An Open Look at OpenTable

Share Price as of Feb-27-2011	$90.04
Shares Out.	23.0
Market Capitalization**	2,072.4
- Cash	42.5
= Total Enterprise Value	2,029.8
Earnings	14.10
EBIT	17.20
P/Book	19.12
P/E	146.98
EV/EBIT	118.01
Revenue Growth YoY	44.3%
Gross Profit Margin	71.9%
EBITDA Margin	24.7%
EBIT Margin	18.1%
Net Income Margin	14.2%

Introduction:
Don't short high valuations. Short broken business models. Those funds who have been shorting OpenTable since it IPOed in 2009, might have wished they had tattooed that maxim onto their foreheads. OpenTable is an online restaurant reservation booking website that allows customers to find open tables at restaurants and book them. After struggling to get its IPO priced, the stock has over the past year seen its shares go up more than fourfold and now trades at a 150 P/E. In the fall, there were several presentations floating around discussing OpenTable as a short. Much of the analysis zeroed in on OpenTable's incredibly high valuation relative to current earnings. Since then, the stock has increased a further 50%. This price action begs the obvious question - Is OpenTable the next Netflix, a company with a surprisingly strong business model and a long run way of growth or will it flare out like many other dotcoms?

Understanding the Business Model:
OpenTable's public face to the world is its website which offers a platform for users to book reservations. However, its actual costumers are not the web users but the featured restaurants. OpenTable sells them an integrated software and hardware package that allows them to computerize host-stand operations and mange their reservations. OpenTable collects revenue in three ways – its initial sale of the package, a monthly subscription for service and upkeep and then a nominal fee per successfully filled reservation booked through the website.

Key Investing Factors:
There are two key investing factors that will determine whether this stock is a long or short. The first is the Total Addressable Market. At the moment, the TAM is defined as all reservation based restaurants in the United States and abroad. OpenTable's ability to grow revenue will be dependent on the extent to which they can add restaurants to their network and their ability to grow their revenue per restaurant by either charging higher subscription rates or increasing booked reservations. The second important factor will be determining the ultimate margins. If they are the long term dominant player and actually have operating leverage then this business could have extremely high margins.

Addressing TAM:
According to the Restaurant Association of America, there are roughly 947,000 full service restaurants in the world of which 7% take reservations which equates to reservation taking restaurants of 66,150. In their own filings, OpenTable estimates that the reservation taking market in the United State is 35,000. For simplicity sake, let's assume that the total world market is 70,000 restaurants – half in the United States and half abroad. On a per restaurant basis, the last 12 months, OpenTable made $6,350 with this revenue largely being comprised of subscription revenue ($2,800) and revenue from actual bookings ($3,004) and the remainder being installation fee ($510). With 70k reservation taking restaurants worldwide and their own roughly $6,350 a year in revenue per restaurant, the current TAM for this service is $444 million.

Addressing Competitive Advantages:
OpenTable has the first mover advantage and has built a large network. The bull case rests on the notion that the network effect will create a positive feedback loop whereby additional restaurants are going to OpenTable because that is where the costumers go which will reinforce the desire for consumers to go to OpenTable. In their filings, OpenTable does not even acknowledge the other web-based competitors but rather sees their competitor being the traditional method of booking over the telephone. The key questions will be can other internet competitors arise?

Building a Bullish Model:
In order to get a sense of what a bullish valuation would look like, I built a model with the most aggressive assumptions possible. For the restaurant growth rates, I accelerated the current organic growth rates and assumed that OpenTable would add restaurants until they had fully penetrated the entire universe of reservation taking restaurants. I assumed that the universe of reservation taking restaurants grows by 2% a year starting from its base of 70,000 restaurants in 2011. Given the high growth rates used, OpenTable is able to fully penetrate this market within five years. Concurrent with this growth in restaurant additions, I assumed that OpenTable is able to ramp up their revenue per restaurant, growing this by 6% a year as opposed to their historic average of 2-3% which is in line with restaurant revenue growth overall. For my operating margins, I assume that this is in fact a business with enormous barriers to entry that and that there is operating leverage that will allow for increasing margins. I increase my operating margins from 15% to 50% in two years and have it stay at 50% thereafter.

