Excerpt from Adam J. Hoffer and Todd Nesbit, eds., *For Your Own Good: Taxes, Paternalism, and Fiscal Discrimination in the Twenty-First Century.* Arlington, VA: Mercatus Center at George Mason University, 2018.

CHAPTER 17 Gambling Taxes

DOUGLAS M. WALKER

Department of Economics, College of Charleston

COLLIN D. HODGES

Division of Resource Economics and Management, West Virginia University

More than the provided and the state of the

What makes the gambling industry somewhat unique is that in many states, gambling is specifically banned either in the state's constitution, or through long-standing legislation. For example, the anti-gambling law in South Carolina dates back to 1802, and the police selectively enforce these laws.² Thus, an act of state government is usually required for the industry to exist legally in a state. With the existence of the gambling industry squarely in their hands, politicians may be expected to extract high rents from the industry.

This chapter discusses the expansion of legal gambling in the United States, with a focus on the taxes derived from lotteries and commercial casinos.

BACKGROUND

Legalized gambling began its modern expansion outside Nevada beginning with the introduction of the New Hampshire state lottery in 1964. Over the next few decades, other states would follow, and in 2016, all but five states operated a lottery.³ The expansion of state lotteries was controversial, with a key argument against them being their regressive nature. Clotfelter and Cook (1991) provide a comprehensive discussion of the different issues surrounding lottery expansion, while Alm et al. (1993) and Jackson et al. (1994) provide econometric evidence on the factors explaining lottery expansion. Despite longstanding controversy over lotteries and state-sanctioned gambling in general, most state governments have apparently judged that the benefits from the lottery revenues outweigh the social costs of having the games. In many states that have more recently introduced lotteries, revenues have been earmarked for "good causes," such as scholarships for college students. Examples include the lotteries in Georgia and South Carolina. This earmarking has likely made lotteries more palatable for voters.

The present-day casino industry traces its roots back to 1931, when casinos were introduced in Nevada. Casinos were then legalized and opened in Atlantic City, NJ, in 1978. It was not until the 1987 California v. Cabazon Band of Indians (480 U.S. 202 (1987)) case in the US Supreme Court and the 1988 Indian Gaming Regulatory Act, which effectively relegated casino regulation to state governments, that tribal and commercial casinos began to spread across the United States. Currently more than 1,000 casinos operate in the United States.⁴ The expansion of the casino industry has been the subject of much more controversy than lottery expansion was. This is likely because many people used to consider casino gambling "sinful" or a vice. During the early 1990s, concerns over the potential negative impacts of casinos were expressed with little or no supporting evidence by its staunchest opponents (e.g., see Goodman 1994). At the same time, empirical evidence in support of the positive economic impacts of casinos outside Nevada was limited. The lack of empirical evidence, combined with moral concerns about statesponsored gambling, has fueled a long debate over the economic and social impacts of casinos.

Roughly half of US casinos are owned by sovereign Indian tribes. Tribal casinos come about after a process through which tribal lands are taken into

trust by the Bureau of Indian Affairs (Department of the Interior) and a compact is signed between the tribe and the relevant state government.⁵ Although tribal casinos do not pay taxes per se, in many states, tribes pay significant fees to maintain a monopoly in the state. For example, in Connecticut, the Mohegan Sun and Foxwoods casinos have agreed to pay 25 percent of their slot machine revenues to the state government in exchange for a guarantee that no commercial casinos will be approved in the state (Light and Rand 2005, 70). In some states, such as Alabama, Georgia, and South Carolina, Las Vegas–style table and slot machine games (Class III games) are not allowed. However, machine game manufacturers have been very clever in designing bingo games (Class II games), which are, from the customer's perspective, almost identical to Class III slot machines.⁶ As a result, tribal casinos can effectively offer slot machines even in states where such machines are illegal. In the remainder of this chapter, discussion about casinos is limited to commercial casinos. This is because data on tribal casinos is generally not publicly available.⁷

Commercial casinos are those sanctioned and regulated by state governments. Such casinos have been legalized in more than fifteen states, beginning with South Dakota in 1989. Many Midwestern states adjacent to the Mississippi River legalized casinos in the early 1990s. The most recent wave of expansion has been in the Mid-Atlantic and Northeast, where Maryland, New York, and Massachusetts have recently legalized commercial casinos. As of early 2016, expansion is being considered in New Hampshire, Rhode Island, Connecticut, and New Jersey.

