Written Testimony of Stephen Herzenberg, Keystone Research Center
To Pennsylvania Senate Finance Committee
Prepared for the Hearings on the Privatization of the Pennsylvania Lottery

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My name is Stephen Herzenberg. I hold a Ph.D. in economics from the Massachusetts Institute of Technology and am the Executive Director of the Keystone Research Center (www.keystoneresearch.org). I appreciate the opportunity to submit written testimony to the Senate Finance Committee on the issue of the privatization of the Pennsylvania lottery. I also wish to recognize Senator Brubaker for his leadership in seeking to ensure a more transparent and rigorous process for deciding whether to privatize the lottery.

Attached as part of my written testimony is a briefing paper my organization released in December 2012 which raised a series of questions about lottery privatization. One indication of the nature of the deliberative process regarding lottery privatization is that all of the questions we raised a month ago remain questions today.

Why the Commonwealth Could Lose $1 to $2 Billion Over 20 Years in Revenue for Seniors' Programs. One central issue in the lottery privatization debate has been the potential impact on revenues for seniors' programs. I want to unpack Keystone Research Center's analysis that the deal negotiated with Camelot could cost the Commonwealth over a billion dollars in revenue for seniors' programs over a 20-year period. Like any estimate, this estimate depends on the assumptions made. Therefore, I want to lay out the assumptions necessary for the state to lose $1 billion in revenue so that readers can judge for themselves whether our assumptions are reasonable.

The first step in the analysis is evaluating the revenue guarantees (or Annual Profit Commitments (APCs)) which Camelot has provided the state. As our brief explains, these guarantees grow at a compound rate of about 3% per year over the full 20-year period (more than 3% at the beginning, less than 3% later in the period)—about the rate of inflation in the United States since the early 1980s.[1] We believe it is reasonable to assume that the Commonwealth could earn this growth of lottery profit without privatization with an expansion in lottery games to include keno and on-line gaming.

The next step in our analysis is to examine the profit received by Camelot if lottery system profits exceed the APCs. Our briefing paper estimates Camelot profit for three scenarios, with the results of these estimates presented in tables in Appendix 2 of our policy brief.

- "Scenario 1" table presents Camelot profits if system profits exceed the APCs by 5%.
- "Scenario 2" table presents estimates if Camelot achieves system profits exceed the APCs by 10%.

[1] From 2001-02 to 2010-11 lottery system profits in Pennsylvania grew by 21% *more* than the rate of inflation. Keystone Research Center calculation based on Pennsylvania Lottery's Comparative Statement of Income and Expenditures as of June 30 of each fiscal year.

- "Scenario 3" table presents estimates if Camelot achieves system profits that exceed the APCs by 15%.

The second-to-last column in these three tables provides the "Contractor Profit" in each of the 20 years, including incentive payments plus administrative management expense. That column shows that Camelot would receive:

- $1.041 billion (in undiscounted nominal-dollar profit) in Scenario 1;
- $1.911 billion in Scenario 2; and
- $2.009 billion in Scenario 3.[2]

The differences in the results for the three scenarios are driven primarily by the following features of the proposed contract with Camelot: after a small range just above the APC commitment, Camelot receives an incentive payment equal to half any additional revenue up to an incentive payment cap set at 5% of total system profit. Thus, in Scenario 2, which still leaves Camelot below (but close to) the incentive cap in each year, Camelot receives roughly twice as much money as in Scenario 1. In Scenario 3, since the incentive cap kicks in at a little over 10% above the APCs, Camelot receives only a little more than in Scenario 2; because of the cap, Camelot doesn't gain a lot from achieving 15% versus 10% above the APC.

Our three scenarios establish that Camelot can receive payments of $1 to $2 billion over 20 years for achieving system profits 5% to 10% above the APCs.

The last step in our analysis is the most speculative: what would the lottery achieve without privatization? If the lottery could achieve the same revenues as Camelot, 5% to 10% above the APCs, then the revenue Camelot receives in these scenarios is lost revenue for seniors programs: i.e., the Commonwealth loses $1 to $1.9 billion (or $0.8 billion to $1.65 billion not counting administrative expense payments). In arguably the most plausible revenue range (i.e., a little above a relatively easily attained target), up to about 11% above the APCs, Camelot would receive about half of the increase in revenue that exceeds inflation.

