, 1085-1107.

Dye, T. (1984). Party and policy in the states. *Journal of Politics*, *46*, 1097-1116.

Dye, T. (1987). *Understanding public policy* (6th ed.). Englewood Cliffs, NJ: Prentice Hall.

Dye, T. (1991). *Politics in states and communities* (7th ed.). Englewood Cliffs, NJ: Prentice Hall.

Dye, T. (1999). *Politics in America* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Dye, T., & Gray, V. (Eds.) (1980). *The determinants of public policy*. Lexington, MA: Lexington Books.

Eadington, W. (1999). The economics of casino gambling. *Journal of Economic Perspectives*, *13*, 173-192.

Elazar, D. (1967). Urban problems and the federal government: A historical inquiry. *Political Science Quarterly*, *82*, 505-525.

Elazar, D. (1972). *American federalism: A view from the states* (2nd ed.). New York: Harper Collins.

Erikson, R. (1976). The relationship between public opinion and state policy: A new look based on some forgotten data. *American Journal of Political Science*, *20*, 25-36.

Erikson, R., McIver, J., & Wright, G. (1987). State political culture and public opinion. *American Political Science Review*, *81*, 797-814.

Erikson, R., Wright, G., & McIver, J. (1993). *Statehouse democracy*. New York: Cambridge University Press.

Fairbanks, J. D. (1977). Religious forces and morality policies in the American states. *Western Political Quarterly*, *30*, 411-417.

Filer, J. E., Moak, D. E., & Uze, B. (1988). Why some states adopt lotteries and others don't. *Public Finance Quarterly*, *16*, 259-283.

Furlong, E. (1998). A logistic regression model explaining recent state casino gaming adoptions. *Policy Studies Journal*, *26*, 371-383.

Glick, H. R. (1992). *The right to die*. New York: Columbia University Press.

Glick, R., & Hutchison, M. (1990). New results in support of the fiscal policy ineffectiveness proposition. *Journal of Money, Credit and Banking*, *22*, 288-304.

Gormley, W. T., Jr. (1983). Policy, politics, and public utility regulation. *American Journal of Political Science*, *27*, 86-105.

Gray, V. (1973). Innovation in the states: A diffusion study. *American Political Science Review*, *67*, 1174–1185.

Gray, V. (2004). The socioeconomic and political context of states. In V. Gray & R. Hanson (Eds.), *Politics in the American States: A Comparative*

Analysis (pp. 1-3). Washington, DC: Congressional Quarterly Press.

Gray, V., Hanson, R., & Jacob, H. (1999). *Politics in the American states: A comparative analysis*. Washington DC: Congressional Quarterly Press.

Gray, V., & Lowry, D. (1993). The density of state interest group systems. *Journal of Politics*, *55*, 191-206.

Gray, V., & Lowry, D. (1999). *The population ecology of interest representation: Lobbying communities in the American states*. Ann Arbor, MI: University of Michigan Press.

Grogan, C. (1994). Political-economic factors influencing state medicaid policy. *Political Research Quarterly*, *47*, 589-623.

Gusfield, J. R. (1963). *Symbolic crusade*. Urbana, IL: University of Illinois Press.

Haider-Markel, D. P., & Meier, K. J. (1996). The politics of gay and lesbian rights: Expanding the scope of conflict. *Journal of Politics*, *58*, 332-349.

Hamm, M. S. (1989). Legislator attitudes toward policies to reduce prison crowding. *Criminal Justice Policy Review*, *3*, 220-235.

Hamm, M. S., & Moncreif, G. (2004). Legislative politics in the states. In V. Gray & R. Hanson (Eds.), *Politics in the American States: A Comparative Analysis* (pp. 157-193). Washington, DC: Congressional Quarterly Press.

Harrah's Entertainment, Inc. (1996). Corporate survey of casino entertainment.

Hedge, D., & Scicchitano, M. (1994). Regulating in space and time: The case of regulatory federalism. *Journal of Politics*, *56*, 134-153.

Helco, H. (1972). Policy analysis. *British Journal of Political Science*, *2*, 83-108.