Although the expansion of lotteries and casino gambling could be attributed to an expanding appreciation for individual liberty or deference to consumer choice, empirical evidence suggests that fiscal stress has been a key determinant of lottery and casino legalization (Alm et al. 1993; Jackson et al. 1994; Calcagno et al. 2010). Interestingly, fiscal stress was not found to be a key determinant outside the United States (Richard 2010). However, it is clear that, in the United States, the potential revenues to governments remain a key catalyst for the expansion of legalized gambling.

TAX REVENUES

Although different states have legalized a variety of types of gambling including pari-mutuel betting on horse and greyhound races—lotteries and casinos provide the vast majority of gambling tax revenues for state governments. For each \$1 lottery ticket, approximately 20 percent goes to administrative costs and commissions to retailers, about 50 percent is returned to players in the form of prizes, and the remaining 30 percent is kept by the sponsoring state. This third allotment is called the "lottery tax." Empirical analysis has suggested that lotteries are generally designed to maximize revenues for the state (Garrett 2001).

Taxes on casino revenues vary greatly, from a low of around 6.75 percent in Nevada to 50 percent or more in such states as Illinois, New York, and Delaware. It is interesting to note that the casino tax rate is lower in larger, more established markets, including Nevada; Atlantic City, New Jersey; and Mississippi. Typically, taxes on casino revenues are applied to gross receipts, and most states have implemented complicated graduated tax schemes, so that larger casino properties with higher revenues will pay a higher percentage of their revenues than smaller casinos will. Even though taxes on commercial casinos and lottery sales are higher than on most other industries, legal gambling still contributes only a modest amount to state coffers. Walker and Jackson (2011) calculate state revenues due to gambling taxes to be less than 5 percent in most states. Recent evidence suggests that government revenues from the gambling industry have flattened, despite casino industry expansion (see Povich 2015).

Figures 1–4 present aggregate revenues from lotteries and casinos across all US states and the take by government, again aggregating across all states.⁸

Figures 1 and 2 illustrate lottery sales and state revenues over the past 15 years. Sales have continued to climb at a healthy rate since 2000, with the exception of flat sales during the Great Recession. Lottery sales in fiscal year 2013 were more than \$64 billion, with state governments retaining about \$21 billion from lottery sales in that year.

Casino revenues in the United States have increased dramatically since 2001, to about \$38 billion in 2014. (This amount does not include tribal casinos, which are probably about another \$30 billion.) The government tax revenue in all states amounted to about \$8 billion in 2011.

INTERINDUSTRY RELATIONSHIPS

One common concern about the expansion of casino gambling has been that the industry may lead to the demise of other types of gambling or other nongambling industries. Such interindustry relationships are commonly called "industry cannibalization" in the gambling literature (Walker 2013, 26–28). Several studies have examined the relationships among different types of gambling. Most evidence suggests that casinos and lotteries are substitutes, and that these forms of gambling harm one another's revenues (see, e.g.,



Figure 1. Total Lottery Sales, All States, 2000-2013

Source: LaFleur's Magazine, 2009-2013; LaFleur's World Lottery Almanac 17e, 1993-2008.



Figure 2. Total Government "Tax" Revenues from Lottery Sales, All States, 2000–2013

Source: LaFleur's Magazine, 2009-2013; LaFleur's World Lottery Almanac 17e, 1993-2008.



Figure 3. Total Casino Revenues, All States, 2001-2014

Source: University of Nevada, Las Vegas, Center for Gaming Research, Las Vegas, NV. http://gaming .unlv.edu/.

Note: Tribal casino revenues are not included in this figure.

Mobilia 1992; Anders et al. 1998; Ray 2001; Siegel and Anders 2001; Elliott and Navin 2002; Popp and Stehwien 2002; Kearney 2005).⁹ However, there is no conclusive evidence from the literature that all types of gambling act as substitutes for one another. One comprehensive US study has found that certain types of gambling are complementary (Walker and Jackson 2008). For example, horse racing gambling revenues and casino revenues have been found to be complements, but this may stem from the development of "racinos" (racetrack casinos).