The Conflict of Interest of the Commonwealth's Privatization Advisor. Our policy brief pointed to the financial self-interest of the Commonwealth's privatization advisor in the deal with Camelot going through. Based on a December 6, 2012 press report, we noted that Greenhill & Co. stood to earn at least $3 million if privatization is implemented. (We also noted, as have many others, the pre-existing relationship between Camelot and Greenhill, established when Greenhill worked on the $576 million sale of Camelot to its current owner, the Ontario teachers' pension fund.) Since our brief was released, other press reports have raised the potential payout for Greenhill & Company if privatization goes through to a whopping $30 to $50 million.[3] At $3 million or $50 million, our concern is that the financial self-interest of the privatization advisor—reinforced by a pre-existing social relationship with the one bidder—would cloud

[2] These amounts are about $240 billion to $260 billion lower in each scenario if you exclude the administrative expense: about $800 million for Scenario 1, $1.65 billion in Scenario 2; and $1.75 million in Scenario 3.

[3] See, for example, http://www.pennlive.com/midstate/index.ssf/2012/12/pennsylvania_lottery_should_no.html; and http://articles.mcall.com/2012-12-25/news/mc-pa-rendell-lottery-privatization-20121225_1_corbett-administration-corbett-signs-tom-corbett

Greenhill's ability to give the Commonwealth sound advice regarding whether privatization is a good idea.

Reforming Consideration of Privatization Decisions. The lack of transparency and rushed nature of the Commonwealth's consideration of lottery privatization make us—and many other Pennsylvanians—nervous. That's why we continue to believe that the contract with Camelot should not proceed. We also believe that the commonwealth needs to reform its basic approach to decisions about how to most efficiently and effectively deliver state services. First, the orientation of state discussions should not be towards—or against—privatization. The state's goal should be efficiently and effectively delivering state services based on the pros and cons in any specific situation. Second, the consultants to the commonwealth need to have a balanced perspective and not to have a financial stake in privatization. Third, the Governor's Advisory Council on Privatization and Innovation needs to be more balanced. Fourth, the General Assembly needs to be afforded ample opportunity for hearings and to provide input on decisions about how the state delivers different services.

Unanswered Questions

In the Rush to Privatize the Pennsylvania Lottery, There Is Still a Lot We Don't Know

By Stephen Herzenberg and Michael Wood

Keystone Research Center • 412 North 3rd St., Harrisburg, PA 17101 • 717-255-7181

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Overview

A plan to privatize the management of the Pennsylvania Lottery would generate little cost savings or income growth for the commonwealth but would likely deliver a big payoff with little risk to the private company bidding on the job.

The Corbett administration is expected to make a decision by the end of the year on a bid to operate the lottery from Camelot Global Services, released publicly on November 20, 2012. The rushed timeline is a concern in and of itself but not the only one:

- The contract has drawn only one bid, raising concerns about whether the commonwealth is getting the best deal it could.
- The profits promised by Camelot are no greater than the rate of inflation over a 30-year period, raising the question of whether the current state-run system could do just as well or better.
- With Camelot's modest profit commitments, the potential loss of revenue over the time period in fees paid to the contractor likely outweighs any potential benefits of the deal.
- Few states have privatized the lottery so there is little experience or evidence to draw on to assess the funding promises Camelot is making.
- The manager of the state's privatization efforts, Greenhill & Co., appears to have a conflict of interest: It coordinated the sale of Camelot to its current owner, and Greenhill's contract with the commonwealth is reportedly structured to pay at least $3 million if a privatization deal is reached.
- Compared to other state lotteries, the administrative costs in Pennsylvania are already quite low. It is unclear what value the contractor would bring to the lottery, and how much the lottery would suffer from a loss of institutional knowledge that exists in the state-run system.

These shortcomings matter because the Pennsylvania Lottery brings in $1 billion a year in funds that almost exclusively support services for senior citizens. Pennsylvania's population is aging, creating a growing demand for these services, including popular prescription drug and transportation programs for seniors. If Camelot underperforms, Pennsylvania seniors are the ones who will pay the price.

This deal will turn over control of the lottery to a private company for an entire generation. Rushing into a bad deal in the name of privatization is poor stewardship of public assets, shortchanging Pennsylvanians not just today but for years to come.

Background

In April 2012, the Corbett administration announced that it would seek bids from companies interested in entering into a private management agreement to run the Pennsylvania Lottery.[1] On November 20, 2012, the administration released the results: one qualified bidder, Camelot Global Services, had submitted annual profit commitments for 20 years.[2] Over the first 10 years, the present value of guaranteed profit commitments from Camelot totals $12.15 billion; over the full 20 years, the present value of commitments equals $23 billion.[3] Camelot's bid is valid through December 31, 2012. No public or legislative hearings have been held or are planned on the proposal.[4]

Unanswered Questions

The documents released so far raise a series of questions about the potential costs and benefits of lottery privatization for the commonwealth. This policy brief poses some of those questions. With this deal affecting 20 years or more of funding for senior services, it is in the public's best interest to have a more transparent and comprehensive review of this plan.