Hofferbert, R. (1966). The relationship between public policy and some structural and environmental variables in the American states. *American Political Science Review*, *60*, 73-82.

Hogwood, B., & Gunn, L. (1984). *Policy Analysis for the Real World*. London: Oxford University Press.

Holbrook, T. M., & Van Dunk, E. (1993). Electoral competition in the American states. *American Political Science Review*, *87*, 955-962.

Honolulu Police Department, Narcotics/Vice Division. Gambling detail (n.d.). Retrieved May 26, 2004, from http://www.honolulupd.org/nv/gambling.htm

Hutcheson, J. D., Jr., & Taylor, G. (1973). Religious variables, political system characteristics, and policy outputs in the American states. *American*

Journal of Political Science, *17*, 414-421.

Jennings, E. T., Jr. (1979). Competition, constituencies, and welfare policies in American states. *American Political Science Review*, *73*, 414-429.

Jewell, M., & Olsen, D. M. (1982). *American state political parties and elections*. Homewood, IL: Dorsey Press.

Jones, C. O. (1975). *Clean Air*. Pittsburgh, PA: University of Pittsburgh Press.

Key, V. O. (1949). *Southern Politics*. New York: Random House.

Key, V. O. (1956). *American State Politics*. New York: Knopf.

Kingdon, J. W. (1995). *Agendas, alternatives, and public policies* (2nd ed.). New York: Harper Collins.

Kuklinski, J. (1977). Constituency opinion: A test of the surrogate model. *Public Opinion Quarterly*, *41*, 34-40.

Lehne, R. (1986). *Casino policy*. New Brunswick, NJ: Rutgers University Press.

Lewis-Beck, M. (1977). The relative importance of socioeconomic and political variables for public policy. *American Political Science Review*, *71*, 559-566.

Lewis-Beck, M., & Mohr, L. (1976). Evaluating the effects of independent variables. *Political Methodology*, *3*, 27-47.

Lockard, D. (1959). *New England State Politics*. Princeton, NJ: Princeton University Press.

Lowery, D., & Sigelman, T. (1982). Political culture and state public policy. *Western Political Quarterly*, *35*, 376-384.

Lowi, T. J. (1964). American government, 1933-63: Fission and confusion in theory and research. *American Political Science Review*, *58*, 589-599.

Lowi, T. J. (1972). Four systems of policy and politics. *Public Administration Review*, *32*, 298-310.

McQueen, P. A. (2003, November). "United States gaming at a glance" and "Canada gaming at a glance." N.A. gaming at a glance: Economic climate determing factor in gaming growth. *International Gaming and Wagering Business*, *24*(11), 16 & 18.

Medoff, M. (2002). The determinants and impact of state abortion restrictions. *American Journal of Economics and Sociology*, *61*, 481-493.

Meier, K. J. (1994). *The politics of sin*. Armonk, NY: M.E. Sharpe Publications

Meier, K. J. (1999). Drugs, sex, rock, and roll: A theory of morality politics. *Policy Studies Journal*, *27*, 681-695.

Meier, K. J., & Johnson, C. (1990). The politics of demon rum. *American Politics Quarterly*, *18*, 404-429.

Meier, K. J., & McFarlane, D. R. (1992). State policies on funding abortions: A pooled timeseries analysis. *Social Science Quarterly*, *73*, 690-698.

Mikesell, J. L., & Zorn, K. C. (1986). State lotteries as fiscal savior or fiscal fraud: A look at the evidence. *Public Administration Review*, *46*, 311-320.

Mohr, L. B. (1969). Determinants of innovation in organizations. *American Political Science Review*, *63*, 111-126.

Mooney, C. Z. (1999). The politics of morality policy: Symposium editor's introduction. *Political Studies Journal*, *27*, 675-680.

Mooney, C. Z. (2001). *The public clash of private values*. New York: Seven Bridges Press.

Mooney, C. Z., & Lee, M.-H. (1995). Legislating morality in the American state: The case of pre-Roe abortion regulation reform. *American Journal of Political Science*, *39*, 599-627.

