

The Socioeconomic Impacts of Legalized Casino Gambling

Big Idea Conference on Gambling Expansion

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Outline

SOCIOECONOMIC IMPACTS OF LEGALIZED CASINO GAMBLING

- 1 Economic perspective on gambling
- 2 Economic benefits
- 3 Economic costs
- 4 Social costs
- 5 Problems in social cost estimation
- 6 Casinos and crime

1 Economic perspective on gambling

- Economics focuses on *voluntary, mutually beneficial transactions*
 - Consumers are sovereign and rational
- ‘Gambling’ is putting something of value at risk on the outcome of an uncertain event
 - Enjoyable and entertaining to some people, not to others
- Since the expected value of all casino bets is negative (for players), gambling must provide entertainment value

Disordered gambling

- Research suggests that 0.4 – 2.0% of the adult population has a gambling disorder
 - Not ‘rational’
 - Inability to control gambling behavior, resulting in financial stress, problems with family, friends, career
 - Gambling problems are more likely with certain types of gambling
 - Slot machines have quick feedback
 - Powerball has a 3-day wait for results
 - ‘Social costs’ are attributed to pathological gamblers
 - ‘Vice’ goods with potential for addiction should maybe be regulated
 - Govt role to protect vulnerable populations
 - Gambling is viewed differently from ice cream, shoes, etc.

2 Economic benefits

- Measurable benefits include:
 - Tax revenues
 - Employment & wages
 - Economic development
- Less-measurable benefits:
 - Consumer surplus
 - Lower prices with more competition
 - Higher quality 'entertainment' options
 - Increased variety
 - These may be greater in magnitude than the 'measurable' benefits