1. **With only one bidder for the lottery, how does the state know it is getting a reasonable deal?**

Privatization research literature shows that one of the most common reasons that privatization fails to deliver on promised benefits is the lack of competition in the private sector. This is the case, for example, with school bus privatization in Pennsylvania.[5] As more school districts privatized their bus services, overall school transportation costs went up. A lack of competition among bus operators, especially in more rural areas where school districts may only receive one or two bids, likely explains the rise in transportation costs.[6] In any market with limited competition, privatization can result in the trading of a public monopoly with a public good mission for a private monopoly with a mission to maximize profits.

For a state seeking to privatize services — just as for a homeowner seeking a roofing contractor — getting only a single bid should be a red flag, a warning sign of a possible fleecing. When Illinois became the first state to outsource the management of its lottery in 2010, three companies (including Camelot) submitted bids.[7] In October 2012, Indiana (the only other state to privatize lottery operations) chose between two qualified bids to award a 15-year lottery contract.[8] With more than one bid on the table, distinctions could be made and judgments rendered, but this is not possible in Pennsylvania. Without multiple competitive bids, how can the commonwealth be sure it is getting a reasonable deal?

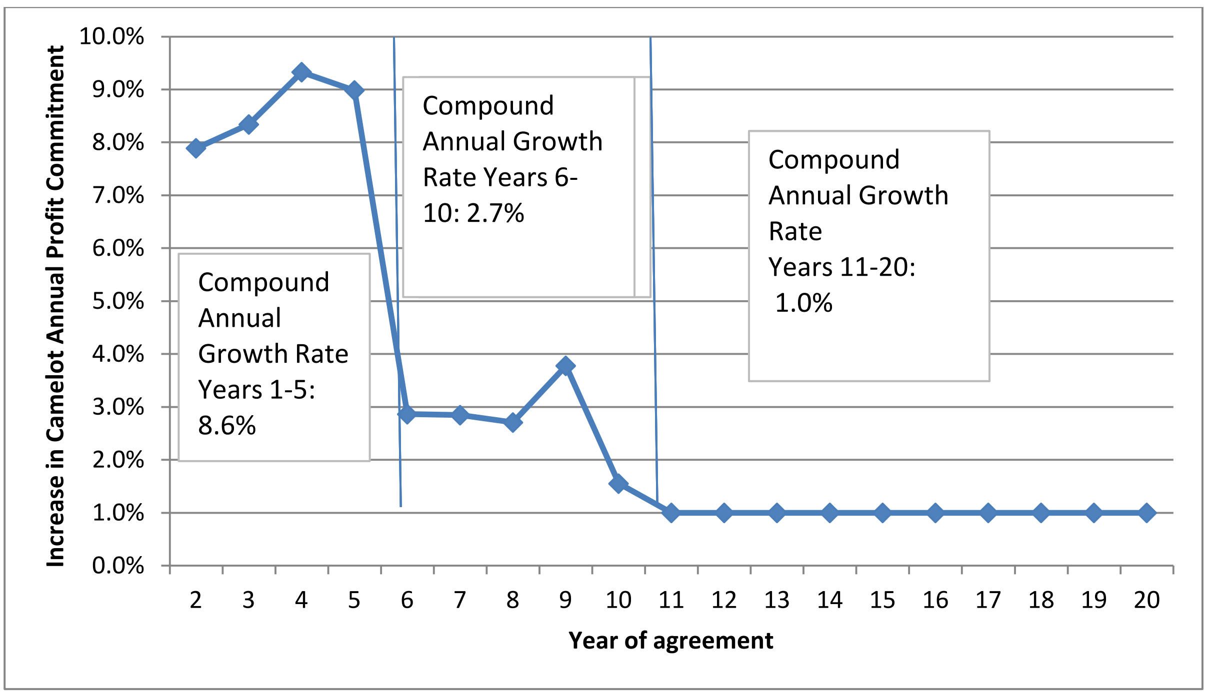
2. **The guaranteed funding levels appear easily attainable: could the state itself achieve these revenues on its own?**

To determine if this deal is worthwhile, the commonwealth should analyze Camelot's revenue expectations and compare them to the performance of the existing state-run lottery. Currently, there is little public information about the assumptions behind Camelot's profit guarantees

The chart below lists the annual change in lottery profits guaranteed by Camelot during the 20-year contract period. The "guaranteed" funding levels grow, on average, 8.6% per year in the first five years, 2.7% per year in years six through 10, and 1% per year in the final 10 years.[9] Over the 20-year contract period, the compound annual growth rate is 3%, about the overall rate of inflation over the past 20 years. This is a smaller growth rate than that of the current system. Since 2002, the lottery's profits have grown at a compound annual growth rate of 3.5%.

