



Tennessee Education Lottery

Estimates for Net Lottery Proceeds & After-School Funding

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Historical Results

	<i>FY08-09</i>	<i>FY09-10</i>	<i>FY10-11</i>	<i>FY11-12</i>
<i>Total Revenue</i>	\$1,020,570,844	\$1,064,551,086	\$1,106,678,193	\$1,221,573,973
<i>Prize Expense</i>	\$633,327,819	\$664,041,523	\$695,149,156	\$770,568,219
<i>Retailer Commissions</i>	\$71,032,366	\$74,331,114	\$77,456,838	\$85,525,965
<i>Operating Expense</i>	\$15,595,907	\$15,139,680	\$15,698,291	\$17,212,674
<i>Other Expenses</i>	\$35,128,624	\$35,060,222	\$36,527,537	\$37,917,640
<i>Total Expenses</i>	\$755,084,716	\$788,572,539	\$824,831,822	\$911,224,498
<i>Net Lottery Proceeds</i>	\$265,486,128	\$275,978,547	\$281,846,371	\$310,349,475
<i>After-School Funding</i>	\$14,666,222	\$12,893,630	\$11,643,581	\$13,089,186
<i>Total State Proceeds</i>	\$280,152,350	\$288,872,177	\$293,489,952	\$323,438,661





FY11-12

	FY10-11	FY11-12	Growth
Instant Games (Net)	\$864,732,374	\$955,253,709	10.47%
Cash 3 and Cash 4	\$83,609,222	\$85,667,148	2.46%
Pick 5 & Tennessee Cash	\$18,528,283	\$19,222,943	3.75%
Powerball and Mega Millions	\$135,708,705	\$156,708,747	15.47%
Misc. Revenue	\$4,099,609	\$4,721,426	15.17%
Total Net Revenue	\$1,106,678,193	\$1,221,573,973	10.38%
Total Expenses	\$824,831,822	\$911,224,498	10.47%
NET LOTTERY PROCEEDS	<u>\$281,846,371</u>	<u>\$310,349,475</u>	<u>10.11%</u>
After-School Proceeds	\$11,643,581	\$13,089,186	12.42%
TOTAL STATE PROCEEDS	<u>\$293,489,952</u>	<u>\$323,438,661</u>	<u>10.20%</u>





Instant Game Growth in FY11-12

Price Point	Percent of Instant Game Sales	FY10-11 Gross Sales (Millions)	FY11-12 Gross Sales (Millions)	Percent Sales Growth	Dollar Growth (Millions)
\$1	10.0%	\$101.8	\$105.1	3.2%	\$3.3
\$2	22.5%	\$250.8	\$235.8	-6.0%	-\$15.0
\$3	7.1%	\$48.3	\$74.3	53.8%	\$26.0
\$5	26.5%	\$259.9	\$278.3	7.1%	\$18.4
\$10	14.3%	\$101.9	\$150.0	47.2%	\$48.1
\$20	19.6%	\$186.1	\$206.2	10.8%	\$20.1
Total	100.0%	\$948.8	\$1,049.7	10.6%	\$100.9





Mega Millions Growth in FY11-12

- *FY10-11 sales: \$45,338,103*
- *FY11-12 sales: \$53,957,595*
- *FY11-12 dollar growth: \$8,619,492*
- *FY11-12 percent growth: 19.0%*
- *Record jackpot cycle for 03/30/2012 drawing: \$640.0 million*
- *Record week of sales: \$14,978,810*
- *27.8% of total annual sales occurred in this one week*
- *Best prior week of sales: \$4,006,115*
- *Ticket sales above best prior week: \$10,972,695*





