

The effects of national economic collapse on gambling: The interesting case of Lotto

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Studies on Economic crisis and gambling

- Horváth & Paap (2012). *The effects of recessions on Gambling expenditures.*
 - The results suggested that growth in lottery gambling was not negatively affected by recessions but growth in casino expenditures and specifically pari-mutuel gambling was.
- Lyons (2013). *Gambling in the public marketplace: Adaptions to economic context.*
 - Of interest is the finding that the potential recession effects were different for type of games. Lottery type games that offer large jackpots showed the least decline and in fact one type, the Megabuck lottery, showed an actual increase during the recession period.

Total collapse in October 2008

- The Icelandic stock market was almost wiped out
- The collapse ranks as third biggest bankruptcies in USA
- Price levels went up by almost 30% on average
- House holds debts, indexed by inflation leading to a substantial increases in debts
- Governmental debts rose from 27% of GDP to 120%.

Studies on Economic crisis and gambling II

- Olason, Hayer, Brosowski & Meyer (in press). *Gambling in the Mist of Economic Crisis: Results from three national prevalence studies from Iceland*
 - There was an increase in past year gambling participation which extended across most gambling types.
 - In absolute terms the increase was most notable for the most popular gambling form Lotto, where almost 10% more Icelanders participated in 2011 compared to 2005/2007.
 - Moreover, those who experienced financial difficulties due to the economic recession were 52% more likely to have bought a lottery ticket during the recession compared to those who were not affected financially.

Lotto participation in a follow-up study

- A representative sample of 5,000 18-70 year old Icelanders were drawn randomly from the National Registry in 2007.
- Information for gambling and problem gambling was collected by telephone and response rate was 63.3%.
- About 2,707 (90.9%) gave verbal agreement for participation in a follow-up study.
- In total, 1,780 (59%) sent in written consent and 1,531 (51%) participated in the follow-study in 2011.

Lotto participation

	2007 %	2011 %	McNemar Chi-square	% change
Total Lotto	49,7	65,7	154,64***	+16,0
Males	50,4	67,5	84,50***	+17,1
Females	49,2	64,3	71,19***	+15,1
Lotto - land based	42,2	56,0	100,72***	+13,8
Lotto - Internet	6,4	8,3	5,72*	+1,9
Lotto subscription	10,3	13,7	18,57***	+3,4

Lotto expenditure trends

	2007	2011	t-test (paired)
Land based			
Mean expenditure	1.013 isk	957 isk	0,805
Median expenditure	1000 isk	1000 isk	-
Internet			
Mean expenditure	938 isk	878 isk	0,724
Median expenditure	1000 isk	1000 isk	-
Subscription			
Mean expenditure	1239 isk	1652 isk	3,623**
Median expenditure	1100 isk	1400 isk	-