Mooney, C. Z., & Lee, M.-H. (2000). The influence of values on consensus and contentious morality policy: U.S. death penalty reform, 1956-1982. *Journal of Politics*, *62*, 223-239.

Morgan, D. R., & Meier, K. M. (1980). Politics and morality: The effect of religion on referenda voting. *Social Science Quarterly*, *61*, 144-148.

Nachmias, D. (1980). The role of evaluation in public policy. *Policy Studies Journal*, *8*, 1163-1169.

National Conference on State Legislatures (2004, January 14). *Economic development & trade: Lotteries in the United States*. Retrieved on March 18, 2004, from http://www.ncsl.org/programs/econ/lotto.htm

National Indian Gaming Commission (n.d.). *Gaming tribes by state*. Retrieved on March 18, 2004, from http://www.nigc.gov/nigc/nigcControl?option=GAMING_TRIBES&REGIONID=0&SORT=1

Nice, D. C. (1980). Ideological stability and change at the presidential nominating conventions. *Journal of Politics*, *42*, 847-53.

Nice, D C. (1986). State support of Constitutional balanced budget requirements. *Journal of Politics*, *48*, 134-142.

Nice, D. C. (1992). The states and the death penalty. *Western Political*

Quarterly, *45*, 1037-1048.

Nie, N. H., Hull, C. H., Jenkins, J.G., & Bent, D. H. (1975). *SPSS: Statistical package for the social sciences* (2nd ed.). Boston: McGraw Hill

Norrander, B., & Wilcox, C. (1993). *Sources of state abortion policy*. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

North American Association of State and Provincial Lotteries (2003). *Lottery history*. Retrieved on March 16, 2004, from http://www.naspl.org/history.html

Olsen, M., Jr. (1965). *The logic of collective action*. Cambridge, MA: Harvard University Press.

Pierce, P., & Miller, D. (2001). Variations in the diffusion of state lottery adaption: How revenue dedication changes morality politics. In C. Mooney (Ed.), *The public clash of private values* (pp.160-169). New York: Seven Bridges Press.

Plotnick, R., & Winters, R. (1985). A politico-economic theory of income redistribution. *American Political Science Review*, *79*, 458-473.

Pool, I., Abelson, R., & Popkin, S. (1965). *Candidates, Issues and Strategies*. Cambridge, MA: MIT Press.

Ranney, A., & Kendall, W. (1954). The American party systems. *American Political Science Review*, *48*, 477-485.

Reno, R. A. (2003, May 2). *Gambling and the Bible*. (Reprinted with permission from Focus on the Family, 1999.) Retrieved on April 19, 2004, from http://www.beliefnet.com/story/126/story_12618_1.html

Robertson, D. (1976). *A theory of party competition*. London: McMillan.

Robertson, D., & Judd, D. (1989). *The development of American public policy*. Glenview, IL: Scott-Foresman.

Rose, I. N. (1999). *Gambling and the law: Pivotal dates*. Retrieved April 22, 2004, from http://www.gamblingandthelaw.com/dates.html

Rubenstein, J. (1984). Casino gambling in Atlantic City: Issues of development and redevelopment. *Annals of the American Academy of Political and Social Science*, *474*, 61-71.

Scholz, J. T., & Wei, F. H. (1986). Regulatory enforcement in a federalist system. *American Political Science Review*, *80*, 1249-1270.

Schwarz, J., & Fenmore, B. (1977). *Presidential election results and congres-*

sional roll call behavior: The case of 1964, 1968, and 1972. San Francisco: Institute for Contemporary Studies.

Sharpe, E. (2003). Local government and the politics of decency. *Social Science Quarterly*, *84*, 262-277.

Sharkansky, I. (1966). The utility of Elazar's political culture: A research note. *Polity*, *2*(1), 66-83.

Sharkansky, I., & Hofferbert, R. (1969). Dimensions of state politics, economics, and public policy. *American Political Science Review*, *63*, 867-879.

