STOCKTON UNIVERSITY | WILLIAM J. HUGHES CENTER FOR PUBLIC POLICY

THE SOUTH JERSEY ECONOMIC REVIEW

About the SJER

Since its inception more than ten years ago, the South Jersey Economic Review has been committed to providing the region's stakeholders and policymakers timely, high-quality research that focuses on the Southern New Jersey regional economy. Over the course of its history, the Review has provided in-depth analyses of the regional economy's healthcare, construction, retail trade, and gaming industries. It has also explored key trends in the region's labor force, demographics, and wages. Economic diversification has also been a key focus of the SJER. The SJER is published bi-annually under the aegis of Stockton University's William J. Hughes Center for Public Policy.

IN THIS ISSUE

ATLANTIC CITY'S ECONOMY

Atlantic City's economy continues to struggle under the weight of the ongoing restructuring taking place in its gaming industry and the related spillover effects on the local economy including the city of Atlantic City's fiscal health. Total employment in the metropolitan area declined 0.3% (350 jobs) year-over-year through the first half of 2016. (Figure 1 and Table 1) Continued weak employment growth in the metropolitan area was driven by job losses in construction, accommodations, and local government. These three sectors lost a total of 2,400 jobs during the first half of 2016. Casino hotels employment (part of the accommodations sector) fell 4.2% as the beleaguered gaming industry shed another 900 jobs over the first half of 2016. Since the first quarter of 2014—which saw the closure of the Atlantic Club in January, the first of the four casino closings that year—employment in the casino hotels industry has declined by 5,400 jobs, a 20% decline. Local government employment was also trimmed by 900 jobs during the first six months of 2016, as the City of Atlantic City continued to grapple with its still-precarious fiscal situation. At the same time, notable job gains were recorded in the metropolitan area's retail trade (+600), education and health services (+600), and restaurants and bars (+900) sectors.

In June, the metropolitan area's unemployment rate stood at a seasonally adjusted 7.4%. (Figure 2) While this rate represented a significant decline from June 2015's 9.5%, it remained well above the state's (5.1%) and nation's (4.9%) rate. Moreover, the metropolitan area's labor force continues to plummet—a fact that has kept the official headline unemployment rate relatively low despite a severely weakened local labor market. Between the second quarter of 2013 and this year's second quarter, the local labor force declined by an eye-popping 13,000, a 9.4% contraction. Placing this contraction in a national framework provides a better sense of its magnitude. Specifically, the percentage decline in Atlantic City's labor force was the largest of any metropolitan area in the country during this period. The second-largest decline was recorded by Binghamton, N.Y. which saw its labor force decrease by 6.9%. Even more

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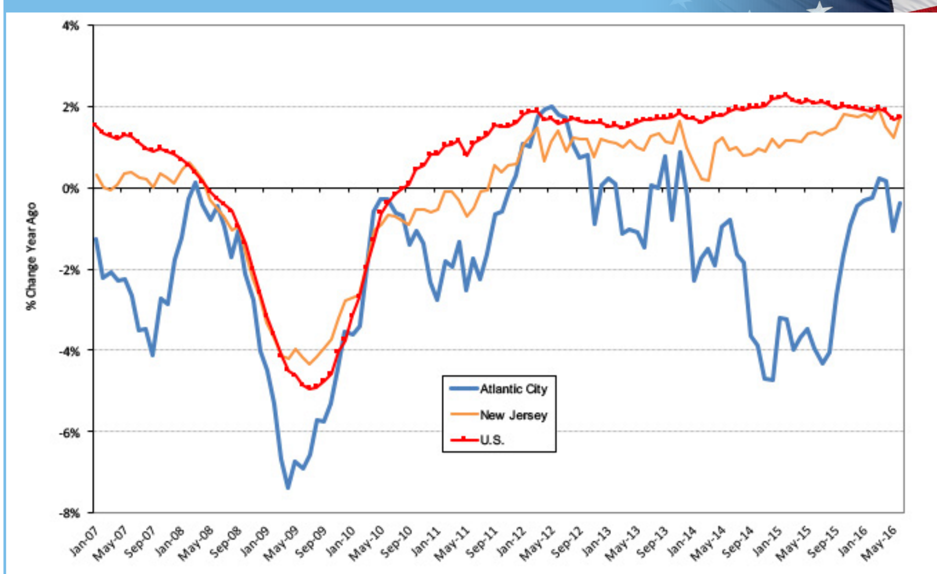
Figure 1: Establishment Job Growth: Atlantic City, New Jersey and the U.S.
January 2007 to June 2016



Source: U.S. Bureau of Labor Statistics.

ATLANTIC CITY'S ECONOMY...
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startling is the fact that Atlantic City's absolute decline was the third-largest recorded among all metropolitan areas in the country during this period. Virginia Beach-Norfolk-Newport News' labor force declined by 15,400, while Rochester's declined by 14,400. Both of these metropolitan areas' labor forces dwarf Atlantic City's, however. Whereas the former's labor force is 6.6 times as large as Atlantic City's, the latter's is 4.2 times as large.

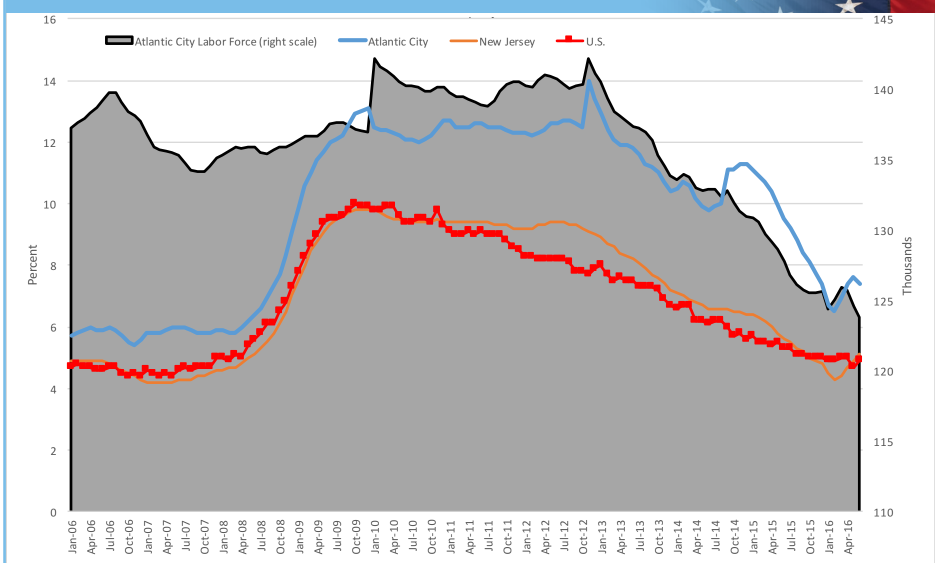
Moving forward, Atlantic City's economy will continue to struggle amid the still-evolving restructuring process taking place within its gaming industry. The recent announcement that the Taj Mahal will close following the upcoming Labor Day weekend will deal the beleaguered local economy yet another blow, as an additional 2,800 hotel casinos jobs will be lost. The Taj will be the fifth casino to close since January 2014 when the Atlantic Club was shuttered. Equally important, should New Jersey voters approve casino expansion to the northern portion of the state via this November's planned referendum, there will likely be additional fallout for Atlantic City's gaming industry over the coming years. While speculation abounds regarding what the effects of northern New Jersey casinos would be on Atlantic City's gaming halls, some analysts believe that such a scenario could eventually cost the local gaming industry another two or three casino closures. Meanwhile, the City of Atlantic City's ongoing fiscal problems—which were temporarily pushed off via the deal struck between state politicians this past spring—will also continue to weigh on the metropolitan area and its ongoing redevelopment efforts. While it will be several months before a clearer picture of the City's fiscal position emerges, the local economy will continue to suffer through what has already proven to be one of its most difficult, lengthy and tumultuous eras in history. And growing evidence that the national economy has slowed markedly this year (first quarter growth in real GDP was a paltry 0.8%, while the advanced estimate for the second quarter showed growth of only 1.2%) may further complicate Atlantic City's already difficult economic situation.