If the contract can be extended past 20 years at the discretion of the contractor with a 1% annual profit growth commitment, then growth over the full life of the contract could end up being *less than* the overall rate of inflation.[10] That is, over the full period and even with an expansion of lottery products, the contractor would be committed only to producing revenues that decline in inflation-adjusted terms.

Figure 1. Contractor Guaranteed Profit Grows Quickly in First Five Years then Slows Dramatically



Source. Pennsylvania Department of Revenue, Lottery PMA Bid Tabulation

These annual growth targets appear modest, especially if we assume that, in the first five years, the higher growth of guaranteed profits is based on an expansion of lottery games to include Keno and online gambling. In the last 10 years, the 1% growth of profits is extremely modest. Assuming an overall rate of inflation of 3%, a 1% growth in profit commitment for years 11-20 is equivalent to a 22% *decrease* in the real (inflation-adjusted) profit guarantee. This is clearly inadequate to support a growing need for senior services as Baby Boomers enter their retirement years.

Given that there is limited experience with lottery privatization in other states, a shorter contract term would be more prudent than locking the commonwealth for a generation into what could turn out to be a bad deal.

3. Will what appears to be a low-risk and high-profit contract for Camelot end up costing the commonwealth revenue?

If the profit targets are easily attainable and could be achieved by the commonwealth without privatization, then fees paid to Camelot amount to lost revenue. How large are these fees? That depends on the level of profit achieved by the contractor. The higher the growth in annual profit commitments (APC), the larger the contractor's fee, which is capped at 5% of total lottery profits. In addition, Camelot is permitted to charge a fee of 0.75% of system profits each year to cover "non-invoiced expenses" — regardless of whether it meets APC. (More detailed estimates of contractor compensation at various levels of system profit performance can be found in Appendix 1.)

If the contractor maxes out its incentive–based compensation (5% of annual lottery profits) for the 20-year term, it will receive $1.15 billion in today's dollars; that figure goes up when you count the management fees amounting to 0.75% of profit per year. (A more detailed analysis of compensation over the contract term can be found in Appendix 2.)

4. What is the return on investment for Camelot?

While Camelot appears poised to receive over $1 billion in present discounted profits,[11] it is unclear what investment the firm will make in the lottery. Based on the information at hand, it appears possible that Camelot will enjoy a phenomenally high rate of return on small investments. The commonwealth should provide credible estimates of the bidder's projected rate of return on its investment under different scenarios, including a scenario in which the contractor receives just enough profit annually to reach the 5% cap. These estimates would make it easier to evaluate whether the bidder is getting too good a deal.

5. Are there strong protections in place if the contractor fails to meet guaranteed funding levels?

The Corbett administration has touted the protections provided by Camelot should it fail to meet the guaranteed profit levels. On closer inspection, however, these guarantees do not appear strong.

The guarantees include a $150 million bond and another $50 million line of credit, both of which could be tapped if revenues fall short of the guarantees. Overall penalty payments could exceed $200 million because the contractor would have to continually replenish the line of credit if it is drawn down. However, the draft contract limits these payments to 5% of total system profits in each year (meaning if profit falls short of APC by more than 5%, the commonwealth is only repaid for the first 5%).[12] Moreover, repeated losses could lead to legal challenges as the contractor seeks to contain its exposure. (Illinois is currently in court trying to extract promised penalty payments from its contractor for failure to meet guaranteed revenue targets.) Repeated losses could also lead to the contractor going out of business prior to the end of the agreement. Bottom line, the real financial protection for the commonwealth from underperformance by the contractor appears much smaller than the likely profit of the contractor.

6. What value does the contractor add?

Privatization makes the most sense in circumstances in which the contractor provides specialized knowledge and/or higher levels of efficiency than the commonwealth. In the proposed lottery privatization, it is unclear what value the contractor adds. For a small portion of lottery sales (involving multi-state games), the contractor is constrained and cannot operate differently than the commonwealth would.[13] Even for other portions of the lottery, there is little evidence that the contractor would perform any better than the state.