The relationships among different types of gambling are clearly important as a matter of politics. In some states, incumbent gambling industries staunchly oppose casinos. An example is the horse racing industry's opposition to casinos in Kentucky (see Hall 2014). In many states, the effect of casinos on lotteries has been an important concern. If casinos and lotteries are substitutes, for example, then the net benefit from casino taxes will be less than their gross tax receipts, as lottery tax receipts are likely to fall as a result of casino expansion. However, a recent study found that casinos had a negative impact on the lottery of only about 5 percent. This suggests that the net impact of casinos on aggregate gambling taxes are still overwhelmingly positive (Cummings et al. 2017).



Figure 4. Total State Government Revenues from Casino Taxes, All States, 1998–2011

Source: University of Nevada, Las Vegas, Center for Gaming Research, Las Vegas, NV. http://gaming .unlv.edu/.

Note: Tribal casino revenues are not included in this figure.

Much less is known about the relationship between gambling and nongambling industries and whether casinos significantly "cannibalize" other industries. Cannibalization might occur, for example, if people divert much of their entertainment spending away from sporting events or movies and concerts, for example, in order to gamble at casinos. The limited available evidence on property values in areas surrounding casinos suggests that the effect of casinos is probably positive on net (Phipps 2004; Wenz 2007; Wiley and Walker 2011). Cotti (2008) examines county-level employment and wage data in the United States, finding that casinos have had a modestly positive impact on employment, with a very slight positive effect on local wages. This evidence suggests that, at least at the county level, casinos likely have not hurt other industries. Even if they did, however, the tax rate applied to gambling is much higher than the tax rate typically applied to nongambling goods and services. Therefore, it seems safe to conclude that even considering interindustry relationships, casinos and lotteries have tended to increase net state revenues.

MARKET SATURATION

During the past few years there has been increasing concern, particularly among politicians in the northeastern United States, that the casino industry may be becoming saturated. The primary example of this is in Atlantic City, where four of the twelve casinos there closed during 2014.¹⁰ Although the term "saturation" has not yet been clearly defined in the context of the casino industry, it loosely means that there are too many casinos for the market. Various stakeholders may adopt differing perspectives. For example, casino patrons may not think a market is saturated until there is at least one casino within a 15-minute drive from their house. Politicians may view market saturation to mean that a new casino opening does not increase overall casino tax revenues. The casino industry might define saturation as the point at which a new casino causes a decline in existing casinos' revenues or profits. Or it might simply be the point at which consumer spending at casinos reaches its maximum, regardless of new or additional supply of casino capacity. Almost no academic research has been done in this area.¹¹

Only three published studies have focused on the saturation issue, with an emphasis on the impact of new casinos in the Northeast (McGowan 2009; Condliffe 2012; Barrow et al. 2016). Condliffe and McGowan focus on whether the introduction of casinos in Pennsylvania led to an increase or decrease in regional aggregate casino revenues. Findings from the studies are in conflict and use simplistic empirical analyses, limiting both the impact and generalizability of their results. Barrow et al. (2016) provides a framework for analyzing the degree to which the casino industry might be saturated. However one limitation of the proposed metrics is that they do not effectively deal with how tourism might affect the saturation measures. Despite the recent papers in this area, it remains one of the most seriously neglected areas of research on the economic impacts of gambling, as the issue has important implications for the stability of casino tax revenue streams.

SOCIAL ISSUES

Gambling can be thought of as a form of entertainment. Casino games and lotteries are entertaining to many people because of the rush of excitement they may create. For example, the consumption value of lottery tickets may simply be the enjoyment people have imagining what they would do if they won a multimillion dollar jackpot. Casino games can be exciting both because of the potential to win large sums of money and the social nature of the games. Similarly, playing daily fantasy sports games may be enjoyable largely because players have friends who are also playing, and they enjoy comparing their results.

Regardless of the consumer benefits from gambling, most politicians believe that the government has a role in regulating gambling. This perspective may have its roots in a moral concern over gambling, or the view that gambling is a vice that should be controlled. However, in recent decades the debate over lotteries and casinos has raised other concerns about the effects of legal gambling. As noted earlier, a key concern with lotteries has been their regressive nature. Nevertheless, state governments have expanded lotteries. Because lottery revenues are often earmarked for positive purposes, such as subsidizing college tuition, the regressive nature of lotteries has apparently not quelled their popularity.

