

# Gambling Tax Regressivity The Case of Casinos

Douglas M. Walker, Ph.D.  
College of Charleston  
U.S.A.

7<sup>th</sup> European Conference on Gambling Studies and Policy Issues  
Nova Gorica, Slovenia, July 1-4, 2008

# Introduction

- Many policy discussions take for granted that taxes on casinos are, like lottery “taxes”, regressive
- But the tax burden depends on TWO questions
  - What is the tax incidence?
  - Who are the consumers?
- For the lottery, the entire tax is passed-on to consumers, so only the second question matters
- But it’s not obvious that this is true for casinos

# Tax Policy Considerations

- The fairness of a tax is often based on a several considerations
  - Benefit principle: who benefits should pay
  - Ability to pay: those with higher income can better afford to pay taxes
    - Typical justification for progressive income taxes

# Vertical Equity

- Addresses ability to pay
- Many people believe those with more income should pay a higher percentage of income in taxes
  - A “progressive” tax
- A “regressive” tax is one for which lower income people pay a higher percentage of income in taxes, relative to higher income people
- A “proportional” tax is one in which people of all incomes pay the same percentage in taxes

# Income Taxes

## ■ Example:

Income	Tax Paid	Avg. Tax Rate	Description
€ 10,000	€ 1,000	10%	
€100,000	€ 15,000	15%	Progressive
€ 10,000	€ 1,000	10%	
€100,000	€ 10,000	10%	Proportional
€ 10,000	€ 1,000	10%	
€100,000	€ 8,000	8%	Regressive

# Other Taxes

- Vertical equity concerns apply to other taxes too
- Suits (1977a) developed an index to measure the degree to which a tax is progressive or regressive
  - Like the Lorenz Curve or Gini Coefficient
  - Suits found the following U.S. taxes were progressive: individual and corporate income; property taxes
  - Regressive taxes included personal property, payroll, and sales/excise taxes
- Politicians and voters may wish to avoid regressive taxes, due to fairness concerns
  - In practice, it is questionable how much they care

# Suits (1977b)

- Suits (1977b) examined taxes on gambling
  - Progressive taxes included casinos, and sports books
  - Regressive taxes included lottery, horse tracks, numbers, and sports cards
- Suits found that taxes on Nevada casinos for the U.S. overall were progressive
  - Higher income individuals are more likely to travel to Las Vegas
- Among NV residents, however, the casino tax is found to be highly regressive

# Other Studies

- A recent review (“Taxing the Poor” 2007) concludes that all U.S. gambling taxes are regressive
- Other studies, including those cited by Anderson at a previous EASG conference, have found casino taxes to be regressive
- Rivenbark (1998) and Borg, Mason, and Shapiro (1991) are among the studies that find casino taxes to be regressive



# The Lottery Tax

- Countless studies have examined the implicit lottery tax
- In the U.S., around 45¢ is paid in prizes, 20¢ goes toward admin./expenses, and 35¢ represents "tax" revenue (varies by state)
- Buyers pay the entire tax
- Since poor people spend proportionally more of their income than rich people on the lottery, the lottery tax is regressive

# Tax Incidence

- In the context of excise taxes, or taxes on particular products, *tax incidence* becomes less straightforward
  - Who actually bears the burden of the tax? – the buyer or seller?
- Incidence is irrelevant of statutory burden
  - It depends on relative sensitivity to price changes (elasticities of D and S)

# Gambling Taxes

- Taxes on gambling products are forms of excise taxes
- Since the goal of legal gambling is often to raise tax revenue, who bears the tax is of interest
- However, most studies appear to take for granted that the consumers bear the entire burden for gambling taxes