Compared to other state lotteries, the administrative costs in Pennsylvania are already quite low, which raises questions about how much more efficient a private contractor could possibly be. In 2011-12, lottery administration costs totaled $36 million, or 3.5% of operating profit.[14] A recent Pennsylvania Treasury analysis found that lottery administrative costs in Pennsylvania were the second lowest, as a share of lottery system sales, of the 10 largest lotteries in the U.S.[15]

In addition to what the contractor brings in the deal, the commonwealth should also give consideration to what would be lost: institutional knowledge. If the state turns over running the lottery to a private company for an entire generation, it also gives up the know-how it has developed. This makes it more dependent on outside entities for the expertise necessary to run a lottery, making it less likely that the state could retake control at a later date. The privatization research literature documents that the loss of public-sector knowledge to run contracted services itself, or to evaluate how good a deal it is getting from contractors, is a common reason that privatized services end up being costly. In part for this reason, there is substantial evidence that Pennsylvania's massive increase in IT contracting during the Rendell administration, including to Deloitte, has come at a high cost.[16]

7. Has Pennsylvania adequately evaluated the experience of other states in considering its lottery privatization decision?

Illinois is the only state currently operating with a private lottery manager, and its experience is not reassuring.[17] The contractor did not meet promised revenue levels, and the parties are now engaged in a court dispute.[18] Indiana has recently awarded a private management agreement. Other states, including New Jersey, recently considered but rejected privatization. Due diligence suggests that Pennsylvania should more fully assess the experience of other states before moving forward.

8. Is Pennsylvania's decision to privatize its lottery influenced by its consultant's financial self-interest?

In early December 2012, it came to light that the commonwealth's privatization consultant, Greenhill & Co., worked on the $576 million sale of Camelot to its current owner, the Ontario teachers' pension fund.[19] More importantly, the Greenhill contract with the commonwealth is reportedly structured to pay at least $3 million if a lottery privatization deal is implemented. This creates a clear conflict of interest that interferes with Greenhill's ability to advise the state on whether lottery privatization makes sense.

Conclusion

The current operation of the Pennsylvania Lottery works well, and the last two years of lottery operation have delivered record profits to state services for seniors. Given the many other challenges faced by the commonwealth, it is unclear why lottery privatization should be a priority. Even with the information available from a rushed and non-transparent process, lottery privatization appears to be an excellent deal for the sole bidder and for the commonwealth's privatization consultant, but not for the commonwealth. At the very least, the Corbett administration should slow down the process and allow a more thorough examination of the pros and cons of the proposed deal.

About Us

The Keystone Research Center (KRC) is a nonprofit, nonpartisan research organization that promotes a more prosperous and equitable Pennsylvania economy. Stephen Herzenberg is an economist and KRC's Executive Director. Michael Wood is the Research Director for the Pennsylvania Budget and Policy Center, a project of KRC. Learn more at www.keystoneresearch.org.

Endnotes

[1] Pennsylvania Office of the Governor, "Governor Corbett Launches Initiative to Maximize Funding for Older Adult Services Funded by the Pennsylvania Lottery," April 2, 2012, http://www.revenue.state.pa.us/portal/server.pt?open=18&objID=1234196&mode=2 .

[2] Pennsylvania Department of Revenue, "Pennsylvania Receives, Considers Bid on Potential Lottery Private Management Agreement: Full Investigation into Bidder Begins, Union Dialogue Continues," November 20, 2012, http://www.revenue.state.pa.us/portal/server.pt?open=18&objID=1301882&mode=2 .

[3] As of December 5, only Camelot's 20 years of profit guarantees have been released to the public, http://www.emarketplace.state.pa.us/FileDownload.aspx?file=11162012\TabFile.pdf. The nominal value of the first 10 years of profits equals $15.23B if you average the two methods of estimating profit in the state report on the privatization deal. This amount was discounted by the Budget Office at a rate of 4% to get to the $12.15 billion figure. The same discount rate was applied by the Keystone Research Center to determine the present discounted value of the 20-year revenue stream.

[4] For more information on the key terms of the Project Management Agreement, see: Pennsylvania Department of Revenue, "Pennsylvania Determines Key Terms of Potential Lottery Private Management Agreement: Commonwealth Evaluates Bidders' Management Proposals, Begins Material Dialogue with Union," November 9, 2012, http://www.revenue.state.pa.us/portal/server.pt?open=18&objID=1299743&mode=2 . More details of the commonwealth's requirements can be found here: http://www.revenue.state.pa.us/portal/server.pt/document/1233953/lpma_factsheet_pdf.

[5] See Mark Price and Stephen Herzenberg, *Runaway Spending: Private Contractors Increase the Cost of School Student Transportation Services in Pennsylvania* (Harrisburg: Keystone Research Center, March 2012), http://keystoneresearch.org/publications/research/school-bus-transport.

[6] For other examples and a review of academic research on the limited competition in many contracted service market, see *Elliott D. Sclar*, *You Don't Always Get What You Pay For: The Economics of Privatization* (Ithaca, NY: Cornell University Press, 2001).