Concerns over casino gambling center around social cost issues. The social costs of gambling have been debated in the literature and are still controversial (Walker 2013). The potential harms that stem from gambling are generally associated with problem gambling, which is akin to drug or alcohol addiction. Problem gambling is gambling to an extent that it negatively affects a person's professional or personal life.¹² Such problems are commonly manifest as financial problems and are thought to lead to increased rates of crime, divorce, and bankruptcy (Walker 2013). However, the degree to which gambling alone can be blamed for such problems is debatable, because most problem gamblers have other disorders, often involving excessive drug and alcohol use (for a discussion, see Petry et al. 2005; Kessler et al. 2008).

The fact that gambling has been linked to a variety of social problems has likely led to its unique status among industries. It is one of the most strictly regulated and highest taxed industries in the United States. Despite the potential for large tax revenues, many observers argue that the state should not be offering, sponsoring, or promoting gambling because of the potential public health harms. Such concerns seem to have been overwhelmed by the arguments in favor of expanded gambling, as no movement has succeeded in repealing casino or lottery legalization in any state.

PUBLIC CHOICE ISSUES

As already noted, empirical evidence suggests that state lotteries are designed to maximize the revenues of the sponsoring state governments. Casino legislation, too, seems to be drafted with an aim toward maximizing tax revenues. However, state governments do little to analyze the tax rates that should be applied to casino revenues to maximize government revenues. That the casino industry is allowed to exist by an act of government raises the potential for enormous rents to be captured by state governments.

Most states do not allow a free market in casinos, although Nevada is close. Typically, a strict limit is placed on the number of casinos allowed, as well as the number of gambling machines and table games (i.e., gambling positions) allowed in each casino. States do vary on the degree to which they control the sizes and number of casinos. States that have more recently legalized gambling commonly use a regional model, in which a single casino is allowed in each region of the state. Examples of this model appear in Kansas, Ohio, and Massachusetts. Obviously, when the state restricts the number of casinos, rentseeking is likely to occur. This situation creates an opportunity for corrupt activities (Walker and Calcagno 2013).

One result of the special status of casinos is that the casino industry itself has a large hand in helping develop the regulations that will control it. This has resulted in regulatory changes over time that appear to be favorable to the casino industry (Calcagno and Walker 2016). For example, states such as Missouri that initially had regulated maximum bets no longer do. States that once allowed only riverboat casinos, such as Mississippi, now allow land-based casinos. Regardless of a trend toward more favorable regulations, the industry is still heavily taxed. However, given that casino taxes represent a relatively small part of state governments' budgets, why are casinos so hotly debated and promoted by politicians?

One answer to this question is that, although casinos do not make a big difference in most states' finances, casinos can help politically—at the margin (Walker 2013). Consider that many states have seen growing fiscal crises, particularly since the Great Recession. Politically, it is difficult to cut spending on popular (and even unpopular) government programs. It is also unpalatable to raise sales, property, or income taxes at the state level. This may help explain why politicians are so willing to consider the legalization and expansion of the gambling industry. This explanation is also consistent with the findings from the literature that fiscal stress is a key determinant of lottery and casino legalization.

TECHNOLOGY AND THE FUTURE OF GAMBLING

The landscape of legal gambling in the United States has changed dramatically since 1990. State lotteries exist in the majority of states, casino gambling is available in most states, and only two states currently ban all forms of gambling. Already widespread, lotteries and casinos are unlikely to see dramatic

change in the near future. The key determinant of how the gambling industry will develop is technology. The ability of people to gamble over the Internet using their home computers or smartphones presents unimaginable possibilities for the expansion of gambling. For example, the popularity of daily fantasy sports, exemplified by Draft Kings and Fan Duel, exploded during the fall of 2015, along with a constant barrage of advertising. Both potential customers and regulators have taken note. A variety of state governments and the federal government are now studying this new activity. There is some debate over whether these activities constitute gambling and how the current laws will treat daily fantasy sports. Online poker and online lotteries have seen similar developments over the past few years, although they developed somewhat more slowly than daily fantasy sports (see Rose 2016).