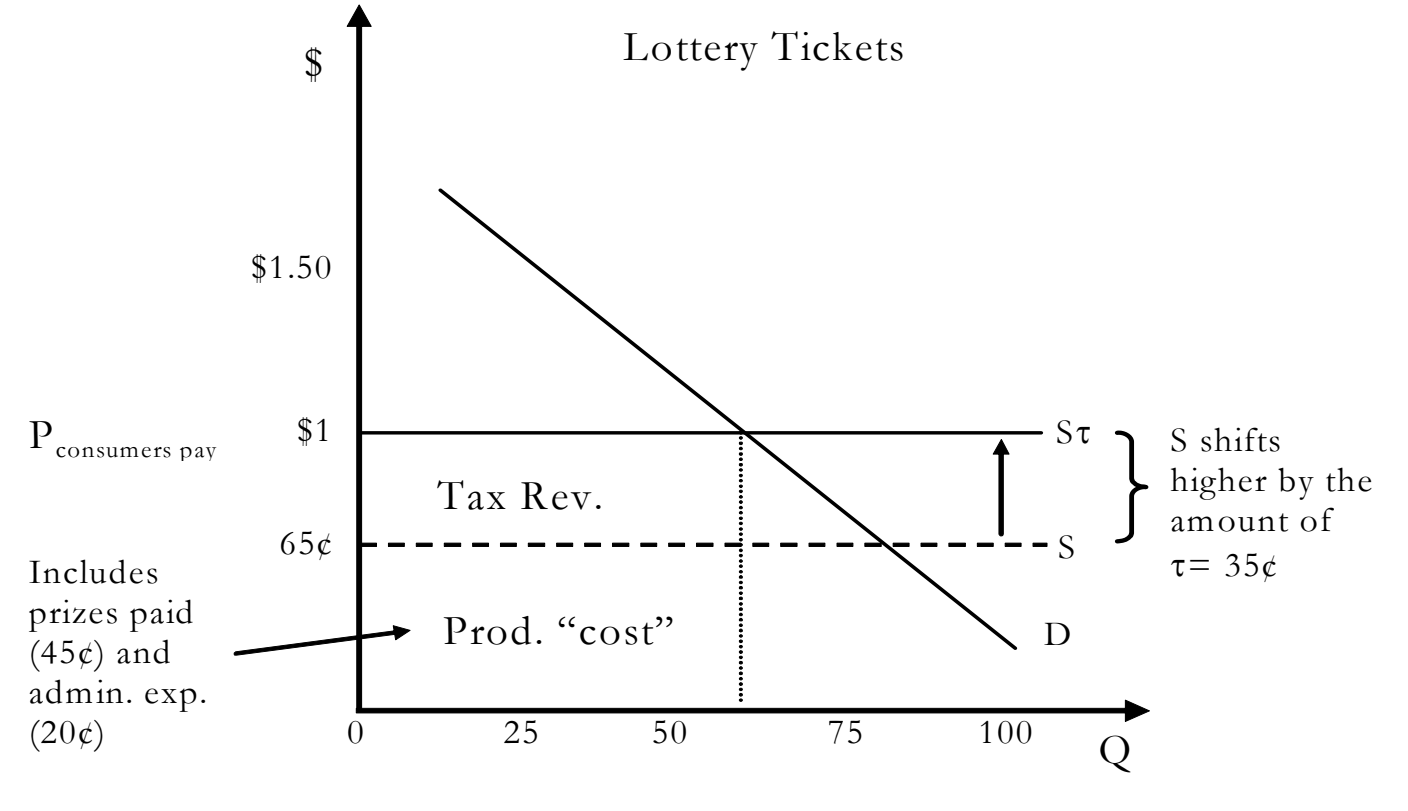
# Lottery Tax Burden

- In the case of lotteries, it is true that consumers bear the entire tax burden
- This is the result of the government controlling supply, price, and the "tax"
- So the regressivity of the lottery tax can easily be established by examining consumption patterns vis-à-vis income

# Graphical Explanation

- The lottery is supplied by government
- Horizontal supply curve
- Tax burden falls entirely on consumers