Shelar, J. L. (2000). The Mormon moment: The Church of Latter-day Saints grows by leaps and bounds. (Reprinted from *U.S. News and World Report*.) Retrieved May 24, 2004, from http://www.rickross.com/reference/mormon/mormon32.html

Sternlieb, G., & Hughes, J. W. (1983). *The Atlantic City gamble*. Cambridge, MA: Harvard University Press

Suits, D. (1977). Gambling taxes: Regressivity and revenue potential. *National Tax Journal*, *30*, 25-33.

Taggart, W., & Winn, R. (1991). Determinants of corrections expenditures in the American states: An exploratory analysis. *Criminal Justice Policy Review*, *5*, 157-182.

Taggart, W., & Winn, R. (1993). Imprisonment in the American states. *Social Science Quarterly*, *74*, 736-749.

Tatalovich, R., Smith, A., & Bobic, M. (1994). Moral conflicts and the policy process. *Policy Currents*, *4*(41), 3-6.

Thomas, C., & Hrebenar, R. (2004). Interest groups in the states. In V. Gray & R. Hanson (Eds.), *Politics in the American States: A Comparative Analysis* (pp. 100-128). Washington, DC: Congressional Quarterly Press.

Tompkins, G. (1975). A causal model of state welfare expenditures. *Journal of Politics*, *37*, 392-418.

Tufte, E. R. (1978). *Political control of the economy*. Princeton, NJ: Princeton University Press.

U.S. Department of Commerce, Bureau of the Census (1992). Table 5: Income and Poverty Status in 1989:1990. *1990 Census of Population and Housing—Summary Social, Economic and Housing Characteristics* (Publication No. 1990 CPH-5-1), 228-229. Washington, DC: U.S. Government Printing Office. Retrieved on February 24, 2004, from http://www.census.gov/prod/cen1990/cph5/cph-5-1.pdf (pp. 244-245 in electronic file).

U.S. Department of Commerce, Bureau of the Census (2003). Table 5: Work Status and Income in 2000:1999. *2000 Census of Population and Housing—United States Summary: 2000; Summary Social, Economic and Housing Characteristics* (Publication No. 2000 PHC-2-1, Part 1), 5. Washington, DC: U.S. Government Printing Office. Retrieved on February 24, 2004, from http://www.census.gov/prod/cen2000/phc-2-1-pt1.pdf (p. 23 in electronic file).

U.S. Department of Commerce, Bureau of the Census, Administrative and Customer Services Division, Statistical Compendia Branch. *Statistical Abstract*. Washington, DC: U.S. Government Printing Office. Retrieved on January 22, 2004, from http://www.census.gov/statab/www/ranks.html

U.S. Department of the Interior, Bureau of Indian Affairs (2002). Indian entities recognized and eligible to receive services from the United States Bureau Of Indian Affairs. *Federal Register*, 67(134), 46327-46333. Washington, DC: U.S. Government Printing Office.

U.S. Department of State, Bureau of the Consular (2003). Tips for travelers to Canada (Publication No. 11046). Washington, DC: U.S. Government Printing Office.

Wald, K. (1992). *Religion and politics in the United States* (2nd ed.). Washington, DC: Congressional Quarterly Press.

Walker, J. L. (1969). The diffusion of innovations among the American states. *American Political Science Review*, *63*, 880-899.

Weber, R., & Shaffer, W. (1972). Public opinion and American state policy making. *Midwest Journal of Political Science*, *16*, 633-699.

Wilks, J., & Taggart, W. (2004). *Gambling in the American states: Why some states are more permissive than others*. Paper presented at the Academy of Criminal Justice Sciences Annual Conference.

Winn, B. M., & Whicker, M. L. (1989-1990). Indicators of state lottery adoptions. *Policy Studies Journal*, *18*, 293-304.

Wright, G., Erikson, R., & McIver, J. (1985). Measuring state partisanship and ideology with survey data. *Journal of Politics*, *47*, 469-489.

Wright, S. (1986). *Social Science Statistics*. Boston: Allyn & Bacon

Worsnop, R. (1994). Gambling boom. *Congressional Quarterly*, *4*, 241-264.

Yamane, D. (2001). *Affiliation, salience, advocacy: Three religious factors in public-policy making*. South Bend, IN: University of Notre Dame, Working Paper and Technical Report Series.