It would be surprising if state governments and perhaps even the federal government did not decide to step in to regulate all forms of online gambling.¹³ Although such regulations will be sold under the guise of consumer protection, it is likely that regulated online gambling would also come with heavy taxes.

CONCLUSION

Despite the view of some that gambling is a vice and should not be sanctioned or allowed by government, most US states have legalized gambling in one form or another. Lotteries have expanded to forty-five states since they were introduced in New Hampshire in 1964. Casinos began their spread outside Nevada and Atlantic City, New Jersey, beginning in 1989. Now more than 1,000 casinos operate in the United States, and gambling plays an important public finance function in many states. The overall contribution of the gambling industry to state budgets is still somewhat small, even though states impose higher taxes on gambling revenues than on many other goods or services.

Increased competition in the gambling industry across state lines has been a catalyst for reconsidering gambling policy in some markets. Some states, for example, have begun to consider lowering their casino tax rates. Other states have expanded the number of casinos allowed beyond what they allowed when casinos were first legalized. In still other states, completely new ideas are gaining attention. For example, some politicians in New Hampshire have even suggested that a free market in gambling might be the best model. It would certainly be unique and could operate better than highly regulated markets.

The most interesting developments in the gambling industry are certainly technology related. Little is known about the relationships between online

forms of gambling and traditional lottery and brick-and-mortar casinos. Certainly, continuous technological advances pose a potential threat to the traditional gambling sectors, and, in turn, to state gambling tax revenues. As a result, we should not be surprised to see state governments, and even the federal government, taking aggressive steps to control and tax new types of gambling as technology allows their development. As a result, the US gambling industry will likely be very different 10 years from now.

NOTES

- 1. Online poker, sports betting, and daily fantasy sports are examples of games that the federal government has a role in defining and regulating. The legality and regulation of these industries have been controversial and are not settled matters at the time of this writing. As a result, and because revenues from these components of the gambling industry still represent a very small proportion of overall revenues, these issues are not addressed in this chapter.
- See http://www.scstatehouse.gov/code/t16c019.php for the anti-gambling law in South Carolina, and Town of Mt. Pleasant v. Chimento et al., South Carolina Supreme Court Opinion No. 27197, November 21, 2012, for an example of a case near Charleston in which a home poker game was raided by police.
- 3. The exceptions are Alabama, Alaska, Hawaii, Nevada, and Mississippi.
- 4. The number includes tribal and commercial casinos, as well as racetrack casinos and card rooms. See www.casinocity.com for a list of casinos and other gambling venues in each state.
- 5. For more information, see http://www.indianaffairs.gov/WhatWeDo/ServiceOverview /Gaming/index.htm.
- 6. For example, at the Poarch Creek Indian tribe's Wind Creek Casino in Wetumpka, AL, the machines are identical to Class III slot machines with one minor detail. At one corner of the display screen, there is a small bingo card. Once the player hits the "play" button, a new bingo card appears, along with winning numbers. Then the slot machine display begins and shows the result of the slot machine play. This entire process takes about 2 seconds. Although it looks just like a Class III slot machine, it is technically and legally considered to be a bingo (Class II) machine.
- 7. Some aggregated tribal casino data are available in Meister (2015).
- 8. The data presented in figures 1–4 are the most recent publicly available data as of this writing. As mentioned earlier, tribal casino revenues are excluded, as are any so-called fees paid by tribal governments to state governments in which tribal casinos are located.
- 9. In this discussion, the terms "substitutes" and "complements" refer only to the relationship between revenues in different industries, not to the economic relationship between the demand for one product and changes in the price of another.
- Recent data showing higher profits for the remaining Atlantic City casinos suggest that the closures in 2014 may have simply been a normal market correction. See Wayne Perry, Associated Press, "Atlantic Casino Profits Up 31 Percent," May 23, 2016, https://www.indystar .com/story/news/2016/05/23/ac-casino-profits-increase/32621749/.
- 11. The study by Walker and Nesbit (2014) examined the effect a new casino in Missouri would have on existing casinos' revenues, but this was not a direct test for industry saturation.
- 12. A growing literature in psychology and medicine is dedicated to understanding and treating gambling problems. Such problems are estimated to affect about 1 percent of the general population and a higher percentage of the adolescent population.