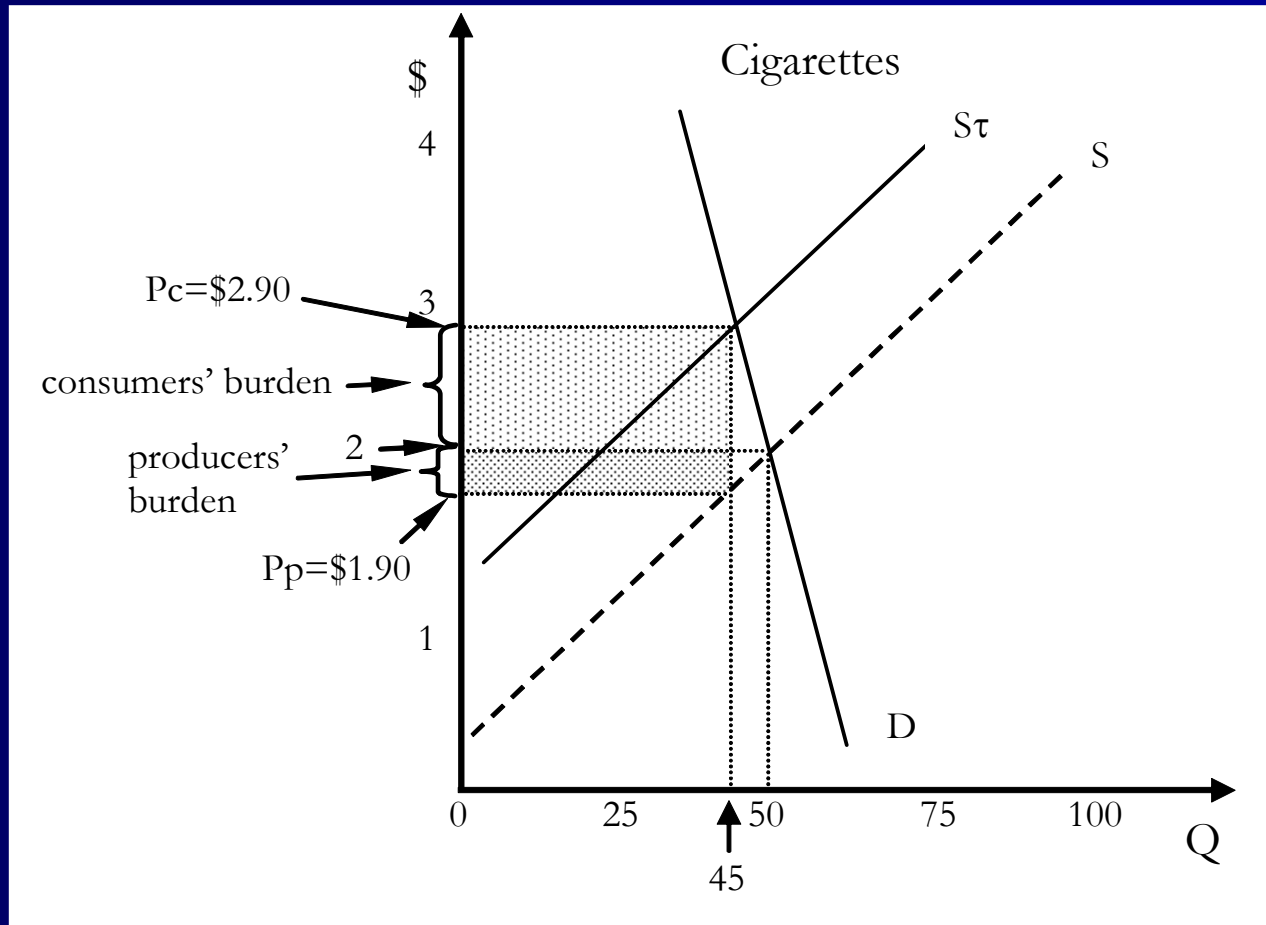
# Tax Burden: Lotteries



# Cigarette Tax Burden

- When government does not supply the product, then the tax burden may be split among buyers and sellers
- Whoever is more sensitive to price changes can avoid the tax
- Relative price elasticity matters
- Then who makes-up the consumers determines regressivity/progressivity