Table 1: Employment by Industry, Atlantic City Metropolitan Area
Average monthly employment (thousands) January to June

Industry/Sector	2015	2016	Change	% Change
Total Nonfarm	127.9	127.5	-0.3	-0.3%
Total ex-Leisure and Hospitality	91.4	91.5	0.2	0.2%
Private	104.6	105.1	0.5	0.5%
Construction	5.4	5.1	-0.3	-5.3%
Manufacturing	2.1	2.1	0.0	0.8%
Wholesale Trade	2.8	2.7	-0.1	-3.0%
Retail Trade	15.6	16.2	0.6	4.0%
Transportion and Utilities	3.0	2.9	-0.1	-4.4%
Information	0.8	0.8	0.0	0.0%
Financial Activities	3.8	3.8	0.1	2.2%
Prof. and Bus. Svs.	10.0	10.0	0.0	0.0%
Education and Health Svs.	19.3	19.9	0.6	3.2%
Hospitals	5.8	5.8	0.0	0.0%
Leisure and Hospitality	36.5	36.0	-0.5	-1.4%
Arts, Entertainment, and Recreation	1.6	1.5	-0.1	-8.4%
Accommodations and Food Services	34.9	34.6	-0.4	-1.1%
Accommodations	23.4	22.1	-1.2	-5.3%
Casino Hotels	21.3	20.4	-0.9	-4.2%
Restaurants and Bars	11.6	12.4	0.9	7.6%
Other Services	5.5	5.7	0.2	3.0%
Government	23.3	22.4	-0.9	-3.7%
Federal Government	2.6	2.6	0.0	0.0%
State Government	4.3	4.3	0.0	0.0%
Local Government	16.4	15.6	-0.9	-5.2%

Source: U.S. Bureau of Labor Statistics.

Figure 2: Unemployment Rate in Atlantic City, New Jersey, U.S. and Atlantic City Labor Force
January 2007 to June 2016 (Seasonlly Adjusted)



Source: U.S. Bureau of Labor Statistics.

OCEAN CITY AND VINELAND-BRIDGETON

While Atlantic City's struggles over the past several years have garnered widespread attention, the larger southern New Jersey regional economy contains two additional metropolitan areas—Ocean City (which is coincident with Cape May County) and Vineland-Bridgeton (which is coincident with Cumberland County).

While these metro area economies have, struggled to add significant numbers of jobs in recent years, similarly to Atlantic City, both managed to record job gains during the first half of this year. Ocean City's economy added 2,700 jobs year-over-year (+6.9%), while Vineland-Bridgeton's added 300 (+0.6%). Ocean City's strong first half of 2016 was fueled by a significant employment increase in its wholesale trade, transportation and utilities sector which added 1,500 jobs. At the same time, Ocean City's accommodations industry (part of the leisure and hospitality sector) which accounts for 16% of its employment base saw employment decline by 800 year-over-year during the first six months of the year.

Vineland's employment gains during the year's first half were driven by advances

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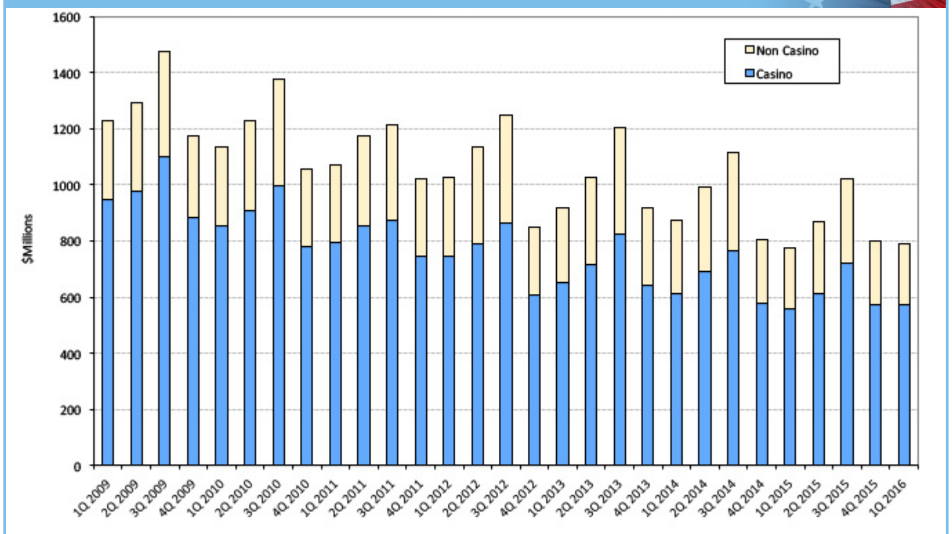
in manufacturing and wholesale trade employment. While the manufacturing sector added 400 jobs year-over-year (+5.1%), wholesale trade added 800 jobs (+28%). These solid job gains were offset, however, by losses in retail trade, professional and business services, and government employment. Combined, these sectors shed 1,100 jobs year-over-year during the first half of 2016.

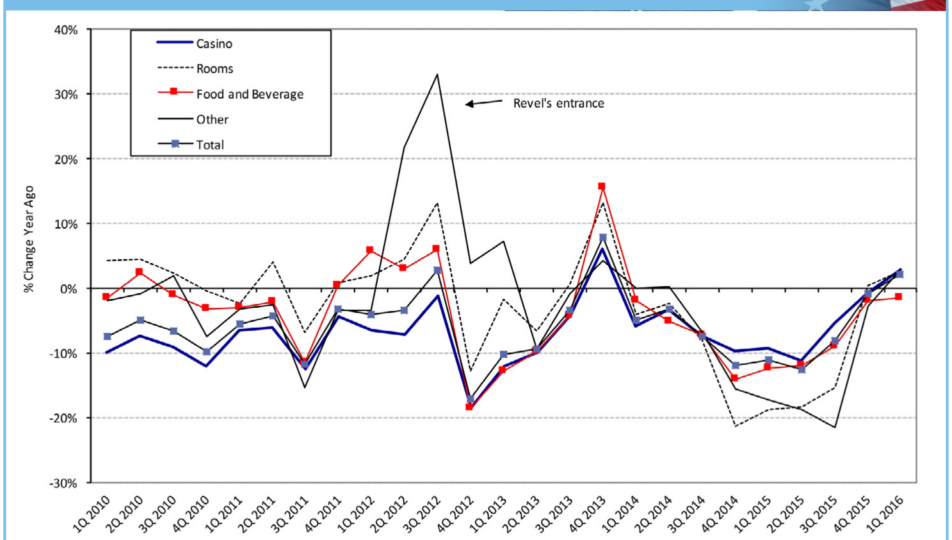
Unemployment, meanwhile, remains elevated in both metropolitan areas. In June, Ocean City's seasonally adjusted unemployment rate stood at 9.2%, while Vineland-Bridgeton's stood at 7.7%. Ocean City's unemployment rate, however, represents a significant improvement on its Great Recession-induced 2012 peak of 15.5%. And, while Vineland-Bridgeton's rate has also declined steeply from its Great Recession 2012 peak of 13.5%, it has seen its labor force decline by nearly 4% during the past two years. Ocean City's labor force in contrast grew modestly (+1.6%) during the same period.