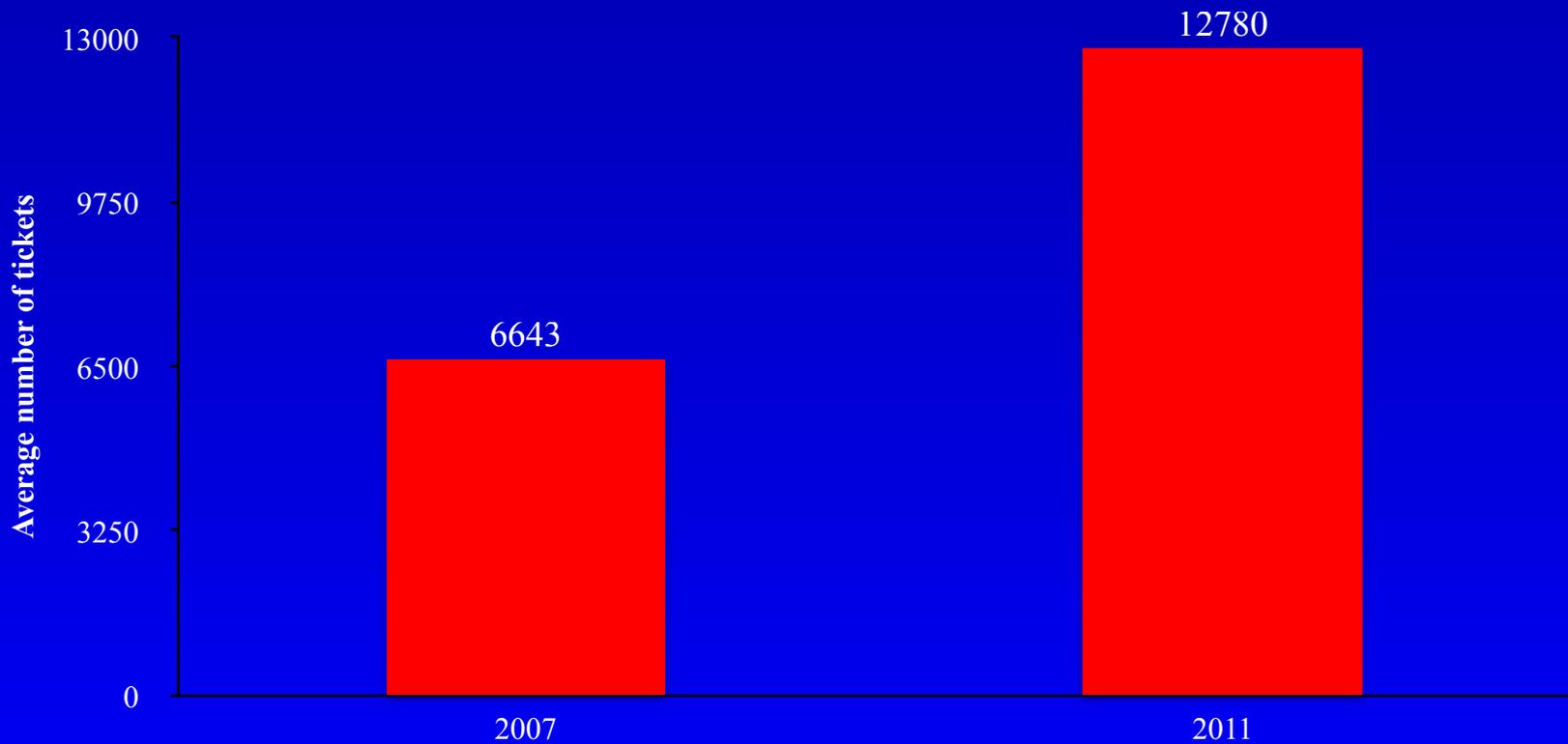
Study on Lotto gamblers

1. Included in the study were all individuals who bought an Icelandic national lottery ticket (Lottó 5/40) on the Icelandic Lottery website (www.lotto.is) over three weeks in 2007 and three weeks in 2011
2. The three-week period in 2007 was chosen when there was a single lottery jackpot (week 4-10 of February), a quadruple lottery jackpot (week 12-18 of August) and a sixfold lottery jackpot (week 2-8 of December). These timeframes were matched for jackpot size in 2011.
3. The total number of lottery buyers was 8,867, 5,725 males (64.6%) and 3,142 females (35.4%).