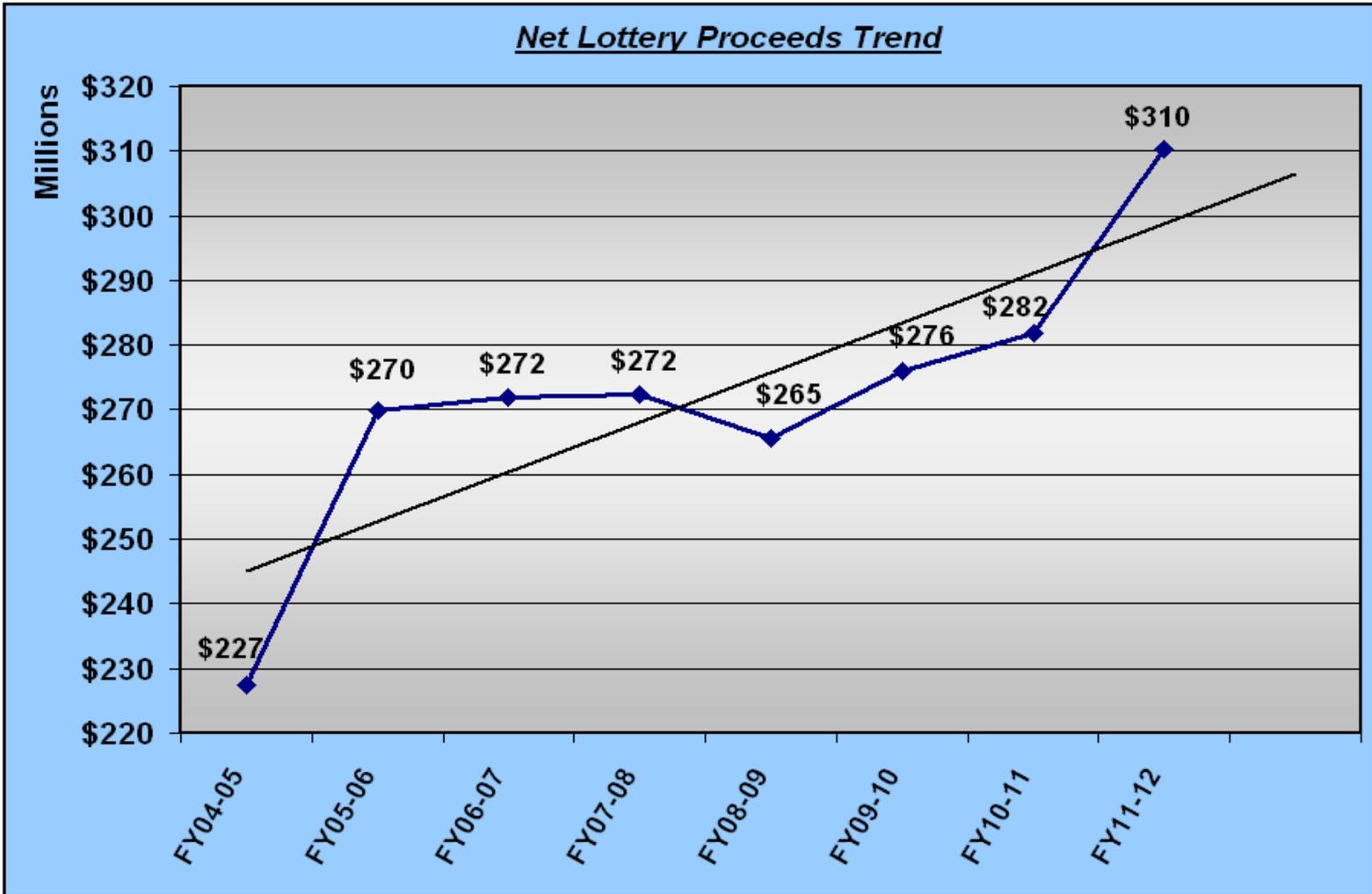
Powerball growth in FY11-12

- *FY10-11 sales: \$90,370,602*
- *FY11-12 sales: \$102,751,152*
- *FY11-12 dollar growth: \$12,380,550*
- *FY11-12 percent growth: 13.7%*
- *Several changes to game structure in January 2012*
- *Jackpot peak under previous structure: \$261.6 million*
- *Jackpot peak in FY11-12 after changes: \$336.4 million*
- *Average jackpot cycle under previous structure: \$74.9 million*
- *Average jackpot cycle in FY11-12 after changes: \$101.7 million*
- *In FY12-13: Jackpot cycles of \$337.0 million, \$587.5 million*
- *Average jackpot cycle (to date) under new structure: \$115.4 million*





Higher Base – Is FY11-12 growth sustainable?





Sustainable Growth?