Figure 3: Casino and Non-Casino* Revenue in the Atlantic City Gaming Industry**
1st Quarter 2009 to 1st Quarter 2016



* Includes: rooms, food and beverage, and other.
** Brick and mortar revenue only.
Source: New Jersey Division of Gaming Enforcement data. Author calculations.

Figure 4: Revenue Growth by Category in the Atlantic City Gaming Industry*
1st Quarter 2010 to 1st Quarter 2016



* Brick and mortar revenue only.
Source: New Jersey Division of Gaming Enforcement data. Author calculations.

AN INDUSTRY IN TRANSITION: A CLOSER LOOK AT THE GAMING INDUSTRY'S RECENT RESTRUCTURING

While considerable debate remains over the question of whether the Atlantic City gaming industry is approaching stabilization, here, I develop a macro picture of the industry's dynamics since early 2009. It should be underscored that the analysis focuses on the industry's aggregate trends. While gaming operators' revenues are analyzed, their costs are not. Thus, no attempt is made to weigh in on how these larger industry and revenue dynamics have affected any particular gaming operator's financial health.

The analysis that follows considers several issues, including: the industry's broader revenue trends, its revenue diversification efforts, shifting market shares and productivity. I address each of these issues in turn. I also examine the evolving relationship between the industry's revenue trends and transportation flows into and out of Atlantic City.

REVENUE TRENDS

Figures 3 and 4 show revenue trends broken out by category (in absolute and year-over-year growth terms, respectively) for the industry since the first quarter of 2009. (It should be noted that all analysis that follows refers exclusively to brick and mortar revenue.) Both casino and non-casino (room, food and beverage, and other) revenues have edged steadily lower over the past six years. Between 2009 and 2015 total industry revenue declined from $5.1 billion to $3.4 billion a 33% decline. Between the first quarters of 2009 and 2016, industry-wide casino revenue declined 39% ($373 million), while non-casino revenue fell 22% ($61 million). While all revenue streams within the non-casino revenue category declined over this period, food and beverage revenue declined the most (-26%) as sales fell $34 million between early 2009 and early 2016. At the same time, it should be noted that employment in the metropolitan area's restaurants and bars industry has continued to see steady gains over the past nine months. This may suggest that such gains—many of which have been tied to new non-casino establishment openings—have come at the expense of food and beverage revenues inside the industry's casinos. Room revenue, meanwhile, declined 19% ($20 million) over the same period, while other revenue (largely tied to non-gaming entertainment) fell 17% ($6.5 million).

As Figure 4 shows, this year's first quarter saw year-over-year increases for three of the industry's four primary revenue streams.

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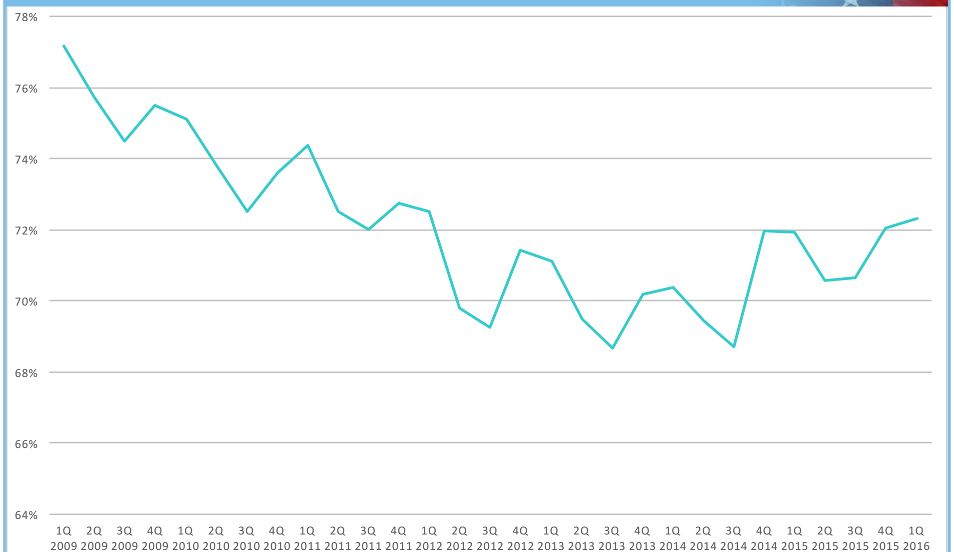
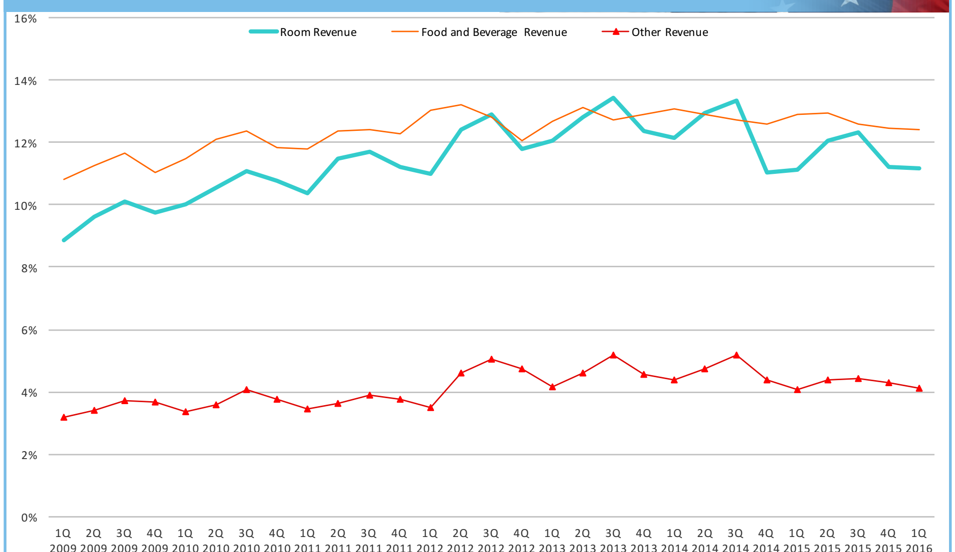
Figure 5: Casino Revenue as a Share of Total Revenue in the Atlantic City Gaming Industry*
1st Quarter 2009 to 1st Quarter 2016



* Brick and mortar revenue only.
Source: New Jersey Division of Gaming Enforcement data. Author calculations.

Figure 6: Room, Food and Beverage, and Other Revenue as a Share of Total Revenue in the Atlantic City Gaming Industry*
1st Quarter 2009 to 1st Quarter 2016



* Brick and mortar revenue only.
Source: New Jersey Division of Gaming Enforcement data. Author calculations.

While casino revenue increased 2.7% year-over-year in this year's first quarter (its first such increase since 2013's final quarter), room revenue rose 2.6%, and other revenue rose 2.7%. Food and beverage revenue, however, declined 1.6% year-over-year. All told, total industry revenue was up 2.2% year-over-year in this year's first quarter, as sales totaled $792 million, up from $775 million in 2015's first quarter. This was the first time since the fourth quarter of 2013 that the industry recorded such a year-over-year increase in total revenue, and why some believe it may have finally begun to stabilize.