[7] http://www.illinoislottery.com/en-us/About_Illinois_Lottery/Financial_Information/private-management-opportunities.html

[8] http://www.ibj.com/indiana-panel-approves-lottery-outsourcing-deal/PARAMS/article/37039. Details of Indiana's process can be found here: http://www.hoosierlottery.com/about-us/bids/public-records.

[9] Figures here taken from the bid tabulation record posted on the commonwealth's website and have not been discounted as the overall APC transaction value for 10 years. The tabulation can be found here: http://www.emarketplace.state.pa.us/FileDownload.aspx?file=11162012\TabFile.pdf.

[10] According to the Corbett administration, "performance–based contract extensions may lengthen the contract term to 30 years if the private manager consistently exceeds its APCs" (http://www.revenue.state.pa.us/portal/server.pt/document/1233954/lpma_faqs_pdf).

[11] See Endnote 3 for an explanation of what "present discounted profit" means.

[12] See Schedule 10.1 (Compensation and Payment Terms), 5(d), (page 50 of the PDF) online here: http://www.revenue.state.pa.us/portal/server.pt/document/1304913/lpma_schedules-exhibits_pdf.

[13] About 12% of Pennsylvania Lottery sales in 2011-12 were from multi-state games such as Powerball and Mega Millions: http://www.palottery.state.pa.us/getattachment/About-PA-Lottery/Annual-Economic-Reports/Annual-Report-2011-2012.pdf.aspx.

[14] Lottery Bureau administrative costs less advertising expenses and net operating revenue taken from the Pennsylvania Lottery Bureau Comparative Statement of Income and Expenditures 2011-12: http://www.palottery.state.pa.us/getattachment/About-PA-Lottery/Annual-Economic-Reports/Annual-Report-2011-2012.pdf.aspx.

[15] Lottery administrative costs in this comparison included administrative costs compared to lottery sales. Pennsylvania Treasury, The McCord Report, June 5, 2012, http://www.patreasury.gov/assets/McCord-Report-06-05-12.pdf.

[16] Bureau of Departmental Audits, *Procurement of Deloitte Contracts: A Special Performance Audit of the Department of General Services*, Office of the Auditor General Commonwealth of Pennsylvania, October 2011; http://www.auditorgen.state.pa.us/reports/stateagencies/departmental/depdepartmentofgeneralservices102109.pdf.

[17] Indiana awarded its management agreement in October 2012, but day-to-day management of the lottery is still being handled by the state as of the writing of this brief.

[18] In early November, an arbitrator in Illinois reduced the contractor penalty for missing its contractual revenue targets, citing “adverse actions” by the state. State officials are said to be considering further action, including going to court, to reverse the arbitrator’s ruling. See Paul Merrion, “Big penalty scratched for Illinois Lottery’s private manager,” *Crain’s Chicago Business*, November 9, 2012, http://www.chicagobusiness.com/article/20121109/NEWS02/121109730/big-penalty-scratched-for-illinois-lotterys-private-manager#ixzz2EyUixn6b.

19 Jan Murphy, “State’s financial advisor doesn’t hide connection to only bidder for Pennsylvania lottery,” *The (Harrisburg) Patriot News*, December 6, 2012, http://www.pennlive.com/midstate/index.ssf/2012/12/pennsylvania_lottery.html.

Appendix 1.

The example below shows how contractor compensation varies based on how much actual lottery profits differ from the contractor's Annual Profit Commitment (APC). For the table, to keep the numbers simple, it is assumed that the yearly APC is $1 billion, with actual profit varying from $950 ($50 less than APC – which has to be made up from the contractor's security collateral) to $1.3 billion, or 30% higher than expected profit.

In the case of a shortfall of $50 million (or 5% of APC – the maximum the contractor is required to reimburse the commonwealth), the contractor loses $50 million as the shortfall is repaid to the commonwealth, or a net of $43 million if you take into account payment for administrative expenses. This payment for the shortfall from APC could be taken from the $150 million bond that the contractor is required to have set aside to make up such deficits. It is not clear how many years a contractor could make up shortfalls of 5% or more before going insolvent.

In cases where profit exceeds APC, the compensation received by the contractor can be substantial. For example, if overall lottery profit grows to just $1.1 million per year, contractor profit rises to $48 million, not counting reimbursement for administrative expenses. To put this in perspective, in 2011-12, the Pennsylvania Lottery's administrative costs were $36 million. This means that the contractor could earn profits far above what the lottery paid in salaries and operating expenses (which were also reimbursed by the lottery). Incentive-based compensation to the contractor is limited to 5% of overall lottery profits and this cap is reached a little above system profit of $1.1 billion (10% above APC). Around this level, the contractor share of the increase in lottery profits above APC is close to 50%. The way this proposal's incentives are structured, the contractor could receive nearly half of the additional revenue that results from an expansion of lottery games to include Keno and online gaming.