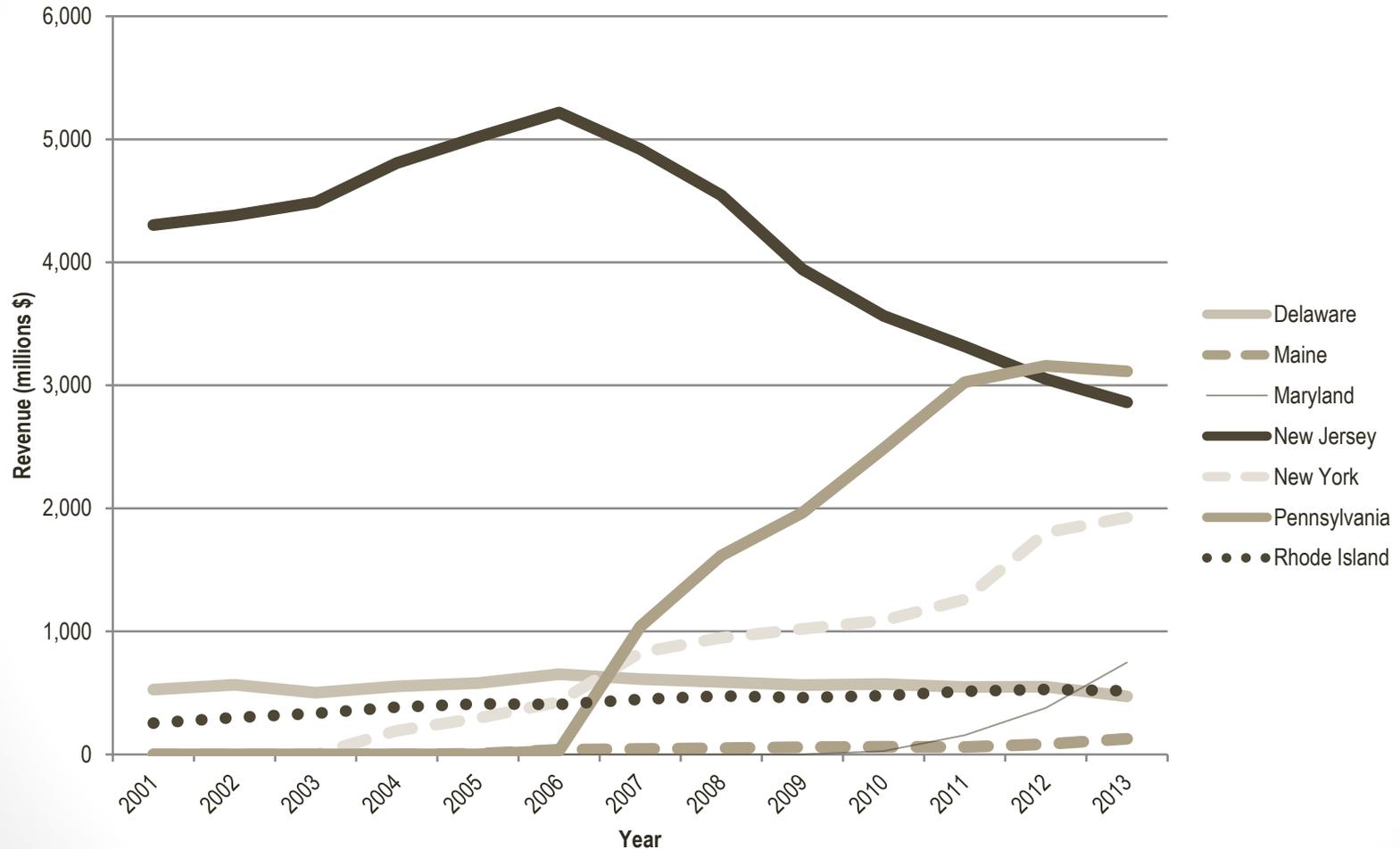
Tax revenues

- Taxes are transfers of wealth
 - Benefit to government is offset by loss to taxpayers
- Tax revenues are the primary reason for legalization in the U.S.
 - Taxes on GGR range from 6% to over 60%
 - CT tribal casinos pay 25% slot revenues to state
 - DE tax on VLT revenue 62%
 - ME taxes 16% table games, 39-46% on slots
 - MD slots taxed at 67%; 20% on table games
 - PA slots taxed at 55%
 - Then casinos pay income taxes...
- Lower tax rates are likely to encourage larger capital investment