REVENUE DIVERSIFICATION

Much has been made of the gaming industry's attempt in recent years to diversify its revenue streams. Figure 5 shows the share of total revenue accounted for by casino revenue for the industry as a whole. As shown, this share has indeed trended down since early 2009. In fact, this share fell to 68.7% in 2014's third quarter. While it has trended up since then (it stood at 72.3% in this year's first quarter), it remains well below the 77.2% recorded in the first quarter of 2009. Six of the eight properties operating today recorded such casino revenue share declines between the first quarter of 2009 and the first quarter of this year. Harrah's 10.3 percentage point decline (from 75.5% to 65.2%) was the largest. Meanwhile, the Tropicana saw its casino revenue share increase from 71% to 76% during the same period.

As Figure 6 shows, room revenue's share of total industry revenue climbed steadily between early 2009 and late 2013, when it peaked at 13.4%. An important part of this increase was tied to Revel's entrance into the market in April 2012. Room revenue accounted for an outsized share of Revel's revenue from its inception. In fact, room revenue accounted for 25% of Revel's revenue by mid-2013, compared to an industry-wide average of 13%. Since early 2009, the Taj Mahal has seen the most significant increase in room revenue share: 15.8% in this year's first quarter (the industry average was 11%) compared to 7.4% in early 2009.

The share of industry revenue accounted for by food and beverage sales has also increased since early 2009—albeit by less than the increase in room revenue. (Figure 6) In 2009's first quarter, food and beverage sales accounted for 10.8% of the industry's revenue. In this year's first quarter, they accounted for 12.4%. Caesars' 5.8 percentage point increase—from 8.6% in early 2009 to 14.4% in this year's first quarter—was the largest increase recorded. This still trailed industry-leader Harrah's, however, which saw food and beverage sales account for 16.2% of revenue in this year's first quarter. The Taj Mahal's 7.2% food and beverage share was the industry's smallest.

Finally, the last major revenue stream for the industry—namely, other revenue, which is largely tied to non-gaming entertainment and which has been a key area of focus for the industry as it seeks to diversify away from gaming revenue—has increased more modestly. (Figure 6) In early 2009, other revenue accounted for 3.2% of total revenue, whereas it accounted for 4.1% in this year's first quarter.

In sum, the industry has managed to reduce its reliance on casino revenue somewhat over the entire period shown in Figures 5 and 6.[1] Non-casino revenue accounted for

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REVENUE DIVERSIFICATION...
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approximately 28% of the industry's first quarter revenue this year. In the first quarter of 2009, these revenue streams accounted for 23% of all revenue. Despite this five percentage point increase, which, again, suggests the industry has had some success in diversifying its revenue base in recent years, the absolute dollar magnitudes that underlie these shares can't be glossed over. This year's first quarter casino revenue totaled $573 million, while non-casino revenue totaled $219 million. In 2009's first quarter, casino revenue totaled $946 million, while non-casino revenue totaled $280 million. Thus, industry-wide both casino and non-casino revenue have declined significantly. While the former declined 39.5% ($373 million) between early 2009 and early 2016, the latter fell by 22% ($61 million).

SHIFTING MARKET SHARES

Among the most intriguing aspects of the local gaming industry's restructuring in recent years has been its effect on market shares. Figure 9 shows the evolution of market shares in the industry between the first quarters of 2009 and 2016. The largest benefactor of the industry's restructuring in recent years—at least in market-share terms—has been Borgata, whose share of total industry revenue stood at 31% in this year's first quarter, up significantly from an early 2009 figure of 19%. Importantly, the majority of Borgata's increase in market share (8 of the nearly 12 percentage points gained since early 2009) has come since the final quarter of 2013—the last quarter before the industry began to restructure. (Atlantic Club's closure in January 2014 was followed by Showboat's in late August, and Revel's and Trump Plaza's in September of that year.)

Table 2 provides one perspective on the evolution of the industry's dynamics since the final quarter of 2013. As noted, that quarter represented the last one before 2014's wave of closures which began in mid-January. As shown, between the final quarters of 2013 and 2015, five properties experienced increases in both total revenue and market share. In addition to Borgata, this group included the Tropicana, Golden Nugget, Harrah's and Resorts. (See the northwestern quadrant of Table 2.) Since late 2013, these five properties have seen their collective market share rise by approximately 21 percentage points (from 53% to 73.5%).

Table 2 also shows how these properties' market-share gains translated into revenue increases. For example, while Golden Nugget's gain in market share was less than half of Borgata's, each percentage-point gain in market share captured by Golden Nugget translated into $6.5 million of additional revenue, compared to $4.7 million for Borgata. Each percentage point gain in market share captured by Tropicana translated into $6 million of additional revenue.

Table 2 also reveals that two properties—Caesars and Bally's—recorded much more modest gains in market share between late 2013 and late 2015 (0.4 and 0.3 percentage points, respectively). At the same time, despite these gains in market share, both properties saw total revenue decline between the final quarters of 2013 and 2015. (See the southwestern quadrant of Table 2.) Finally, the southeastern quadrant of Table 2 includes the four casinos that closed during 2014 as well as the Taj Mahal which remains open. Between the fourth quarters of 2013 and 2015, the Taj Mahal recorded decreases in both total revenue and market share. These recent industry dynamics' impact on the Taj Mahal undoubtedly played a role in the recently announced decision to shutter the property this coming September.

Table 3 provides yet another revenue-based

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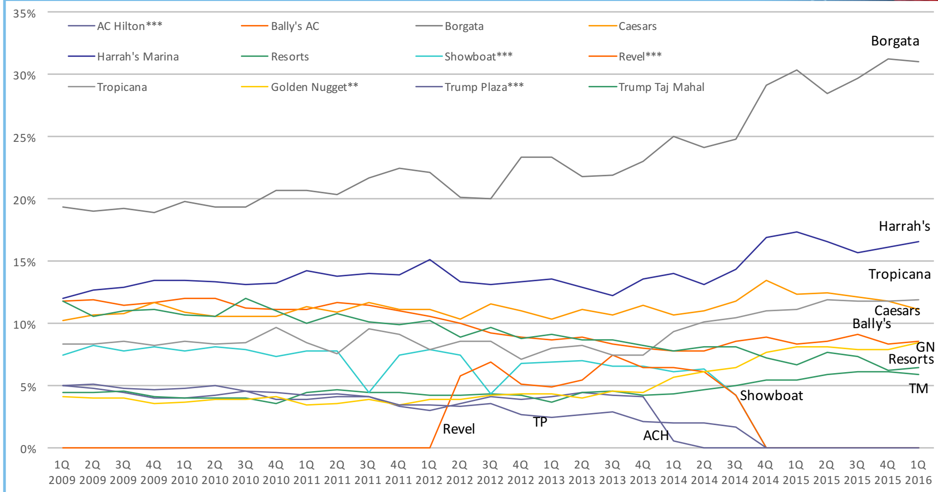
Figure 7: Property Shares of Total Revenue in the Atlantic City Gaming Industry*
1st Quarter 2009 to 1st Quarter 2016



* Brick and mortar revenue only.
** Golden Nugget purchased Trump Marina in early 2011 and commenced management on May 24, 2011
*** ACH closed January 13, 2014 . Showboat closed August 31, 2014. Revel opened on April 2, 2012 and closed September 2, 2014. Trump Plaza closed Septebmer 16, 2014.
Source: New Jersey Division of Gaming Enforcement data. Author calculations.