Contractor Profits for Different Levels of Actual Lottery Profits (in $ Millions)

							Total Contractor Profit/(Loss)		
Total Lottery Profit	Differ-ence From APC ($1 B)	Reimbursement for Administrative Management Expense (0.75% of Profit) (A)	Tier 1 Incentive 25% of First 1% Increase in Profit	Tier 2 Incentive 50% of the Remaining Increase in Profit	Contractor Profit (Incentive Payments) (Limited to 5% of System Profit) (B)	Contractor Penalty Payment for Failing to Make APC (C)	Actual Dollars (A+B+C)	As a % of System Profit	As a % of Difference from APC
$950	($50)	$7	$0	$0	$0	($50)	($43)	-4.5%	85.8%
$1,000	$0	$8	$0	$0	$0	$0	$8	0.8%	
$1,050	$50	$8	$3	$20	$23	$0	$30	2.9%	60.8%
$1,100	$100	$8	$3	$45	$48	$0	$56	5.1%	55.8%
$1,150	$150	$9	$3	$70	$58	$0	$66	5.8%	44.1%
$1,200	$200	$9	$3	$95	$60	$0	$69	5.8%	34.5%
$1,250	$250	$9	$3	$120	$63	$0	$72	5.8%	28.8%
$1,300	$300	$10	$3	$145	$65	$0	$75	5.8%	24.9%

Source. Keystone Research Center calculations based on Pennsylvania Lottery Private Management Agreement Summary of Terms and Conditions (http://www.revenue.state.pa.us/portal/server.pt/document/1233953/lpma_factsheet_pdf).

Appendix 2.

The following tables show simplified examples of how much the contractor would be compensated and how much additional revenue for lottery programs would be generated if actual profits exceeded Camelot's current Annual Profit Commitment (APC) targets by three constant (5%, 10%, and 15%) rates over the 20-year term of the contract. In two of the three scenarios (and the more likely of the three), where system profits exceeded APC by 5% and 10% each year, the contractor keeps a larger share of the increase over APC than goes back into the lottery system to fund programs.

Contractor compensation is largely based on exceeding APC targets. When they do, the contractor earns tier incentives. Tier 1 incentives exist for the first 1% of system profit that exceeds APC. This amount is split between the contractor (25%) and the commonwealth (75%). All other profit that exceeds APC that year is subject to tier 2 incentives. These are split equally between the contractor and the commonwealth. In total, tier incentives are limited to 5% of total system profit. Additionally, the contractor receives 0.75% of annual profit (whether or not APC is met) for non-invoiced expenses (administrative management expense).

Scenario 1: Lottery Profits 5% Above Annual Profit Commitment (APC) Each Year (in $ Millions)										
				Tier Incentives					
Year of Contract	System Profit (Exceeds APC by 5%)	Increase from APC	Administrative Management Expense (0.75% of Profit)	Tier 1	Tier 2	Total Tier Before Limit	Total Tier Incentives (Limited to 5% of Total System Profit)	Contractor Profit	Net Change in Lottery Funding Above APC
1	$1,184	$56	$9	$3	$23	$25	$25	$34	$22
2	$1,278	$61	$10	$3	$24	$27	$27	$37	$24
3	$1,384	$66	$10	$3	$26	$30	$30	$40	$26
4	$1,514	$72	$11	$4	$29	$32	$32	$44	$28
5	$1,650	$79	$12	$4	$31	$35	$35	$48	$31
6	$1,697	$81	$13	$4	$32	$36	$36	$49	$32
7	$1,745	$83	$13	$4	$33	$37	$37	$50	$33
8	$1,792	$85	$13	$4	$34	$38	$38	$52	$33
9	$1,860	$89	$14	$4	$35	$40	$40	$54	$35
10	$1,889	$90	$14	$4	$36	$40	$40	$55	$35
11	$1,908	$91	$14	$5	$36	$41	$41	$55	$36
12	$1,927	$92	$14	$5	$37	$41	$41	$56	$36
13	$1,946	$93	$15	$5	$37	$42	$42	$56	$36
14	$1,966	$94	$15	$5	$37	$42	$42	$57	$37
15	$1,985	$95	$15	$5	$38	$43	$43	$57	$37
16	$2,005	$95	$15	$5	$38	$43	$43	$58	$37
17	$2,025	$96	$15	$5	$39	$43	$43	$59	$38
18	$2,082	$99	$16	$5	$40	$45	$45	$60	$39