- *Inclined to say “yes”*
- *Assumption: All factors that influence lottery ticket sales which are exogenous to the Lottery Corporation remain relatively stable.*
- *i.e. expansionary economy, relatively stable gas prices, no additional inflationary pressures, no legislative changes, no other significant substitute products, etc...*
- *Restructured Powerball should continue to generate significant incremental revenue.*
- *Sales, prize expense, and proceed maximizing model*





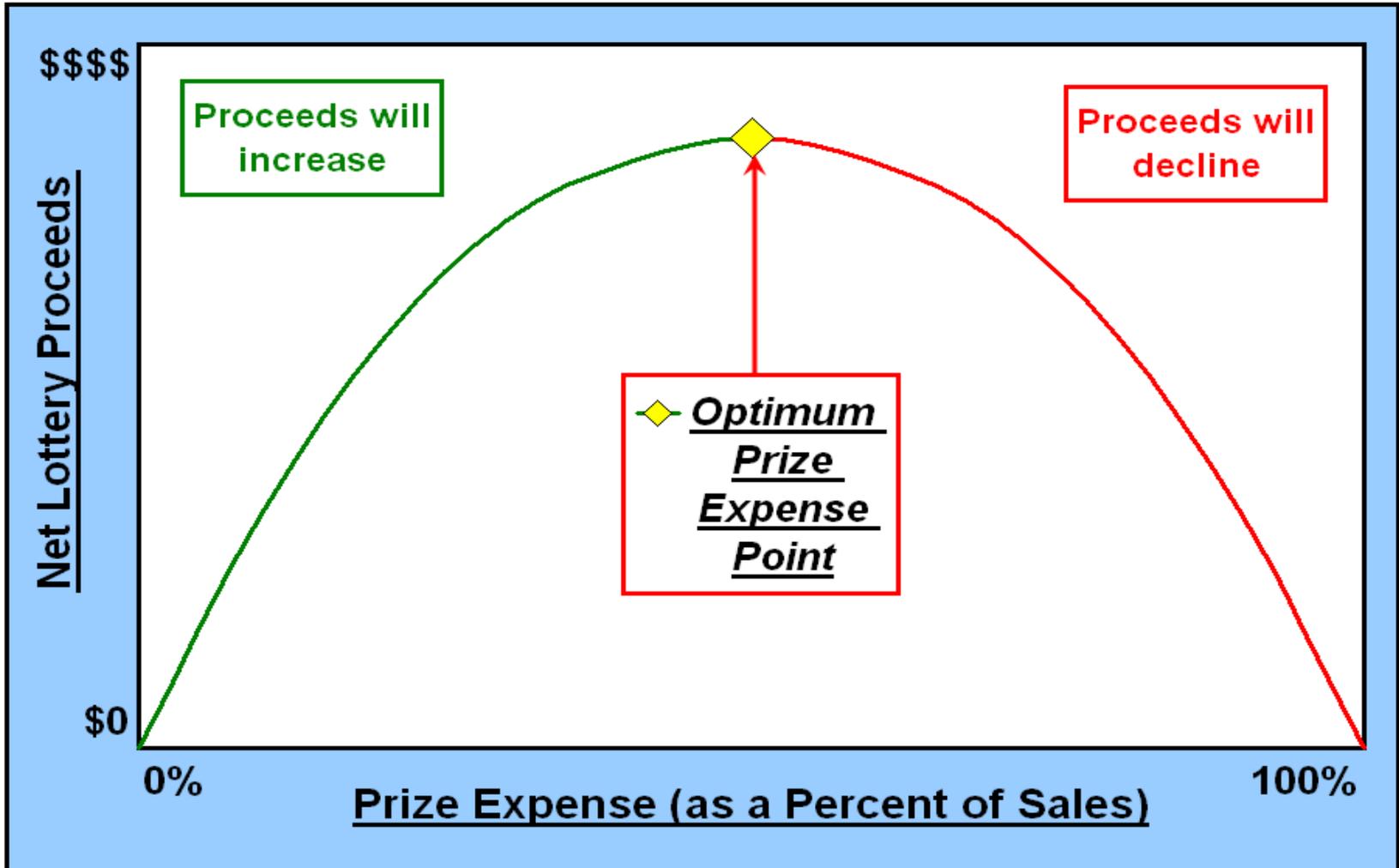
Proceed Maximization

- *Lottery ticket sales are a function of prize expense*
- *Generally \approx more prize money paid, higher sales*
- *0% paid as prizes = no ticket sales = \$0 proceeds*
- *100% paid as prizes = a lot ticket sales = \$0 proceeds*
- *What prize expense ratio maximizes proceeds?*
- *Proceed maximization = Marginal expense = Marginal revenue*
- *If an additional \$1 of expense results in more than an additional \$1 sales...proceeds increase*
- *If an additional \$1 of expense results in less than an additional \$1 of sales (or negative sales)...proceeds decline*





Proceed Maximizing Model





What about Tennessee Lottery?