Table 2: Revenue vs. Market Share Dynamics in the Atlantic City Gaming Industry
4th quarter 2013 to 4th quarter 2015

Revenue Increase

Market Share *Gain*: Property	Δ Market Share (ppts.)	$ Δ TR (mil.) / ppt. Δ market share	Market Share *Loss*: Property	Δ Market Share (ppts.)	$ Δ TR (mil.) / ppt. Δ market share
Borgata	+8.3	$4.7	None		
Tropicana	+4.4	$6.0			
Golden Nugget	+3.5	$6.5			
Harrah's	+2.6	$1.8			
Resorts	+1.9	$5.3			

Revenue Decrease

Market Share *Gain*: Property	Δ Market Share (ppts.)	$ Δ TR (mil.) / ppt. Δ market share	Market Share *Loss*: Property	Δ Market Share (ppts.)	$ Δ TR (mil.) / ppt. Δ market share
Caesars	+0.4	- $25.2	Showboat	-6.6	N/A
Bally's	+0.3	- $28.3	Revel	-6.4	N/A
			Atlantic Club	-4.1	N/A
			Trump Plaza	-2.1	N/A
			Taj Mahal	-2.0	$12.9**
Industry	+21.3			-21.3	

* Negative values reflect revenue decrease and market share gain.
** Positive value reflects revenue decrease and market share loss.
Source: New Jersey Division of Gaming Enforcement data. Author calculations.

Table 3: Revenue Changes in the Atlantic City Gaming Industry
4th Quarter 2013 to 4th Quarter 2015

Property	$ Change in Total Revenue (Thousands)	$ Change in Revenue via:				Share of $ Change in Total Revenue			
		Casino	Rooms	Food and Beverage	Other	Casino	Rooms	Food and Beverage	Other
Bally's AC	-$7,399	-$4,307	-$3,095	-$472	$475	58.2%	41.8%	6.4%	-6.4%
Borgata	$39,249	$35,404	$2,692	$1,391	-$238	90.2%	6.9%	3.5%	-0.6%
Caesars	-$10,249	-$11,034	-$398	$1,215	-$32	107.7%	3.9%	-11.9%	0.3%
Harrah's	$4,755	$1,465	$1,636	$1,806	-$152	30.8%	34.4%	38.0%	-3.2%
Resorts	$9,900	$9,714	$472	-$878	$592	98.1%	4.8%	-8.9%	6.0%
Tropicana	$26,079	$23,123	$888	$994	$1,074	88.7%	3.4%	3.8%	4.1%
Golden Nugget	$22,599	$20,438	-$146	$1,495	$812	90.4%	-0.6%	6.6%	3.6%
Taj Mahal	-$25,679	-$17,890	-$3,071	-$3,788	-$930	69.7%	12.0%	14.8%	3.6%
Industry	**$59,255**	**$56,913**	**-$1,022**	**$1,763**	**$1,601**	**96.0%**	**-1.7%**	**3.0%**	**2.7%**

Source: New Jersey Division of Gaming Enforcement data. Author calculations.

perspective on how the industry's eight existing operators have managed the restructuring process. First, it shows each operator's change in total revenue between the final quarters of 2013 and 2015, along with dollar changes for each major revenue stream. It also breaks out each stream's respective share of the total revenue change. As the final row shows, these operators managed, collectively, to increase total revenue by $59 million between these two quarters. As shown, this revenue increase was heavily reliant upon casino revenue, which accounted for 96% of the increase in total revenue. Increases in food and beverage and other revenue also contributed—albeit far less—to the overall revenue gain, while room revenue actually decreased.

Table 3 also reveals that there were important differences in the way the industry's recent restructuring has affected operators' revenue streams. For example, Bally's revenue decline was largely driven by casino and room revenue losses, while Caesars' revenue decline was almost exclusively a function of casino revenue. At the same time, Caesars saw a sizable increase in food and beverage revenue which partly offset its casino revenue losses. Interestingly, Tropicana was the only property that recorded increases across all four revenue categories. Harrah's revenue increase was the broadest-based, with three of the four revenue streams accounting for north of 30% of its total revenue gain.

Finally, and importantly, it should be noted (though it is not shown in Table 3) that during this period—from the fourth quarter of 2013 to last year's final quarter—these eight operators' reliance on casino revenue actually *increased*. Collectively, casino revenue accounted for 70% of these operators' total revenue in 2013's fourth quarter. In last

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year's final quarter, they accounted for 72%. This represents an important qualification to the aforementioned revenue diversification within the industry. The increase in industry diversification noted above reflects a longer time horizon—namely, from early 2009 to early 2016—and thus reflected a period during which there were more operators in the industry. Since the industry's restructuring process formally commenced in early 2014, casino revenue has become, for the (now smaller) industry as a whole, a larger share of total revenue.

ROOMS, OCCUPANCY AND ROOM RATES

Figures 8-10 provide three perspectives on the recent dynamics within the accommodations component of Atlantic City's gaming industry. Figure 8 shows the industry's total room count, along with quarterly occupancy rates. (Owing to the industry's seasonality, each line in the figure represents a different quarter so that like-quarters can be directly compared across years.) Unsurprisingly, the industry's room supply began to increase in 2012 in tandem with Revel's entrance into the market. Thus, 2012 saw the industry's room inventory increase 6.6% to 18,448. Room supply increased again the following year before plummeting amid the wave of casino closures in late 2014. Between the final quarter of 2013 (the quarter preceding Atlantic Club's closure) and the fourth quarter of 2014 (the quarter following the closures of Showboat, Revel and Trump Plaza), the industry lost 5,024 rooms or 27% of its supply.

While the contraction in room supply did lift the industry's overall occupancy rate between 2013 and 2015 (to 80.7% from 77.4%), it is noteworthy that 2015's rate remained below 2011's 82.7%. Even more interesting are quarterly comparisons of occupancy rates between 2013 and 2015. Whereas all quarters saw increases during this period, the important third quarter (which accounts for approximately 30% of annual room revenue in the industry) eked out a notably small 0.7 percentage point increase.

Figure 9 shows the industry's average rate per occupied room. (Again, each line in the figure represents a different quarter so the like-quarters can be directly compared across years.) The industry's average room rate hovered near $98 between 2010 and 2013.

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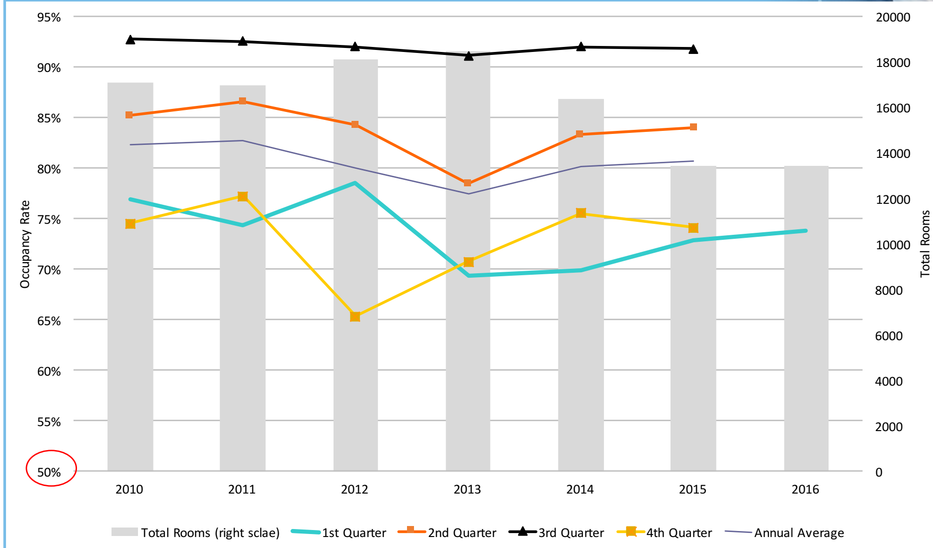
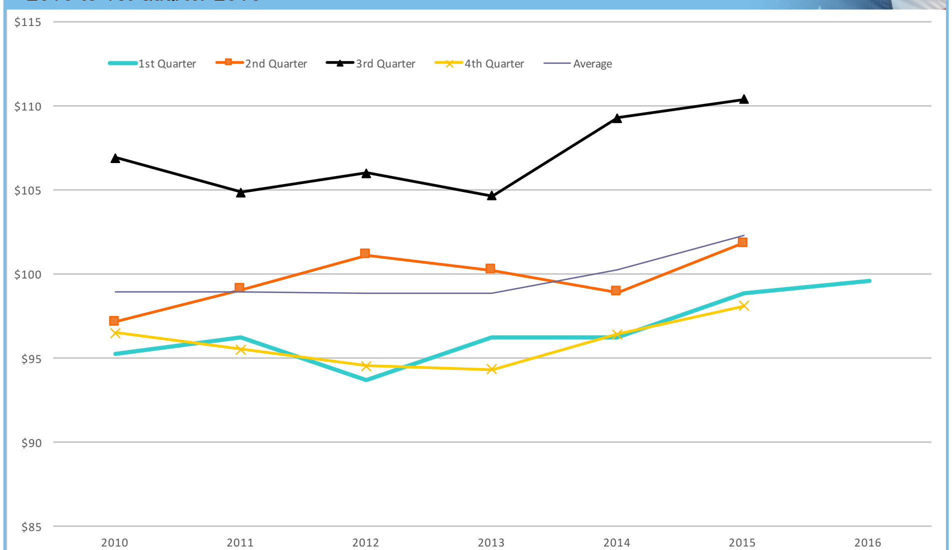
Figure 8: Hotel Room Count and Occupancy Rates in the Atlantic City Gaming Industry
2010 to 1st Quarter 2016