13. As of July 2017, it is unclear how the federal government may act toward expanded online gambling. This issue has become more complicated as US Attorney General Jeff Sessions has reportedly recused himself from making any decisions regarding online gambling (see Brody 2017).

REFERENCES

- Alm, James M., Michael McKee, and Mark Skidmore. 1993. "Fiscal Pressure, Tax Competition, and the Introduction of State Lotteries." *National Tax Journal* 46: 463–76.
- Anders, Gary C., Donald Siegel, and Munther Yacoub. 1998. "Does Indian Casino Gambling Reduce State Revenues? Evidence from Arizona." *Contemporary Economic Policy* 16: 347–55.
- Barrow, Clyde W., David R. Borges, and Alan P. Meister. 2016. "An Empirical Framework for Assessing Market Saturation in the U.S. Casino Industry." *Gaming Law Review and Economics* 20 (5): 397–411.
- Brody, Ben. 2017. "Adelson-Backed Lobbying against Web Gaming Makes Sessions Fold." Bloomberg, June 30. www.bloomberg.com.
- Calcagno, Peter T., and Douglas M. Walker. 2016. "A Review of Regulatory Theory and the U.S. Casino Industry." *Journal of Gambling Business and Economics* 10 (1): 14–39.
- Calcagno, Peter T., Douglas M. Walker, and John D. Jackson. 2010. "Determinants of the Probability and Timing of Commercial Casino Legalization in the United States." *Public Choice* 142: 69–90.
- Clotfelter, Charles T., and Philip J. Cook. 1991. *Selling Hope: State Lotteries in America*. Cambridge, MA: Harvard University Press.
- Condliffe, Simon. 2012. "Pennsylvania Casinos' Cannibalization of Regional Gambling Revenues." UNLV Gaming Research & Review Journal 16 (1): 45–58.
- Cotti, Chad D. 2008. "The Effect of Casinos on Local Labor Markets: A County Level Analysis." Journal of Gambling Business and Economics 2 (2): 17–41.
- Cummings, Will E., Douglas M. Walker, and Chad D. Cotti. 2017. "The Effect of Casino Proximity on Lottery Sales: Evidence from Maryland." *Contemporary Economic Policy* 35(4): 654–99.
- Elliott, Donald S., and John C. Navin. 2002. "Has Riverboat Gambling Reduced State Lottery Revenue?" *Public Finance Review* 30 (3): 235–47.
- Garrett, Thomas A. 2001. "The Leviathan Lottery: Testing the Revenue Maximization Objective of State Lotteries as Evidence for Leviathan." *Public Choice* 109: 101–17.
- Goodman, Robert. 1994. Legalized Gambling as a Strategy for Economic Development. Northampton, MA: United States Gambling Study.
- Hall, Gregory. 2014. "Horse Group Now Opposes Kentucky Casinos." *Courier-Journal*, December 5. www.courier-journal.com.
- Jackson, John D., David S. Saurman, and William F. Shughart II. 1994. "Instant Winners: Legal Change in Transition and the Diffusion of State Lotteries." Public Choice 80: 245–63.
- Kearney, Melissa S. 2005. "State Lotteries and Consumer Behavior." *Journal of Public Economics* 89: 2269–99.
- Kessler, R. C., I. Hwang, R. LaBrie, M. Petukhova, N. A. Sampson, K. C. Winters, and H. J. Shaffer. 2008. "DSM-IV Pathological Gambling in the National Comorbidity Survey Replication." *Psychological Medicine* 38: 1351–60.
- Light, Steven, and Kathryn Rand. 2005. *Indian Gaming & Tribal Sovereignty: The Casino Compromise*. Lawrence: University Press of Kansas.