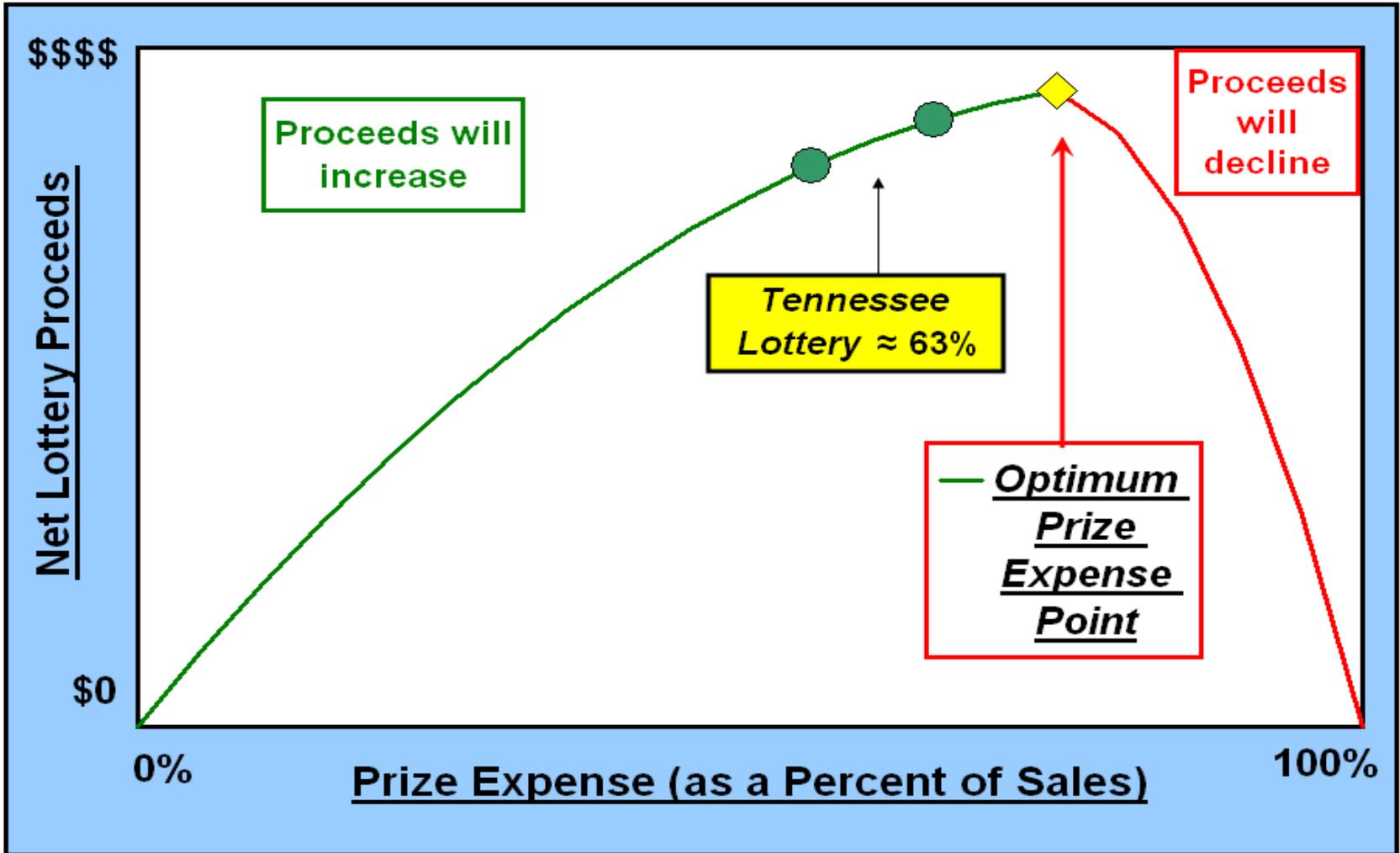
- *Has Tennessee Lottery maximized proceeds?*
- *Where is TN on the curve?*
- *Why? Because marginal revenue has continued to be more than marginal expense*
- *Especially relative to marginal prize expense*

	<i>Marginal Expense</i>	<i>Marginal Prize Expense</i>	<i>Marginal Revenue</i>	<i>Marginal Proceeds</i>
FY09-10	\$33,487,823	\$30,713,704	\$43,980,242	\$10,492,419
FY10-11	\$36,259,283	\$31,107,633	\$42,127,107	\$5,867,824
FY11-12	\$86,392,676	\$75,419,063	\$114,895,780	\$28,503,104