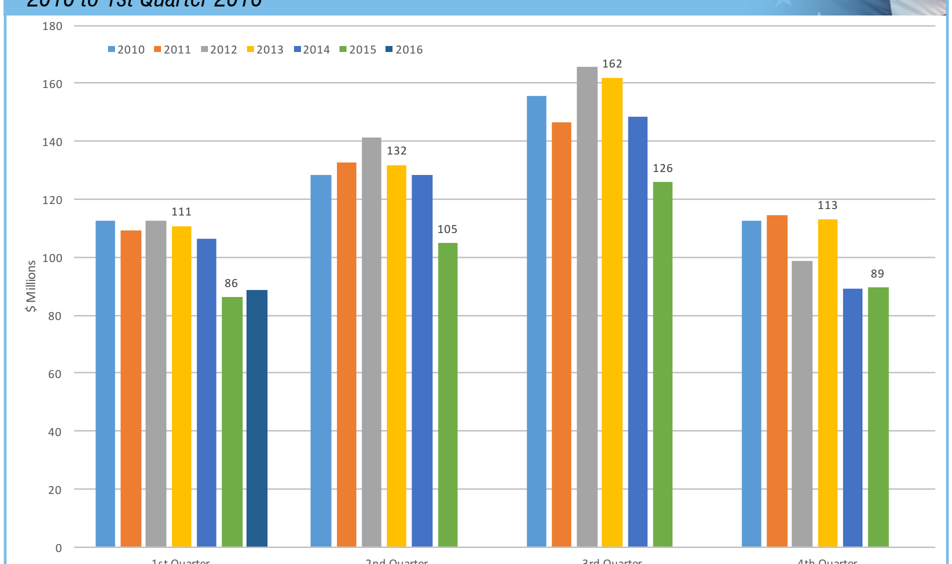
Source: New Jersey Division of Gaming Enforcement.

Figure 9: Average Rate per Occupied Room in the Atlantic City Gaming Industry
2010 to 1st Quarter 2016



Source: New Jersey Division of Gaming Enforcement.

Figure 10: Room Revenue by Quarter in the Atlantic City Gaming Industry
2010 to 1st Quarter 2016



Source: New Jersey Division of Gaming Enforcement.

ROOMS, OCCUPANCY,...
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In 2014, it rose 1.4%, while it increased 2.1% in 2015. Between the final quarter of 2013 (the last quarter ahead of the following year's casino closures) and 2015's final quarter, the industry's average room rate increased 4%. However, this overall industry increase in room rate masks important differences across properties. For example, between the two aforementioned quarters, Harrah's average room rate climbed 9.4% (to $100.52), while neighboring Golden Nugget's declined 7.1% (to $73.50).

Finally, Figure 10 shows the industry's room revenue by quarter between 2010 and the first quarter of 2016. The figure also shows actual quarterly dollar amounts for room revenue in 2013 and 2015. As noted, the industry's room revenue has declined approximately 20% since 2010. Since 2013, the last year before 2014's casino closures, it has declined 21.5%.

PRODUCTIVITY

Figure 11 provides one means of gauging the effect of the industry's recent restructuring on its productivity—when productivity is measured as revenue per casino hotels employee. As shown, the industry's employment has declined precipitously since early 2009 in tandem with falling revenue. Between the fourth quarters of 2009 and 2012, casino hotels employment declined by 9.3% (3,300 jobs). Over the same period, total revenue in the industry declined $913 million to $4.3 billion from $5.2 billion or 17.7%. Putting these two series together provides a rough measure of the industry's productivity. As shown, productivity declined 9.3% between 2009 and 2012—from $147,000 to $133,000. Since 2012, productivity has rebounded strongly, amid continued declines in both revenue and employment. Between 2012 and 2015, revenue declined by 18.6% to $3.5 billion, while the number of casino-hotel employees fell by 33% to 21,300. Productivity, meanwhile, rose nearly 22% over the same period—to $162,000 last year from $133,000 in 2012.

TRANSPORTATION FLOWS AND CASINO WIN

Figure 12 shows the historic relationship between transportation flows into (and out of) Atlantic City and the gaming industry's total casino win between January 2009 and June 2016. More specifically, it shows the monthly number of total transactions at the Pleasantville toll plaza on the Atlantic City Expressway—a key entry point into Atlantic