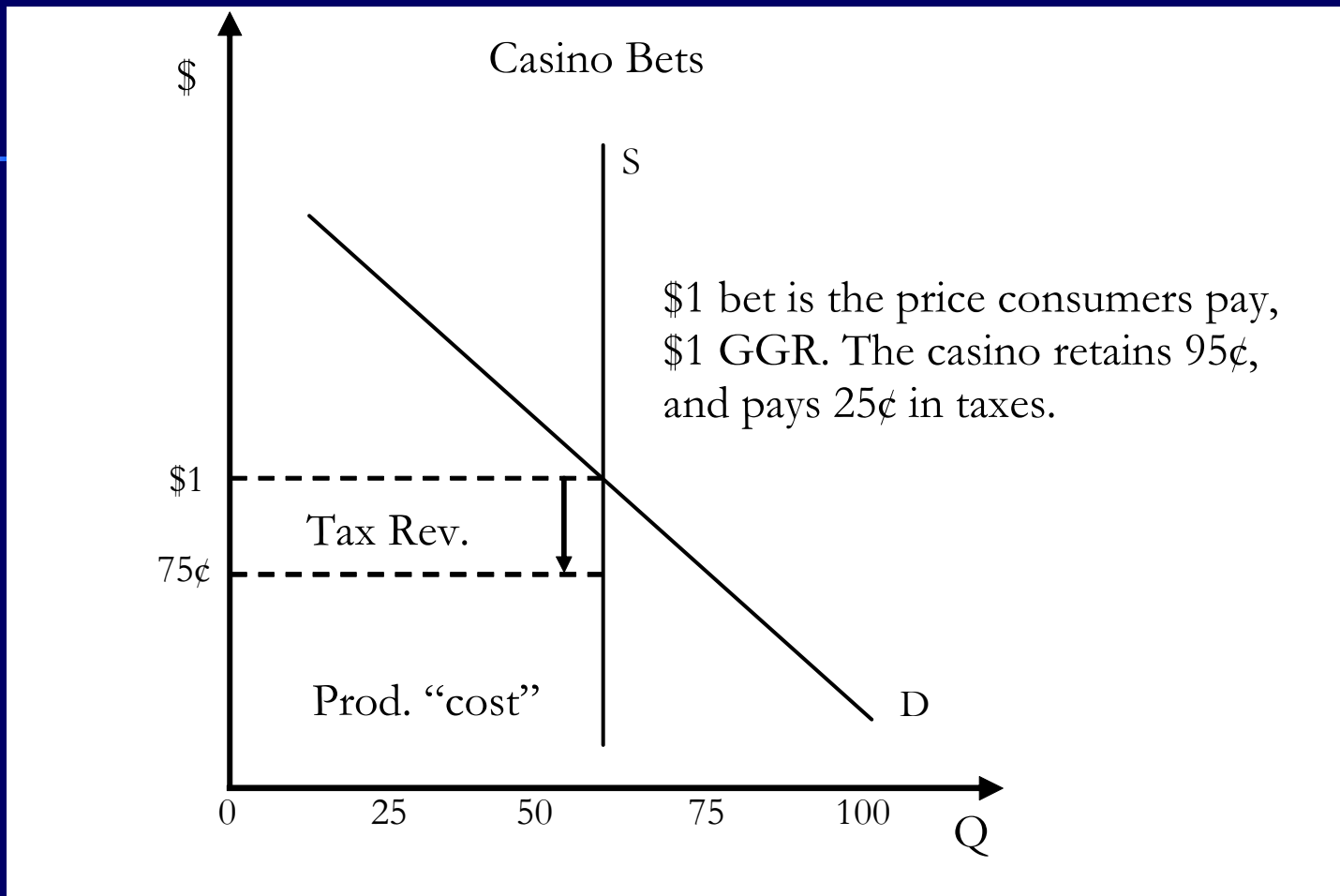
# Tax Burden: Cigarettes





# Casino Taxes

- Many studies seem to take for granted that all gambling taxes are regressive like lotteries
- But it depends on the extent to which taxes are shifted to consumers
- If the supply of casinos is fixed by government, then  $S$  is vertical...



# Casino Taxes, cont.

- But the supply curve is likely positively sloped, and very steep, up to the quantity limited by government
- The regressivity of casino taxes depends on...
  - 1: To what extent taxes on GGRs are passed-on to customers AND
  - 2: Demographics: who gambles, higher- or lower-income individuals

# Anderson (2005)

- This paper, presented at a previous EASG conference, addressed the issue
  - But Anderson suggests that researchers assume that the D is vertical, not that the S is horizontal
- He suggests that the legal restrictions on gambling create rents, and taxes can be seen as an attempt to capture the rents
  - This raises questions about the relevance of regressivity

# Are Casino Taxes Regressive?

- The question has not been adequately addressed – here or in other studies
  - The extent to which consumers bear the tax is not as obvious as is commonly thought
- It could be tested by comparing the “price” of casinos in different jurisdictions with different tax rates on GGR.
- If casino games are priced the same in different jurisdictions (with different tax rates), then it may be the case that the casino (seller) bears the entire tax burden
  - Or, do casinos provide fewer amenities in higher-tax jurisdictions, increasing the “price”?

# Summary and Conclusion

- Casino taxes are often assumed to mimic lottery taxes – as demographics of lottery and casino players may be similar.
- However, it is not clear the extent to which the taxes are borne by consumers
- If casinos bear the taxes entirely, then the regressivity question may be moot
- Subsequent analysis will include empirical work
- Comments/questions?

# Contact Information

Doug Walker  
Dept of Economics and Finance  
College of Charleston  
5 Liberty Street  
Charleston, SC 29401  
USA

<http://www.cofc.edu/~walkerD>  
[WalkerD@cofc.edu](mailto:WalkerD@cofc.edu)