

# Lecture #6

## Activity Ratios

Occupancy Rates

Inventory turnover

### Celerity Hotel and Beach Resort

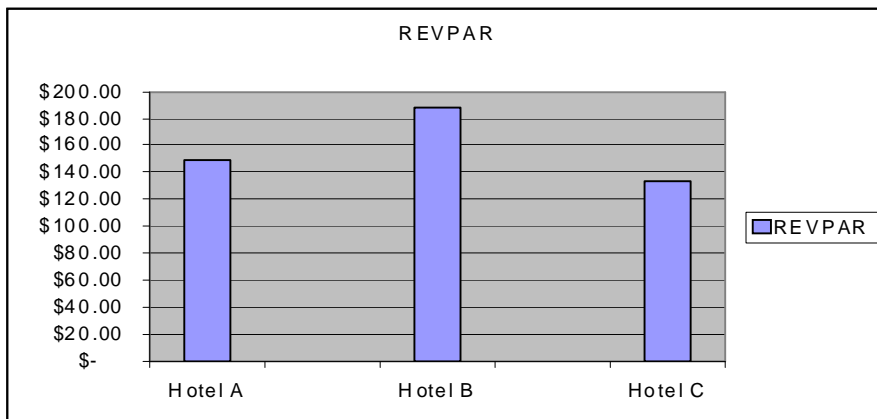
Ratio Analysis	2007	2008	Definition
<b>Activity Ratios</b>			
Inventory Ratio (Food)		0.70 Times	Cost of Food Revenues/Avg Inventory
Fixed Asset Turnover Ratio		0.38 Times	Rev / Avg of FA
Asset Turnover Ratio		0.31 Times	Rev / Avg of Total Assets
Occupancy Rate			
<b>Operating Ratios</b>			
OR	76%	77%	Occupancy Rate
ADR	\$ 240.00	\$ 260.00	Average Daily Rate
Number of Rooms	300	300	# or Rooms
REVPAR	\$182.65	\$200.91	Rooms Revenue / Available Room or OR * ADR

### The REVPAR Strategy: OC Vs ADR

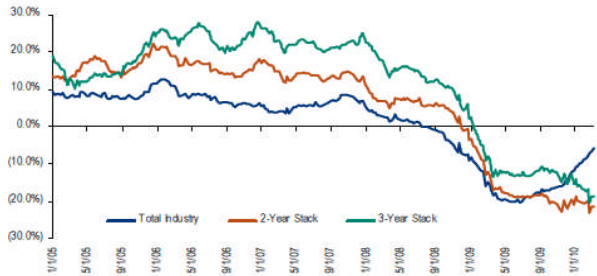
Example:

#### Chasing REVPAR Strategy

	<u>Hotel A</u>	<u>Hotel B</u>	<u>Hotel C</u>
OR	30%	75%	95%
ADR	\$ 500.00	\$ 250.00	\$ 140.00
<b>REVPAR</b>	<b>\$ 150.00</b>	<b>\$ 187.50</b>	<b>\$ 133.00</b>



**Chart 1: Total US RevPAR**



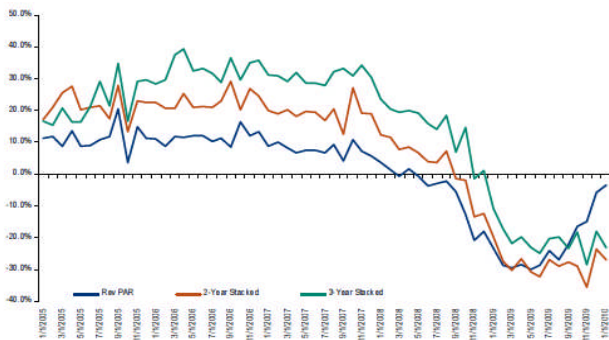
Source: BoFA Merrill Lynch Gaming & Lodging Research, Smith Travel Data