- McGowan, Richard. 2009. "The Competition for Gambling Revenue: Pennsylvania v. New Jersey." Gaming Law Review and Economics 13 (2): 145–55.
- Meister, Alan. 2015. Casino City's Indian Gaming Industry Report. Newton, MA: Casino City.
- Mobilia, Pamela. 1992. "Trends in Gambling: The Pari-Mutuel Racing Industry and Effect of State Lotteries, a New Market Definition." *Journal of Cultural Economics* 16: 51–62.
- Petry, Nandy M., Frederick S. Stinson, and Bridget F. Grant. 2005. "Comorbidity of DSM-IV Pathological Gambling and Other Psychiatric Disorders: Results from the National Epidemiological Surveys on Alcohol and Related Conditions." *Journal of Clinical Psychiatry* 66 (5): 564–74.
- Phipps, Alan G. 2004. "Crime and Disorder, and House Sales and Prices around the Casino Sites in Windsor, Ontario, Canada." *Canadian Geographer* 48 (December): 403–32.
- Popp, Anthony V., and Charles Stehwien. 2002. "Indian Casino Gambling and State Revenue: Some Further Evidence." Public Finance Review 30 (4): 320–30.
- Povich, Elaine. 2015. "State Gambling Revenue Takes Hit as Millennials Bring New Habits to Casinos." Stateline, September 15. http://www.pewtrusts.org/en/research-and-analysis/blogs/ stateline/2015/09/15/state-gambling-revenue-takes-hit-as-millennials-bring-new-habits-to -casinos.
- Ray, Margaret A. 2001. "How Much on That Doggie at the Window? An Analysis of the Decline in Greyhound Racing Handle." *Review of Regional Studies* 31: 165–76.
- Richard, Brian. 2010. "Diffusion of an Economic Development Policy Innovation: Explaining the International Spread of Casino Gambling." *Journal of Gambling Studies* 26 (2): 287–300. doi: 10.1007/s10899-009-9166-4.
- Rose, I. Nelson. 2016. "Daily Fantasy Sports & Internet Poker: Winning Battles, but Losing War." Gaming Law Review and Economics 20 (4): 308–12.
- Siegel, Donald, and Gary C. Anders. 2001. "The Impact of Indian Casinos on State Lotteries: A Case Study of Arizona." *Public Finance Review* 29: 139–47.
- Walker, Douglas M. 2013. Casinonomics: The Socioeconomic Impacts of the Casino Industry. New York: Springer.
- Walker, Douglas M., and Peter T. Calcagno. 2013. "Casinos and Political Corruption in the United States: A Granger Causality Analysis." Applied Economics 45 (34): 4781–95.
- Walker, Douglas M., and John D. Jackson. 2008. "Do U.S. Gambling Industries Cannibalize Each Other?" *Public Finance Review* 36 (3): 308–33.
 - ——. 2011. "The Effect of Legalized Gambling on State Government Revenue." Contemporary Economic Policy 29 (1): 101–14.
- Walker, Douglas M., and Todd M. Nesbit. 2014. "Casino Revenue Sensitivity to Competing Casinos: A Spatial Analysis of Missouri." Growth and Change 45 (1): 21–40. doi: 10.1111/ grow.12035.
- Wenz, Mike. 2007. "The Impact of Casino Gambling on Housing Markets: A Hedonic Approach." Journal of Gambling Business and Economics 1 (2): 101–20.
- Wiley, Jonathan A., and Douglas M. Walker. 2011. "Casino Revenues and Retail Property Values: The Detroit Case." *Journal of Real Estate Finance and Economics* 42: 99–114.

from the University of California, San Diego. He has been president of the Association of Private Enterprise Education and of the Southern Economic Association. His books include *Economics in Our Time* (with R. McNown) and *Common Sense Economics* (coauthored). A contributor to twenty-five other books, he is the author of more than 163 refereed journal articles, and his articles have appeared in the *Washington Times*, *Chicago Tribune*, *Wall Street Journal*, *Christian Science Monitor*, and *Forbes*.

Michael Marlow is a professor of economics at California Polytechnic State University, San Luis Obispo. He has been at Cal Poly since 1988 and was named a University Distinguished Scholar in 2007. He received his PhD in economics from Virginia Polytechnic Institute and State University, Blacksburg. His research focuses on the economic effects of government policies, and his most recent research has focused on public health economics in the areas of obesity, nutrition guidelines, and right-to-know laws. He has published two books and more than seventy-five refereed articles in academic journals.