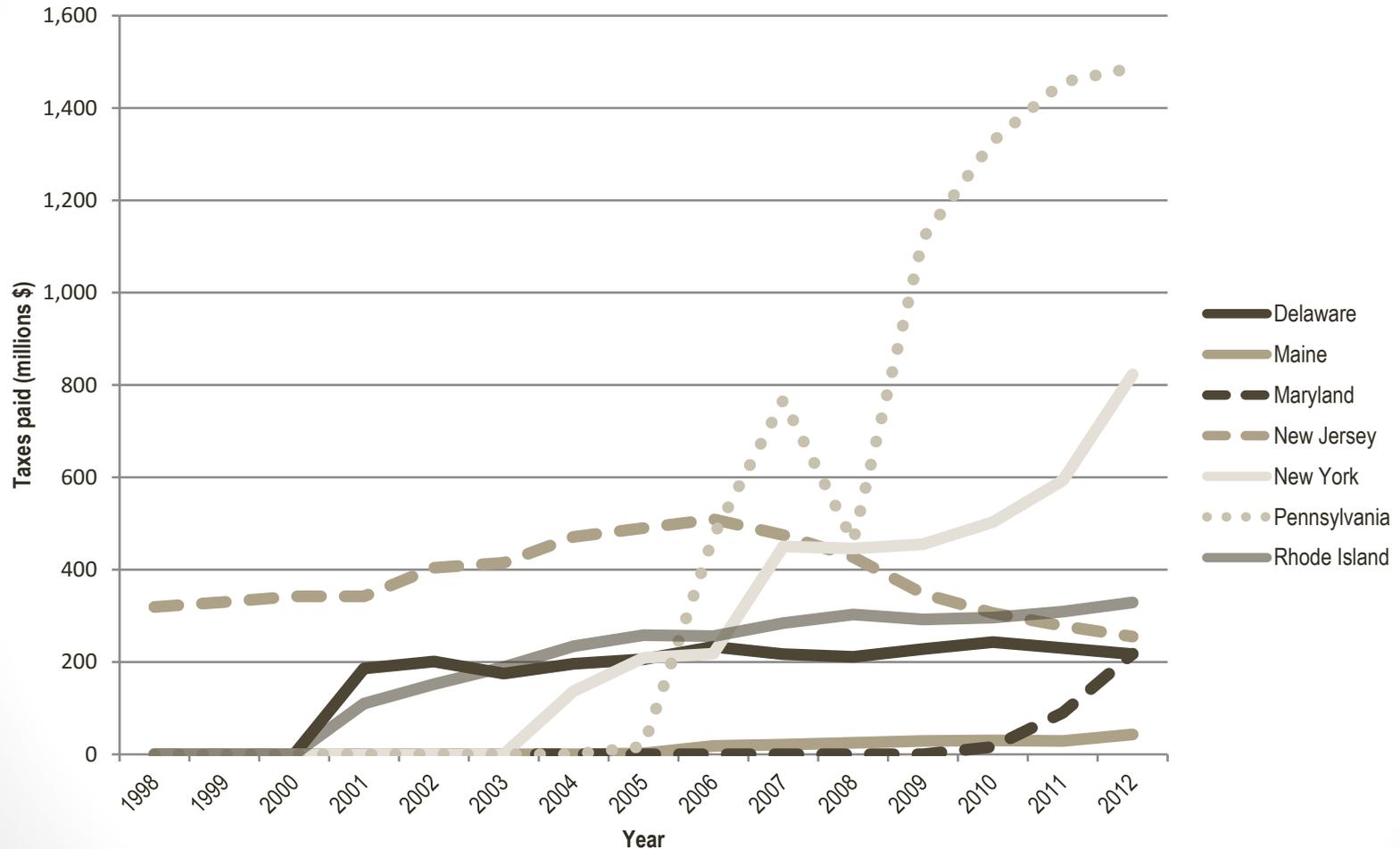
Tax revenues, cont.

- 2011 study showed slightly *negative* effect of casino revenues on state tax revenues
 - But effect is positive when tourism and economic growth effects are considered – indirect tax revenues attributable to casinos
 - Study was a panel of U.S. states
- States tax GGR at much higher rates (25-30% avg) than sales taxes (6% avg)
 - 1-to-1 substitution in spending => casinos increase tax revenues
 - Lottery 'tax' is about 30%