	Assumption	3 Year Avg.
North American Rest. Growth	25.00%	21.00%
International Rest. Growth	40.00%	121.00%
Revenue Per Res. Growth	6.00%	3.00%
Worldwide Growth of Rest.	2.00%	1.94%
Operating Margins	50.00%	8.50%
Final Penetration Rate	100.00%	15.00%
Discount Rate	10.00%	
Terminal Growth Rate	2.00%	
Tax Rate	35.00%	

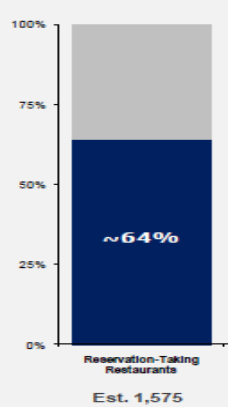
distorted due to acquisition

Using these very aggressive assumptions gives you the revenue projections below which yields a DCF Value of $2.3 billion. This is only slightly higher than the current market valuation of $2.06 Billion which means that if all goes exactly as planned and revenues explode and margins stay permanently expanded, this stock only has room for a further 15% upside. At least on a DCF basis, this is a richly valued stock even using very favorable assumptions. In order for it to be a short though, these assumptions have to look like they would likely be wrong.

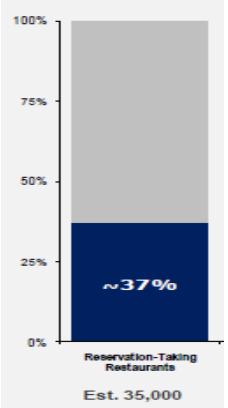
	2011	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
North American Restaurant	17,244	21,555	26,943	33,679	37,885	38,643	39,416	40,204	41,008	41,828
International Restaurant	8,756	12,258	17,161	24,025	33,636	38,643	39,416	40,204	41,008	41,828
Total Restaurant	25,999	33,813	44,104	57,705	71,521	77,286	78,831	80,408	82,016	83,656
Revenue Per Rest.	6,543	6,739	6,941	7,150	7,364	7,585	7,813	8,047	8,288	8,537
Total Revenue	175,066	241,336	333,682	462,772	607,987	696,414	752,963	814,104	880,209	951,682
Operating Income	26,260	72,401	166,841	231,386	303,993	348,207	376,481	407,052	440,104	475,841
Net Income (35% Tax Rate)	17,069	47,061	108,447	150,401	197,596	226,335	244,713	264,584	286,068	309,297
DCF Value	**$2,333,721.63**							Terminal Value		3,866,207
Price Per Share	**102.32**									

Assumption #1: Restaurant Growth Stays Accelerated, Full Penetration of Market in 5 Years
The market has come to the implicit belief that eventually all restaurants will have to come under the purview of OpenTable. San Francisco provides the key to understanding how their penetration rate will mature in the years to come. OpenTable has operated in San Francisco for much longer duration than any other market. San Francisco is a tech savvy city that would be a favorable market place for this sort of service. Still, even after over a decade of operating in the Bay Area, San Francisco is not yet fully penetrated. Its rate of 64% compares favorably to the 37% elsewhere in North America but is still nowhere near the 100% needed to justify the above DCF. Likely the restaurants that have not added OpenTable will not be likely to do so in the future for reasons I will discuss later. We can safely assume that OpenTable continues to ramp up its penetration but it will likely never reach 100% nation and international wide penetration, maybe closer to the 64% seen in San Francisco.

San Francisco



North America



Assumption 2: No Viable Competitor Will Emerge
Since outhustling its competitors Savvydiner.com and Dinnerbroker.com a decade ago, OpenTable has enjoyed a near monopoly position. This looks like it will change as an IAC owned website, UrbanSpoon recently launched a new online reservation booking service called RezBook. Restaurants have just begun embracing this other service. I interviewed several restaurant managers in the NYC area who are currently using both or plan on using both. While most of these managers liked OpenTable, the fact was that they need competition to exist in this space so that the prices per booked reservation could go down and they would not be at the mercy of OpenTable. OpenTable did express concerns to each one of them when they decided to adopt the other service but OpenTable had no choice but to let them go forward. Competition will emerge because the restaurants – the costumers – will go out of their way to call for it and there is nothing that will prevent restaurants from using multiple booking agents. Operating margins of 50% will be too attractive for potential competitors not to acquiesce to those calls.