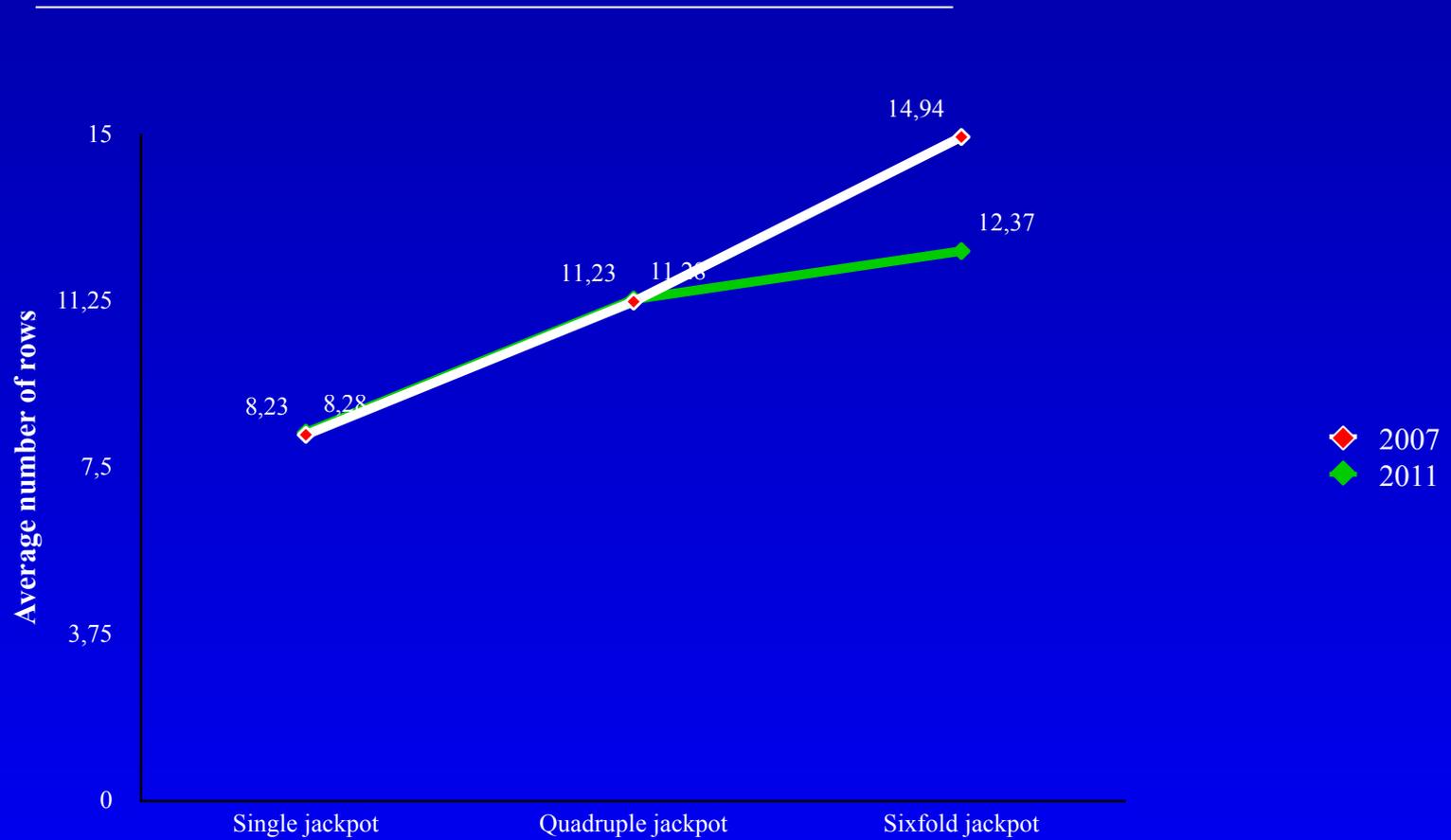
Number of buyers by jackpot size, year and gender

		2007	2011
<i>Size of the jackpot</i>	<i>Gender</i>	<i>n</i>	<i>n</i>
<i>Single jackpot</i>	<i>Male</i>	276	794
	<i>Female</i>	127	381
n = 1578			
<i>Quadruple jackpot</i>	<i>Male</i>	111	1927
	<i>Female</i>	426	895
n = 4025			
<i>Sixfold jackpot</i>	<i>Male</i>	2082	3682
	<i>Female</i>	1009	1876
n = 8649			

Total number of tickets by year



Average number of rows purchased by jackpot size



Conclusions

- Three different study designs:
 - Cross-sectional study (n = 8.249)
 - Longitudinal study (n = 1.780)
 - Lotto sales data (n = 8.867)
- Remarkable consistency in results accross studies
 - Comparison between cross and longitudinal studies suggests that both study designs produce similar results: Increase in lotto gambling
 - The actual Internet sales data confirms this trend found in the self report data.
 - Further, although more people were buying lotto tickets in 2011 than in 2007, they tend to spend less.