Casino revenues in NE states

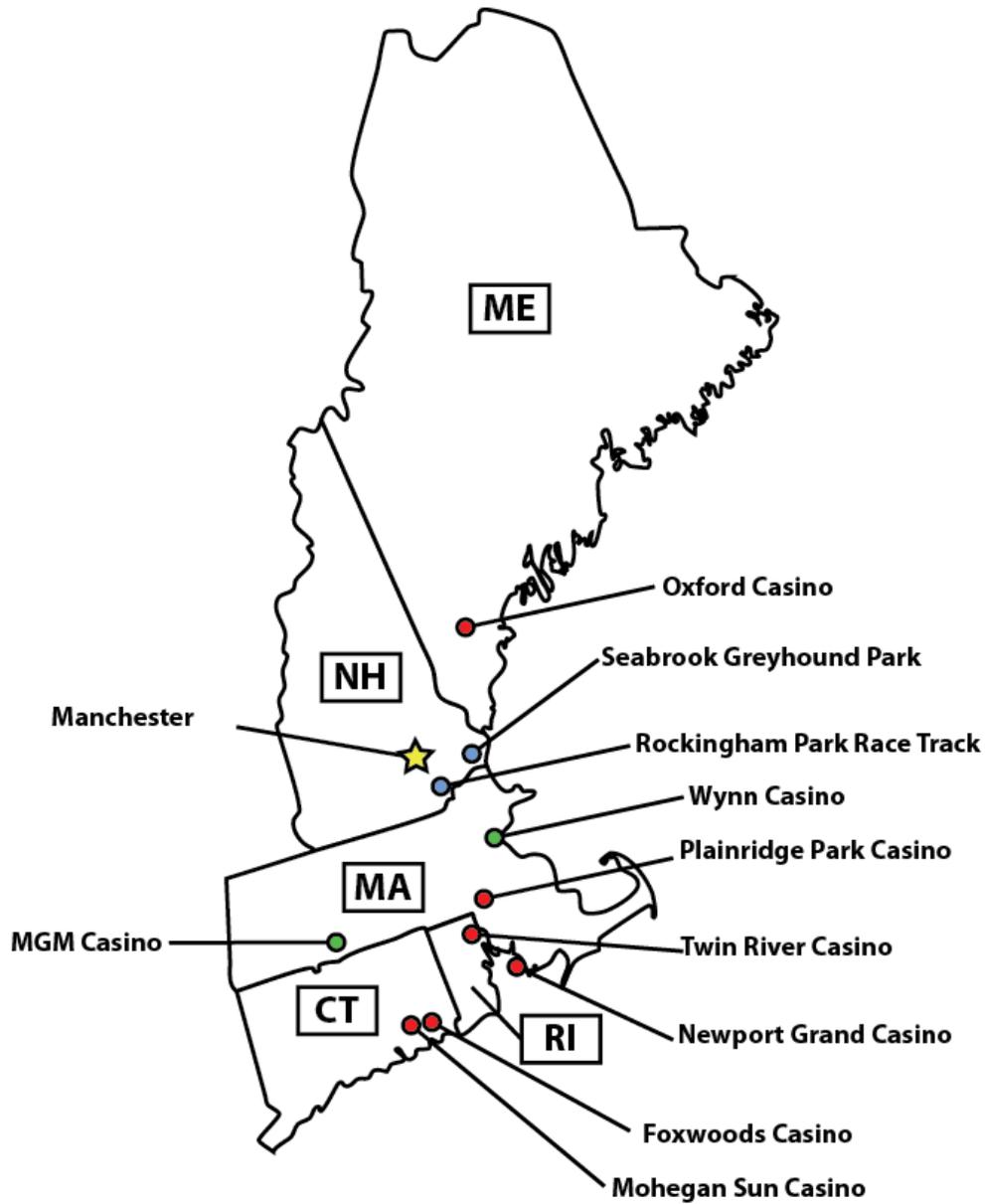


Casino taxes paid in NE states



Market saturation?

- Is the NE market 'saturated'?
 - Closure of 4 of 12 Atlantic City casinos in 2014 raises questions
 - Hasn't been studied much
- What does 'saturation' mean?
 - New supply does not increase regional casino revenues (or taxes)?
 - Should NH be concerned with 'regional saturation'?
- Are casino owners willing to build more?
 - A good market test of a saturated market
- Implication may be that state policy needs to be more 'competitive'
 - Discussion of lower tax rates in DE, IN
 - Other regulatory changes to help stabilize industry



Casino taxes & politics

- Taxes from gambling (casinos + lotteries) represent < 5% of revenue in most states
- Govt allows industry to exist, enforces monopoly
- ‘Defensive legalization’
 - Why not keep \$ at home?
- Gambling taxes are ‘voluntary’
 - ‘regressivity’ question is interesting
- Fiscal stress relief
 - Avoid cutting spending or raising other taxes

Employment & wages

- Do casinos create new jobs or ‘cannibalize’ jobs in other industries?
- 2008 county-level analysis showed a positive employment effect and minor wage effect from casinos
 - 8.2% employment effect (all industries)
 - 0.8% wage effect (all industries)
- Entertainment & hospitality industry effects:
 - 7.5% employment effect
 - 6.2% wage effect
- Effect size depends on county size (population)
 - Greater effect (%) in smaller counties
 - Minimal effect in large counties