Year of Contract	System Profit (APC +5%)	Increase from APC	Admin. Mgmt. Expense (0.75%)	Tier 1	Tier 2	Total Tier Before Limit	Tier Incentives (5% of Profit Limit)	Contractor Profit	Net Funding Above APC
19	$2,066	$98	$15	$5	$39	$44	$44	$60	$39
20	$2,087	$99	$16	$5	$40	$45	$45	$60	$39
							Total	**$1,041**	**$673**
							Discounted at 4%	**$685**	**$443**

Scenario 2: Lottery Profits 10% Above Annual Profit Commitment (APC) Each Year (in $ Millions)									
			Administrative Management Expense (0.75% of Profit)	Tier Incentives					
Year of Contract	System Profit (Exceeds APC by 10%)	Increase from APC		Tier 1	Tier 2	Total Tier Before Limit	Total Tier Incentives (Limited to 5% of Total System Profit)	Contractor Profit	Net Change in Lottery Funding Above APC
1	$1,241	$113	$9	$3	$51	$54	$54	$63	$50
2	$1,339	$122	$10	$3	$55	$58	$58	$68	$54
3	$1,450	$132	$11	$3	$59	$63	$63	$74	$58
4	$1,586	$144	$12	$4	$65	$68	$68	$80	$64
5	$1,728	$157	$13	$4	$71	$75	$75	$88	$70
6	$1,778	$162	$13	$4	$73	$77	$77	$90	$72
7	$1,828	$166	$14	$4	$75	$79	$79	$93	$74
8	$1,878	$171	$14	$4	$77	$81	$81	$95	$76
9	$1,949	$177	$15	$4	$80	$84	$84	$99	$78
10	$1,979	$180	$15	$4	$81	$85	$85	$100	$80
11	$1,999	$182	$15	$5	$82	$86	$86	$101	$80
12	$2,019	$184	$15	$5	$83	$87	$87	$102	$81
13	$2,039	$185	$15	$5	$83	$88	$88	$103	$82
14	$2,059	$187	$15	$5	$84	$89	$89	$104	$83
15	$2,080	$189	$16	$5	$85	$90	$90	$105	$84
16	$2,101	$191	$16	$5	$86	$91	$91	$106	$85
17	$2,122	$193	$16	$5	$87	$92	$92	$108	$85
18	$2,181	$198	$16	$5	$89	$94	$94	$111	$88
19	$2,164	$197	$16	$5	$89	$93	$93	$110	$87
20	$2,186	$199	$16	$5	$89	$94	$94	$111	$88
							Total	**$1,911**	**$1,517**
							Discounted at 4%	**$1,257**	**$998**

Scenario 3: Lottery Profits 15% Above Annual Profit Commitment (APC) Each Year (in $ Millions)									
Year of Contract	System Profit (Exceeds APC by 15%)	Increase from APC	Administrative Management Expense (0.75% of Profit)	Tier Incentives			Total Tier Incentives (Limited to 5% of Total Profit)	Contractor Profit	Net Change in Lottery Funding Above APC
				Tier 1	Tier 2	Total Tier Before Limit			
1	$1,297	$169	$10	$3	$79	$82	$56	$66	$103
2	$1,400	$183	$10	$3	$85	$88	$61	$71	$111
3	$1,516	$198	$11	$3	$92	$96	$66	$77	$120
4	$1,658	$216	$12	$4	$101	$105	$72	$85	$132
5	$1,807	$236	$14	$4	$110	$114	$79	$92	$144
6	$1,858	$242	$14	$4	$113	$117	$81	$95	$148
7	$1,911	$249	$14	$4	$116	$120	$83	$97	$152
8	$1,963	$256	$15	$4	$119	$124	$85	$100	$156
9	$2,037	$266	$15	$4	$124	$128	$89	$104	$162
10	$2,069	$270	$16	$4	$126	$130	$90	$105	$164
11	$2,090	$273	$16	$5	$127	$132	$91	$107	$166
12	$2,110	$275	$16	$5	$128	$133	$92	$108	$168
13	$2,132	$278	$16	$5	$130	$134	$93	$109	$169
14	$2,153	$281	$16	$5	$131	$136	$94	$110	$171
15	$2,174	$284	$16	$5	$132	$137	$95	$111	$173
16	$2,196	$286	$16	$5	$134	$138	$95	$112	$174
17	$2,218	$289	$17	$5	$135	$140	$96	$113	$176
18	$2,281	$297	$17	$5	$139	$144	$99	$116	$181
19	$2,263	$295	$17	$5	$138	$143	$98	$115	$180
20	$2,285	$298	$17	$5	$139	$144	$99	$117	$182
							Total	**$2,009**	**$3,132**
							Discounted at 4%	**$1,322**	**$2,061**