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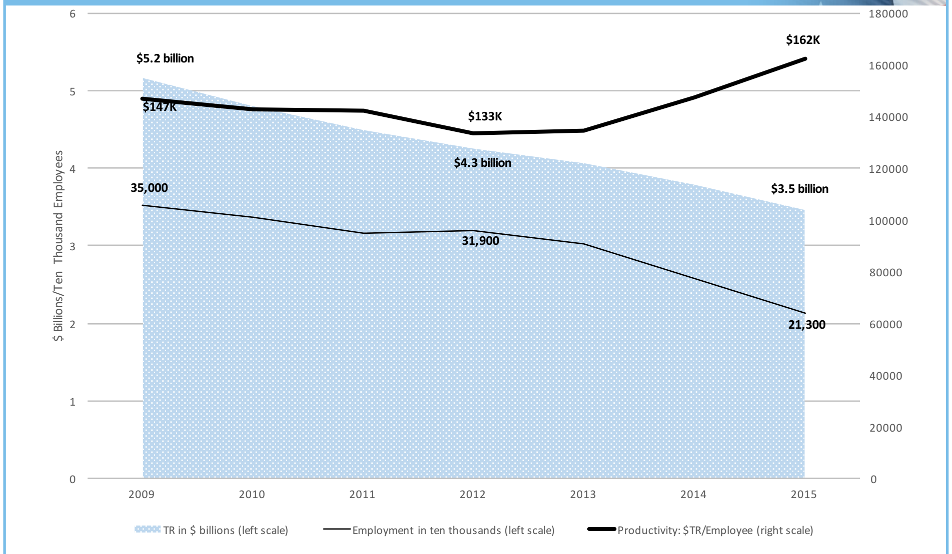
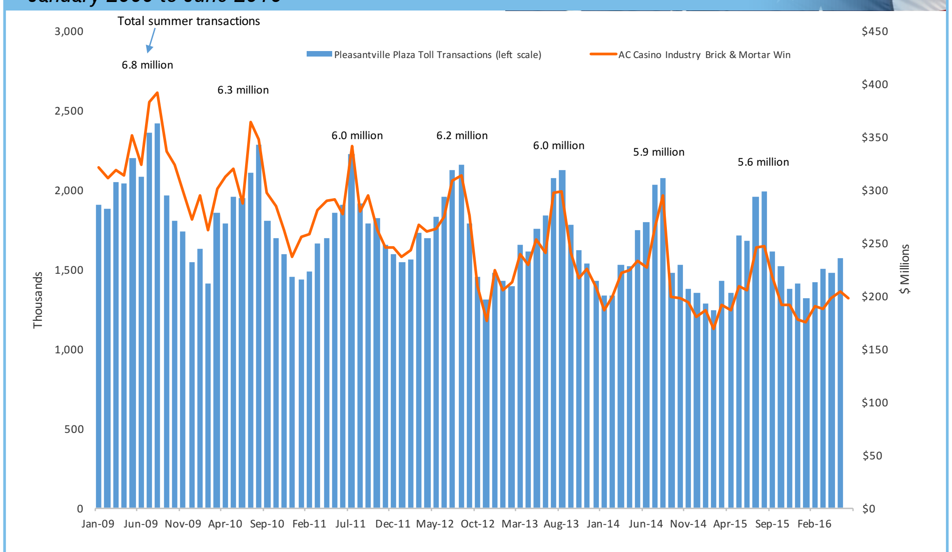
Figure 11: Total Revenue, Employment, and Productivity in the Atlantic City Gaming Industry
2009 to 2015



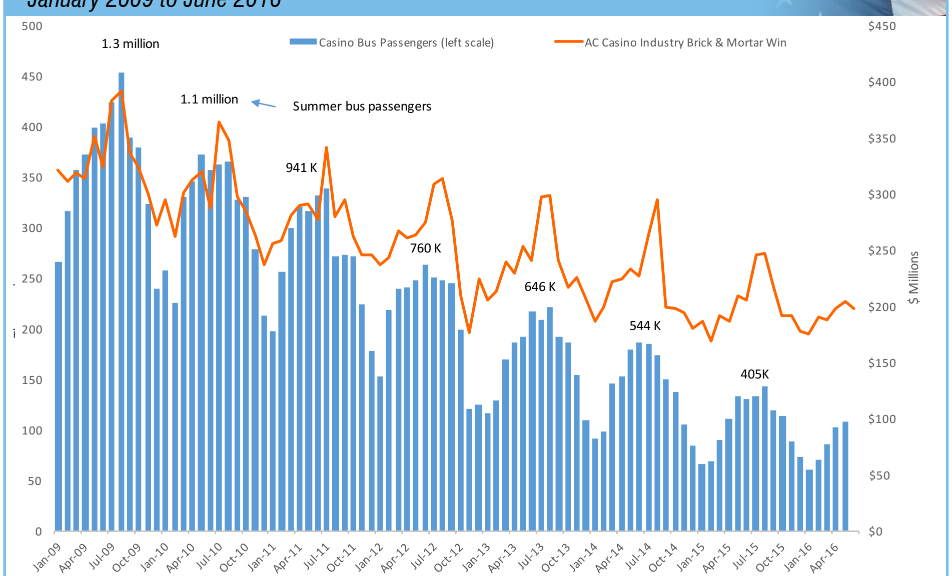
Sources: New Jersey Division of Gaming Enforcement and U.S. Bureau of Labor Statistics. Productivity by author calculation.

Figure 12: Casino Win* in the AC Gaming Industry and Pleasantville Toll Plaza Transactions
January 2009 to June 2016



* Brick and mortar revenue only.
Source: New Jersey Division of Gaming Enforcement and South Jersey Transportation Authority.

Figure 13: Casino Win* in the AC Gaming Industry and Casino Bus Passenger Activity
January 2009 to June 2016



* Brick and mortar revenue only.
Source: New Jersey Division of Gaming Enforcement and South Jersey Transportation Authority.

TRANSPORTATION FLOWS,...
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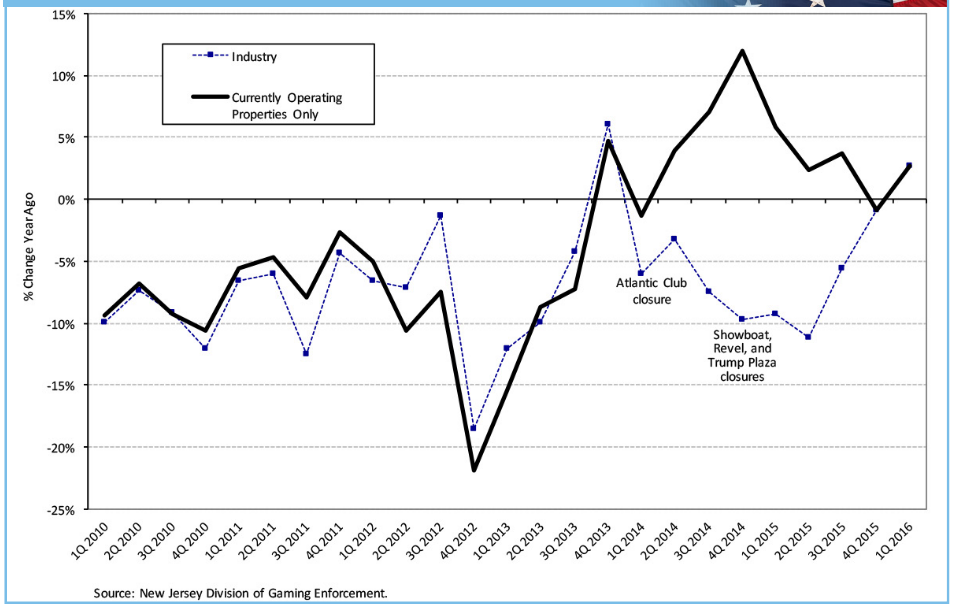
City. It also shows the total number of summer (June-August) transactions. As shown, the industry's decline in casino win has closely tracked the decline in toll transactions through the Pleasantville toll plaza. (In fact, the correlation between year-over-year growth in casino win and toll transactions is a very high 0.76.) Summer-time toll transactions through the Pleasantville toll plaza have fallen significantly since 2009. Between the summer of 2009 and last summer, toll transactions declined nearly 18% (from 6.85 million to 5.63 million). Over the same period, the industry's summer casino win declined nearly 37% (from $1.1 billion to $696 million). Putting these two figures together allows one to derive a rough proxy of the dollar value (in casino win terms) per toll transaction. For example, during the summer months of 2009, each Pleasantville toll transaction yielded $160 of casino win for the industry. Last summer, this figure was $124—a 23% decline. Last summer, total toll transactions through Pleasantville declined 4.6% year-over-year, while casino win fell 11.3%. At the same time, the Egg Harbor toll plaza (which provides a reasonable proxy for summer shore vacation activity) saw total transactions increase 0.4%. This represented a smaller gain than 2014's 2.2% summer gain, however.

Figure 13 shows the remarkable decline in casino-bus passenger activity since 2009. As with Figure 12, Figure 13 also shows the total number of casino-bus passengers during each year's summer months. As shown, the number of casino-bus passengers totaled 1.3 million during the summer months of 2009. Last year, they totaled 405,000—a startling 68% decline.