Casinos and economic growth

- Some local economies clearly see significant growth because of the casino industry
 - Las Vegas
 - Macao
 - Mississippi Gulf Coast
- Studies show that casino revenues have a positive effect on state-level per capita income
 - 3 studies by Walker & Jackson of different time periods
- Intuition: increased economic activity is the source of economic growth
 - Casinos are not unique in this respect

Consumer benefits

- Rarely discussed in political debate over casinos
- Entertainment isn't tangible, but it benefits consumers
 - Baseball game tickets
 - Critics: gambling is a 'sterile transfer of money'
- Exchange, including casino bets are voluntary transactions
 - 'Consumer surplus' refers to value in excess of what is paid for a good or service
 - Analogous to 'profit' for businesses
- Variety benefits
- Tourism: new option for potential tourists
- Increased competition in entertainment industry
 - higher quality products for consumers

3 Economic costs

- Inter-industry relationships (gambling industries)
 - *Intra-state* gambling

Model / Variable	Casino	Dog racing	Horse racing	Lottery
Casino		-	+	-
Dog racing	(-)		-	+
Horse racing	+	-		+
Lottery	-	+	+	
Indian casino square footage	+	(+)	+	-

- *Inter-state* gambling

Model / Variable	Casino	Dog racing	Horse racing	Lottery
Adjacent Casinos	-	(+)	+	-
Adjacent Dog racing	(-)	+	+	-
Adjacent Horse racing	+	-	+	+
Adjacent Lottery	(-)	-	+	-

Economic costs, cont.

- Inter-industry relationships (non-gambling industries)
 - ‘Substitution effect’ or ‘industry cannibalization’
 - Market competition
 - Govt controls existence/size of casino industry
- 2013 Florida Gaming Study finds ‘number of establishments’ in the county increases with the addition of a casino
- 2011 study of Detroit, MI found that casinos had a positive impact on retail property sales prices
- Casinos are competitors to some types of industries, but complementary to others
 - Results vary
 - Overall effects are likely market-specific

Economic costs, cont.

- Infrastructure costs can be significant
 - Traffic/roads
 - Water, sewer, etc.
 - Police, fire protection
- Casino taxes should be levied to cover these expenses
 - Legalization usually includes

Net economic impact

- Considering just the economic benefits
 - Tax revenues
 - Employment & wage effects
 - Consumer benefits
- And economic costs
 - Inter-industry competition
 - Gambling industries
 - Non-gambling industries
 - Infrastructure
- Economic benefits > costs

4 Social costs of gambling

- Social costs are mostly attributed to pathological gamblers
- Most 'social costs' defy monetary measurement
 - Income lost from missed work
 - Increased suicide attempts
 - Crime
 - Corruption of public officials
 - Strain on public services
 - Industry cannibalization
 - Divorce caused by gambling
 - Bankruptcy

Social costs, cont.

- Monetary measurement was a focus in 1990s research
- Policymakers like to have data to support position
- Most social cost estimates use a simple formula:

Est. cost per pathological gambler	X prevalence est. (%)	X population est.	= est. annual social cost of gambling (\$)
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- Cost estimates ranged from \$9,000 – \$30,000 annual cost per pathological gambler
 - Estimates are arbitrary
- Despite problems, casino opponents continue to repeat
 - Monday in Savannah, GA
 - cost:benefit ratio of casinos is 3:1
 - ‘Economists are unanimous’

Other social issues

- NIMBY – ‘not in my back yard’
- Change in culture
- Does increased availability increase prevalence of problem gambling?
 - Modestly, in short-term
 - But support exists for ‘adaptation theory’
 - Consider increased availability over past 20 years

5 Problems in social cost estimation

- Fundamental flaw: no definition of 'social cost' prior to measurement (Walker & Barnett 1999)
 - Researchers include whatever they want
- Measurement issues
 - Counterfactuals
 - Surveys & fungible budgets
 - Govt spending as a 'social cost'
 - Comorbidity (co-existing disorders)

Comorbidity

- Most pathological gamblers have other disorders
- Petry, Stinson, and Grant (2005, p. 569) find:
 - 74.2% have alcohol use disorders
 - 38.1% have drug use disorders
 - 41.3% have anxiety disorders
 - 28.5% have obsessive-compulsive personality disorder
- How best to allocate 'social costs' to gambling when most pathological gamblers have multiple disorders?
- Most studies ignore this...completely
 - Result is an exaggeration of the social costs attributable to gambling problems.