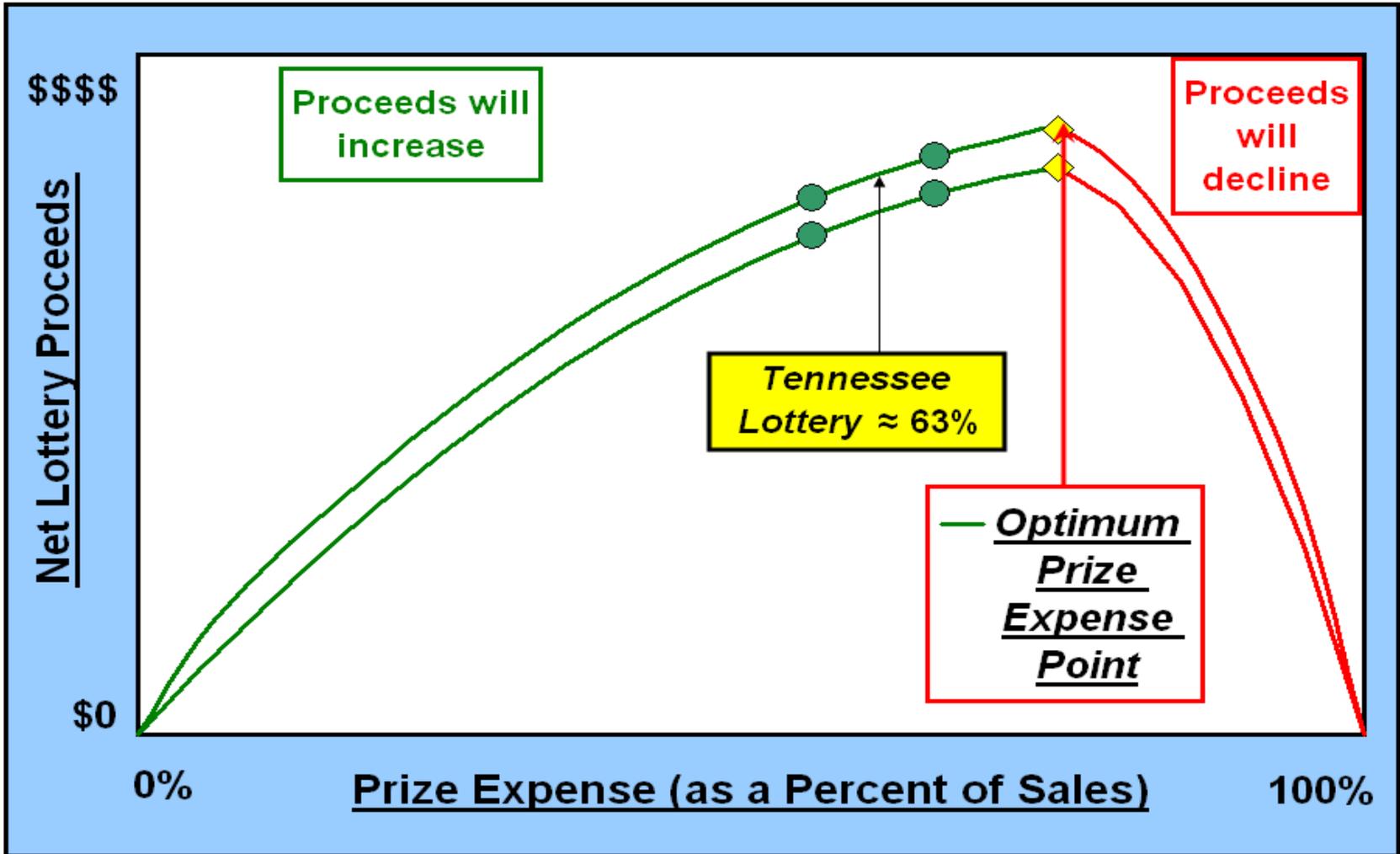


Proceed Maximizing Model (TN)





Proceed Maximization Model (TN Adjusted)





FY12-13: Year-to-Date

- Through October 31, 2012*
- Total Net Revenue: + 4.55%*
 - *Instant Games: + 3.74%*
 - *Cash 3 and Cash 4: -1.65%*
 - *Powerball & Mega Millions: + 10.61%*
 - *Tennessee Cash: + 8.46%*
- Total Expenses: + 4.30%*
 - *Total Expense / Total Net Revenue: 74.3%*
- Net Lottery Proceeds (NLP): + 5.29%*
 - *Net Lottery Proceeds / Total Net Revenue: 25.7%*