ATLANTIC CITY GAMING INDUSTRY'S FUTURE

While many points could be drawn out of the foregoing analysis, among the most important would seem to be this: The local gaming industry's restructuring, which has proven wrenching for the area's economy over the past several years, remains incomplete. At the same time, it remains true and unsurprising, that most, though not all, of the industry's currently operating eight properties have benefited (at least in revenue terms) from the industry's consolidation. As Figure 14 shows, the industry's currently operating eight properties began (as a group) to record significant year-over-year gains in casino revenue beginning in the second quarter of 2014 following the closure of the Atlantic Club in January of that year. (In fact, these eight properties had actually recorded a year-over-year decline in casino revenue in the first quarter of 2014.) The rate of these over-the-year gains for these eight properties post-Atlantic Club's closure accelerated during the reminder of 2014 before slowing in 2015. Last year's final quarter actually saw a year-over-year decline in casino revenue for these eight (currently operating) properties—a sign that the local industry's consolidation to date has not yet proven sufficient to offset the powerful competitive regional gaming forces—ones that will continue to mount owing to additional new casinos scheduled to come online over the near future. This backdrop hangs over this year's first quarter (highly welcomed) 2.7% year-over-year gain in brick-and-mortar casino revenue for the industry. (This year's first quarter represented the first "clean" quarter for year-over-year comparative analytical purposes, as fourth quarter 2015 versus fourth quarter 2014 comparisons involve the fallout that ensued in the months following the wave of casino closures in late 2014.)

Figure 14: Casino Revenue Growth in the Atlantic City Gaming Industry
2010 to 1st Quarter 2016



Further, and importantly, despite efforts to diversify its revenue base, the industry's remaining eight operators have collectivelyactually seen their reliance on casino revenue increase modestly over the past two years. This fact seems especially discouraging given the industry's important role in larger local economic development efforts to transform the local economy into a broader-based resort destination—one that offers a more diverse non-gaming entertainment and tourism portfolio. It seems reasonable to assume that the gaming

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ATLANTIC CITY GAMING...

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industry's sophisticated management teams have strived hard over the past few years to diversify their revenue bases away from casino revenue. The fact that they have, at least as an industry, collectively failed to do so to date suggests that such diversification efforts will remain an ongoing and long-term project.

The recently announced closure of the Taj Mahal—slated to close following the upcoming Labor Day weekend—of course provides additional evidence that the local gaming industry's restructuring process has not yet run its course. The Taj Mahal's closure will cost the local economy an additional 2,800 jobs. This closure, the industry's fifth since early 2014, will bring the total number of lost casino jobs in Atlantic City to approximately 12,000 since the end of 2013. The larger significance of the local gaming industry's recent contraction can only be grasped by placing it in a larger national context. Between the fourth quarters of 2013 and 2015, the largest total establishment job loss among the nation's 382 metropolitan areas was recorded by Lafayette, La. which saw its nonfarm establishment job base shrink by 10,400 jobs. Based on U.S. Bureau of Labor Statistics data, Atlantic City's nonfarm job base declined by 7,400 over the same period. This represented the second-largest absolute and percentage declines among all metropolitan areas in the country.[2]

While the four previous closures cost the metropolitan area approximately 7,660 jobs, the industry's remaining eight operators actually trimmed their payrolls by nearly 1,500 between the end of 2013 and the end of 2015.[3] All told, by year's end the gaming industry's job losses (including the impending loss of jobs associated with the Taj Mahal's closure) will have cost the local economy approximately $249 million of lost wages and salaries since December 2013. This lost payroll represents approximately 4.7% of the metropolitan area's 2013 total covered wages and salaries, which totaled $5.3 billion.

Of course, as noted at the outset, the local gaming industry's future will be intimately tied to this coming November's referendum. Should New Jersey voters approve casinos in the northern part of the state (polls from earlier this summer showed conflicting results regarding voters' position on the issue) there are widespread expectations that Atlantic City's gaming industry will likely undergo additional consolidation. While speculation abounds regarding how extensive such a consolidation could be, some analysts believe that northern casinos may eventually force an additional two or three Atlantic City gaming halls to close.[4] In this vein, Boyd Gaming's recent decision to sell its 50% stake in industry-leader Borgata to partner MGM is intriguing. News reports indicate that Boyd received $589 million (after deducting its share of Borgata's currently outstanding debt) in the recently completed transaction—an amount that represents roughly one-half of Borgata's total 2015 revenue of $1.17 billion.

HOUSING MARKET AND POPULATION UPDATE

Atlantic City economy's ongoing struggles continue to weigh heavily on its real estate sector. Home prices in the metropolitan area, which had shown signs of stabilizing in early 2013, have continued to decline over the past two and a half years. In fact, through the first six months of this year, single-family home prices declined another 3.6% year-over-year according to Freddie Mac's Home Price Index which tracks single-family home prices in the states and metropolitan areas based on a repeat-transactions methodology. This rate of decline, moreover, was greater than comparable first-half declines in home values in 2014 (-2.1%) and 2015 (-2.2%). These home price pressures, as has been widely reported, continue to place Atlantic County at or near the top of the nation's leaders in home foreclosures. As the number of foreclosures remains high in the local economy, it

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HOUSING MARKET...
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continues to put downward pressure on home prices across the metropolitan area. Thus, a feedback loop seems to have set in over the past two years as continued declines in home prices work to increase the number of underwater homeowners—many of whom are forced into foreclosure.

Reflecting its weakened economy and real estate market, Atlantic City has also experienced population losses the last two years, according to Census Bureau population estimates released this past spring. While the metropolitan area lost 0.3% of its population (roughly 800 individuals) between July 2013 and July 2014, the period between July 2014 and last July saw it lose another 0.5% (1,280 individuals). More troubling, however, is the fact that these rates of population loss reflect significant international in-migration to the metropolitan area. In other words, actual domestic out-migration from the local economy has been steadily rising over the past several years. Indeed, between April 2010 and July 2015, total domestic out-migration from Atlantic City totaled 12,637. Natural increase (births minus deaths) totaled 3,846 over the same. International migration to Atlantic City—which totaled 8,527 during this period—thus proved critical to offsetting the large flow of out-migrants from the local economy. The upshot is that Atlantic City's rather modest population losses over the past few years—in the face of major economic disruptions that have worked to push thousands to pursue domestic out-migration—are largely the product of a still-robust flow of international in-migration to the local area.[5]

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ENDNOTES

[1] As explained in more detail below, there is an important qualification to this statement.

[2] The 12,000 employment figure, it should be noted, is based on casinos' filings with the New Jersey Division of Gaming Enforcement (DGE). Historically, there has been a small absolute difference (though not a growth rate difference) between the casino industry's DGE employment filings imply and the U.S. Bureau of Labor Statistics' (BLS) monthly estimate of casino hotels employment in Atlantic City. Whereas DGE-based employment filings show a decline of 9,123 in casino employment between the end of December 2013 and end of December 2015 (-28.1%), BLS figures for December in each of these years indicate a decline of 8,100 (-28.6%).

[3] Again, the figures cited here are based on DGE filings.

[4] Based on reporting by the Press of Atlantic City, Fitch Ratings recently predicted that as many as four Atlantic City properties could close if casino gambling comes to North Jersey. See, Brian Ianieri, "North Jersey casino expansion referendum faces defeat: Poll" Press of Atlantic City, July 11, 2016.

[5] For additional information, see the Spring 2016 edition of Light's On published by The Lloyd D. Levinson Institute of Gaming, Hospitality, and Tourism at Stockton University.

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