6 Casinos and crime

- Casinos are often criticized as a source of crime
- Pathological gamblers are more likely to commit crimes
- Casinos attract potential victims with cash and potential criminals
- Crime rate = $\frac{\# \text{ crimes committed}}{\text{population at risk}}$
 - Crime rates should measure the *risk of being victimized*
- Studies finding a casino-crime link include only the 'resident population' in the denominator
 - Crime rate should be $(C_R + C_V) / (P_R + P_V)$
 - But many studies use: $(C_R + C_V) / P_R$
 - Tourism count data are difficult to obtain

Summary of research

- Economic benefits & costs are relatively easy to measure
- Social costs are very difficult (impossible?) to measure in monetary terms
 - Research should focus on *types of harms*, how many people are afflicted, and qualitative impacts
 - Be very wary of \$ estimates of social costs
- Neglected aspects of debate
 - Role of govt
 - Moral issues/individual liberty
 - Consumer benefits

Concluding thoughts

- Casino proponents and opponents probably overstate the case
 - Both costs and benefits are probably less than many argue
- 'Economics of casinos' has changed
 - 1990 – attract tourists, generate jobs and revenue
 - 2015 – keep residents/tax revenues in-state

Contact Information

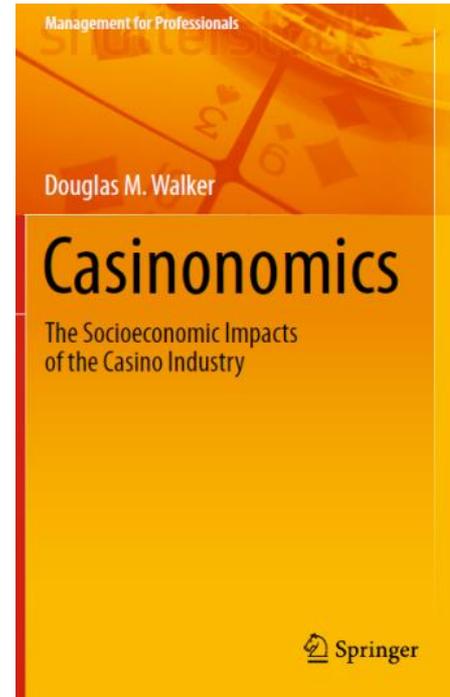
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casinonomics.net



Casinonomics (2013)

Counterfactuals

- ‘Counterfactual’ is critical to consider for understanding benefits and costs of an industry expanding
 - What industry *would have otherwise* expanded?
 - Practical testing uses ‘peer’ jurisdictions
- Knowing the counterfactual is difficult
 - In small cities, maybe no other industry would have expanded
- Benefits
 - Tax revenues
 - Employment & wage effects
 - Consumer benefits
- Costs
 - Pathological gamblers would otherwise do...what?
 - Illegal gambling? More drugs? Online gambling? Not gamble?

Surveys and fungible budgets

- Diagnostic instruments and cost estimate surveys ask about gamblers' spending behavior
 - Blaszczynski et al. (2006) find that without explicit instructions, respondents use different strategies in estimating their gambling losses
- Some people can't estimate losses even if given calculation instructions
 - Serious biases in reported gambling losses are likely (p. 128)
- Budgets are fungible, so one cannot attribute specific expenditures to a particular revenue source

Government expenditures as social costs

- Are treatment costs a 'social cost' or a cost of choosing a particular govt policy?
 - Suppose Canada govt covers 100% of treatment, while U.S. covers only 25%
 - Then social costs of gambling are higher in Canada for a given number of pathological gamblers
 - If government expenditures are social costs, then they can be reduced by simply reducing spending
 - Education spending as a social cost?
- => Conceptual definition of social cost is important