Assumptions for FY12-13

- *No new multi-jurisdictional games*
- *No additional changes to Powerball or Mega Millions*
- *No new TN-exclusive online games*
- *No changes to Cash 3, Cash 4, or Tennessee Cash*
- *Launch of at least one spotlight instant game*
- *One more Powerball jackpot cycle above \$300 million*
- *One more Mega Millions jackpot cycle above \$150 million*
- *No extraordinary changes to the retailer base*
- *No legislative changes*
- *Total Expenses = 74.8% of Total Net Revenue*
- *Net Lottery Proceeds = 25.2% of Total Net Revenue*





FY12-13 Estimates

	Low	Median	Upper
Instant Games (Net)	\$983,911,000	\$991,076,000	\$998,240,000
Cash 3 and Cash 4	\$83,097,000	\$83,954,000	\$84,810,000
Tennessee Cash	\$19,800,000	\$20,184,000	\$20,569,000
Powerball and Mega Millions	\$156,709,000	\$164,544,000	\$172,380,000
Misc. Revenue	\$4,600,000	\$4,800,000	\$5,000,000
Total Net Revenue	\$1,248,117,000	\$1,264,558,000	\$1,280,999,000
Total Expenses (74.8%)	\$933,592,000	\$945,889,000	\$958,187,000
NET LOTTERY PROCEEDS (25.2%)	\$314,525,000	<u>\$318,669,000</u>	\$322,812,000
After-School Funding	\$12,000,000	\$13,000,000	\$14,000,000
TOTAL STATE PROCEEDS	\$326,525,000	<u>\$331,669,000</u>	\$336,812,000





Assumptions for FY13-14

- *No new multi-jurisdictional games*
- *No changes to Powerball or Mega Millions*
- *No new TN-exclusive online games*
- *No changes to Cash 3, Cash 4, or Tennessee Cash*
- *Launch of one spotlight high price point instant game*
- *Two Powerball jackpot cycles above \$300 million*
- *Two Mega Millions jackpot cycles above \$150 million*
- *No extraordinary changes to the retailer base*
- *No legislative changes*
- *Total Expenses = 75.0% of Total Net Revenue*
- *Net Lottery Proceeds = 25.0% of Total Net Revenue*





FY13-14 Estimates

	Low	Median	Upper
Instant Games (Net)	\$1,010,898,000	\$1,025,764,000	\$1,040,630,000
Cash 3 and Cash 4	\$83,097,000	\$83,954,000	\$84,810,000
Tennessee Cash	\$20,386,000	\$20,588,000	\$20,790,000
Powerball and Mega Millions	\$156,709,000	\$164,544,000	\$172,380,000
Misc. Revenue	\$4,600,000	\$4,800,000	\$5,000,000
Total Net Revenue	\$1,275,690,000	\$1,299,650,000	\$1,323,610,000
Total Expenses (75.0%)	\$956,768,000	\$974,738,000	\$992,708,000
NET LOTTERY PROCEEDS (25.0%)	\$318,922,000	<u>\$324,912,000</u>	\$330,902,000
After-School Funding	\$12,000,000	\$13,000,000	\$14,000,000
TOTAL STATE PROCEEDS	\$330,922,000	<u>\$337,912,000</u>	\$344,902,000





Subsequent Years

- Growth beyond FY14-15 is difficult to forecast due to a number of unknown factors such as:
 - *Changes to payout ratios*
 - *Matrix changes to jackpot based games*
 - *Structure changes to pari-mutuel and online games*
 - *Legislative action*
 - *Varying jackpot cycles*
 - *New and discontinued games*
 - *Changes to retailer base*
 - *Changes in advertising*
 - *Changes in economy*
 - *Changes in gas prices*





FY14-15, FY15-16, and FY16-17

Estimated Growth for Total Net Revenue: 3.0% per year

Estimated Growth for Net Lottery Proceeds: 2.0% per year

	FY14-15	FY15-16	FY16-17
Total Net Revenue	\$1,338,640,000	\$1,378,799,000	\$1,420,163,000
Total Expenses	\$1,007,230,000	\$1,040,761,000	\$1,075,364,000
Net Lottery Proceeds	<u>\$331,410,000</u>	<u>\$338,038,000</u>	<u>\$344,799,000</u>
After-School Funding	\$13,000,000	\$13,200,000	\$13,400,000
Total State Proceeds	<u>\$344,410,000</u>	<u>\$351,238,000</u>	<u>\$358,199,000</u>