**Table 2: Total US Hotel Statistics**

Week Ending	Occ	ADR	RevPAR 1-Year	RevPAR 2-Year
2/13/10	-2.3%	-4.7%	-6.9%	-22.7%
2/20/10	2.4%	-4.4%	-2.2%	-26.0%
2/27/10	2.5%	-4.7%	-2.3%	-23.5%
3/6/10	4.0%	-3.0%	0.9%	-20.6%
4-wk Avg	1.7%	-4.2%	-2.6%	-23.2%
QTD	0.9%	-5.6%	-5.4%	

Source: BoFA Merrill Lynch Gaming & Lodging Research, Smith Travel Data

**Chart 2: Luxury RevPAR**



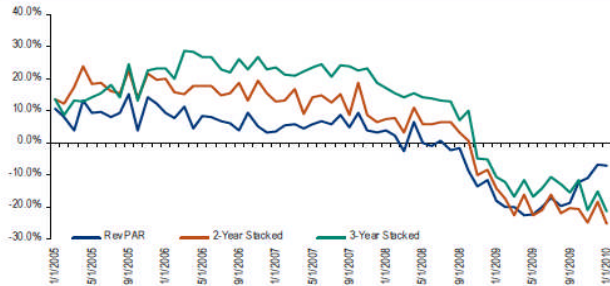
Source: BoFA Merrill Lynch Gaming & Lodging Research, Smith Travel Data

**Table 3: Luxury Hotel Statistics**

Week Ending	Occ	ADR	RevPAR 1-Year	RevPAR 2-Year
2/13/10	3.3%	-3.6%	-0.4%	-26.6%
2/20/10	9.2%	-7.4%	1.1%	-30.8%
2/27/10	11.4%	-7.2%	3.3%	-29.0%
3/6/10	16.5%	-5.4%	10.2%	-26.4%
4-wk Avg	10.1%	-5.9%	3.6%	-28.2%
QTD	8.8%	-8.2%	-0.2%	

Source: BoFA Merrill Lynch Gaming & Lodging Research, Smith Travel Data

**Chart 3: Upper Upscale RevPAR**



Source: BoFA Merrill Lynch Gaming & Lodging Research, Smith Travel Data

**Table 4: Upper Upscale Hotel Statistics**

Week Ending	Occ	ADR	RevPAR 1-Year	RevPAR 2-Year
2/13/10	0.5%	-7.1%	-6.7%	-22.2%
2/20/10	7.9%	-7.2%	0.2%	-28.2%
2/27/10	7.4%	-7.3%	-0.5%	-24.9%
3/6/10	8.4%	-5.5%	2.4%	-21.6%
4-wk Avg	6.1%	-6.8%	-1.2%	-24.2%
QTD	5.2%	-9.4%	-4.7%	

Source: BoFA Merrill Lynch Gaming & Lodging Research, Smith Travel Data

<u>Hotel Revenue Assumptions:</u>
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- OR (Occupancy Rate)
- ADR (Average Daily Rate)
- #Rooms
- Days of operations in a year

OR x ADR = REVPAR

#Rooms x Days in a year = Annual Available Rooms

Hotel Revenues = Revpar x Annual Available Rooms

Or

Hotel Revenues = OR x ADR x # Rooms \* Days in operation in a year (365)

<u>Food &amp; Beverage Assumptions:</u>
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3 - 4 formats:

Breakfast

Lunch

Dinner

After Dinner

Weekends/Weekdays

Operating Assumptions:

- TO (turnover)
- Average Check per person
- Number of Seats
- Days in a year
- # of Formats

Annual Breakfast Revenue = Breakfast TO x Lunch Average Check x #  
Seats x number of days

Annual Lunch Revenue = Lunch TO x Lunch Average Check x # Seats x  
number of days

Annual Dinner Revenue = Dinner TO x Dinner Average Check x # Seats x number of days

Annual Revenues = Annual Breakfast + Annual Lunch + Annual Dinner

<u>Casino Assumptions:</u>
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Number of Wins

Slot regulation percentage win

### Payout percentage

Slot machines are typically programmed to pay out as winnings 82% to 98% of the money that is wagered by players. This is known as the "theoretical payout percentage" or RTP, "return to player". The minimum theoretical payout percentage varies among jurisdictions and is typically established by law or regulation. For example, the minimum payout in [Nevada](#) is 75%, and in [New Jersey](#), 78%.