Brian Meehan is an assistant professor of economics at Berry College, Mount Berry, Georgia. Meehan earned his PhD in economics at Florida State University, Tallahassee, with research interests in law and economics, and public choice. He earned his MA in economics from Central Michigan University, Mount Pleasant, and his BS in economics from Northern Michigan University, Marquette. His research has been featured in the journals *Public Choice, International Review of Law & Economics, Applied Economics,* and *Journal of Private Enterprise.*

Matthew Mitchell is a senior research fellow and director of the Project for the Study of American Capitalism at the Mercatus Center at George Mason University. He is also an adjunct professor of economics at Mason. Mitchell received his PhD and MA in economics from George Mason University and his BA in political science and BS in economics from Arizona State University. He specializes in public choice economics and the economics of government favoritism toward particular businesses, industries, and occupations. His research has been featured in the *New York Times*, *Wall Street Journal, Washington Post, LA Times, U.S. News & World Report*, NPR, and C-SPAN. Mitchell has testified before the US Congress and has advised several state and local government policymakers on both fiscal and regulatory policy. **Todd Nesbit** is an assistant professor of economics at Ball State University, Muncie, Indiana, and is on the Board of Scholars at the Mackinac Center for Public Policy. He earned his PhD in economics at West Virginia University, Morgantown, in 2005. He has authored numerous papers that have appeared in such peer-reviewed professional journals as the *Journal of Economic Behavior and Organization, Southern Economic Journal*, and *Public Budgeting and Finance*. His primary interest is in the secondary and unintended effects of excise taxation.

Justin M. Ross is a public finance economist specializing in state and local tax policy. Ross joined the Indiana University School of Public and Environmental Affairs, Bloomington, in 2008 and teaches public revenue theory, public managerial economics, and benefit-cost analysis. Ross's primary research interests include property tax–related issues, such as assessment and zoning. His articles have appeared in the top public finance, economics, and public administration journals, including *National Tax Journal, Land Economics, Journal of Environmental Economics & Management*, and *Public Finance Review*.

William F. Shughart II is research director and senior fellow at the Independent Institute; the J. Fish Smith Professor in Public Choice in the Jon M. Huntsman School of Business at Utah State University, Logan; and former president of the Southern Economic Association. A former economist at the Federal Trade Commission, Professor Shughart received his PhD in economics from Texas A&M University, College Station, and he has taught at George Mason University, Clemson University, University of Mississippi, and the University of Arizona. He is the editor in chief of *Public Choice* and the editor of *Taxing Choice: The Predatory Politics of Fiscal Discrimination* (Transaction Publishers, 1997).

Russell S. Sobel is a professor of economics and entrepreneurship in the Baker School of Business at The Citadel in Charleston, South Carolina. He earned his BS in business economics from Francis Marion College, and his PhD in economics from Florida State University. Sobel has authored or coauthored more than 150 books and articles, including a nationally best-selling college textbook, *Economics: Private and Public Choice*. His research has been featured in the *New York Times, Wall Street Journal, Washington Post*, and the *Economist*, and he has appeared on CNBC, Fox News, CSPAN, NPR, and the CBS Evening News. His recent research focuses on the areas of state economic policy reform and entrepreneurship. **E. Frank Stephenson** is the Henry Gund Professor of Economics at Berry College in Mount Berry, Georgia. He earned his PhD in economics at North Carolina State University, Raleigh, and a BA in economics from Washington and Lee University, Lexington, Virginia. His research interests are public policy and sports economics, and his research has appeared in such journals as *Public Choice, Public Finance Review, Journal of Sports Economics*, and *Contemporary Economic Policy*.

Richard E. Wagner is the Holbert L. Harris Professor of Economics at George Mason University, Fairfax, Virginia. He joined the faculty of George Mason University in 1988. Professor Wagner's fields of interest include public finance, public choice, political economy, and macroeconomics. He has authored more than 200 articles in professional journals and some thirty books and monographs, including *Inheritance and the State*; *Democracy in Deficit* (with James M. Buchanan); *Public Finance in a Democratic Society*; and *To Promote the General Welfare*.

Douglas M. Walker is a professor in the Department of Economics at the College of Charleston, South Carolina, where he has taught since 2007. His primary research focuses on the socioeconomic impact of gambling, particularly casino gambling, which he has been studying for more than twenty years. Regarded as one of the top experts in the world on this issue, he has published two books and more than fifty articles and book chapters on this subject. He has also served as an advisor or consultant for a variety of industry groups, state governments, and consulting firms, and was a visiting professor at Harvard Medical School and the Cambridge Health Alliance, Division on Addiction, where he began to study "responsible gambling."