The winning patterns on slot machines – the amounts they pay and the frequencies of those payouts – are carefully selected to yield a certain fraction of the money played to the "house" (the operator of the slot machine), while returning the rest to the players during play. Suppose that a certain slot machine costs \$1 per spin. It can be calculated that over a sufficiently long period, such as 1,000,000 spins, that the machine will return an average of \$950,000 to its players, who have inserted \$1,000,000 during that time. In this (simplified) example, the slot machine is said to pay out 95%.

## Vigorish (Vig)

### Casino games

*Vig* may generically refer to the built-in house advantage on most bets on any game in a casino. The term may also refer to, and be applied in specific ways to, particular casino games.

- [Baccarat](#), in the house-banked version of baccarat (also mini-baccarat) commonly played in North American casinos, vigorish refers to the 5% commission (called the [cagnotte](#)) charged to players who win a bet on the [banker hand](#). The rules of the game are structured so that the banker hand wins slightly more often than the player hand; the 5% vigorish restores the [house advantage](#) to the casino for both bets. In most casinos, a winning banker bet is paid at [even money](#), with a running count of the commission owed kept by special markers in a *commission box* in front of the dealer. This commission must be paid when all the cards are dealt from the shoe or when the player leaves the game. Some

casinos don't keep a running commission amount, and instead withdraw the commission directly from the winnings; a few require the commission to be posted along with the bet, in a separate space on the table.

- **[Backgammon](#)**, the *recube vig* is the value of having possession of the [doubling cube](#) to the player being offered a double.
- **[Craps](#)**, vigorish refers to the 5% commission charged on a *buy* bet, where a player wishes to bet that one of *the numbers* — 4, 5, 6, 8, 9 or 10 — will be rolled before a 7 is rolled. The commission is charged at the rate of \$1 for every \$20 bet. The bet is paid off at the true mathematical odds, but the 5% commission is paid as well, restoring the house advantage. For many years, this commission was paid whether the bet won or not. In recent years, many casinos have changed to charging the commission only when the bet wins, which greatly reduces the house advantage; for instance, the house advantage on a buy bet on the 4 or 10 is reduced from 5% to 1.67%, since the bet wins one-third of the time (2:1 odds against). In this case, the vig may be deducted from the winnings (for instance, a \$20 bet on the 4 would be paid \$39 — \$40 at 2:1 odds, less the \$1 commission), or the player may simply hand the commission in and receive the full payout. This rule is commonplace in [Mississippi](#) casinos, and becoming more widely available in [Nevada](#).
- **Poker**
  - In [pai gow poker](#), a 5% commission charged on all winning bets is referred to as vigorish. Unlike baccarat, the commission is paid after each winning bet, either by the player handing in the amount from his stack of chips, or by having the vig deducted from the winnings.
  - In **table [poker](#)**, the vigorish, more commonly called the *[rake](#)*, is a fraction of each bet placed into the [pot](#). The [dealer](#) removes the rake from the pot after each bet (or betting round), making change if necessary. The winner of the hand gets the money that remains in the pot after the rake has been removed. Most casinos take 5-10% of the pot, capping the total rake at \$3 or \$4.
- **[Slot machines](#)** - the payouts and winning combinations available on most slot machines and other electronic gambling systems are often designed such that an average of between 0.1% to 10% (varying by machine and facility) of funds taken in are not used to pay out winnings, and thus becomes the house's share. Machines or facilities with a particularly low percentage are often said to be *loose*.