Assumption 3: OpenTable Can Continuously Increase Its Revenue per Restaurant
OpenTable currently receives $6,350 a year in revenue per restaurant on its network. In the bullish assumption, I assumed that OpenTable increases their revenue per restaurant by 6% a year which is twice the yearly growth rate in restaurant revenue of 2-3%. OpenTable's route to increasing its revenue per restaurant lies in boosting the number of restaurant bookings. However, there is a limit to how many bookings through OpenTable a restaurant would even want. OpenTable bookings add value to restaurants if they would have otherwise not occurred. When someone books through OpenTable who would have otherwise booked through calling up on the phone, the restaurant is actually worse off. Let me explain why.

The all in cost of an OpenTable booking is $1.60. If you consider that most restaurants earn 10% net income margins and the average meal for an OpenTable restaurant costs $42.50, then booking through OpenTable lowers margins from 10% to 7.5%. That margin reduction is tolerable if you are receiving a costumer you would have not otherwise received. However, once OpenTable starts converting paper bookings into

OpenTable bookings then OpenTable's impact on margins overrides its positive effect on increasing capacity usage. The example below shows what happens to a sample restaurant that adds OpenTable and how OpenTable can increase capacity but still hurt overall net income if too many people start using OpenTable in lieu of normal booking methods.

Capacity is less than 100% so Restaurant Joins OpenTable to fill out capacity.

OpenTable adds ten new costumers and increases capacity to 100%; Net Income also rises to $409.

Capacity is still 100%

Pre Open Table		*Favorable OpenTable Outcome*		*Unfavorable OpenTable Outcome*	
Capacity	100	Capacity	100	Capacity	100
Capacity %	90.00%	Capacity	100.00%	Capacity	100.00%
Paper Bookings	90	Paper Bookings	90	Paper Bookings	70
Price	42.5	Open Table Bookings	10	Open Table Bookings	30
NI Margin	10%	Price	42.5	Price	42.5
		NI Margin	10%	NI Margin	10%
		Open Table Fee	16	Open Table Fee	48
Net Income	**382.5**	**Net Income**	**409**	**Net Income**	**377**

Bookings that were previously paper bookings are now being booked through OpenTable lowering overall margins.

Net Income is lower than it was prior to OpenTable

In order to solve this problem of having too many reservations going through OpenTable, many restaurants now limit the number of seats made available to OpenTable. According to the Wall Street Journal article "More Ways To Snag That Table Reservation", patrons now find themselves thinking that a restaurant was booked because of lack of availability on OpenTable only to find it to be empty when they call. The bottom line is that restaurants will not gracefully let their margins erode by several hundred basis points. Either OpenTable will have to drastically reduce its fee structure or restaurants will either opt out of OpenTable or reduce the number of featured tables.

Revised Model

The assumptions inherent in the bullish model are unrealistic. OpenTable will not grow to reach full penetration because not all restaurants will want to opt in given the occasionally unfavorable economics. Revenues per restaurant growth will be limited by the fact that too many people booking reservations online through OpenTable hurts operating margins at restaurants. Lastly, operating margins while they will likely rise from their current level of 15%, it is completely unrealistic to expect them to stay elevated for too long. Competitors exist in the wings and there are no costs for restaurants to adapt those competitor's products.

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Final Penetration Rate	70.00%	15.00%
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Tax Rate	35.00%	

Changed from 6% to 3%

Changed from 50% to 35%

Changed from 100% to 70%

I revised the previous very bullish model to include more moderate, yet still optimistic assumptions. For terminal penetration, I assumed that OpenTable penetrated 70% of the American and international restaurant market. This is higher than the San Francisco penetration rate by 6%. For the revenue per restaurant growth,

I assumed that that metric grew at a rate of 3% which is line with how it is grown in the past and historic restaurant revenue growth. For the operating margins I assumed that there was not as much operating leverage as we would like to believe and that furthermore, competition would prevent them from price gouging the restaurants. OpenTable's new terminal margins are 35% versus 50%. 35% is still twice the operating margins of an internet booking site like Expedia.com which has margins of 18%. These new assumptions yielded a revised DCF and a new price target of $41.25 – see below.

	2011	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
North American Restaurant	17,244	21,420	21,848	26,000	26,520	27,050	27,591	28,143	28,706	29,280
International Restaurant	8,756	12,258	17,161	26,000	26,520	27,050	27,591	28,143	28,706	29,280
Total Restaurant	25,999	33,678	39,009	51,999	53,039	54,100	55,182	56,286	57,411	58,560
Revenue Per Rest.	6.54	6.74	6.94	7.15	7.36	7.59	7.81	8.05	8.29	8.54
Total Revenue	170,111	226,961	270,779	371,774	390,586	410,349	431,113	452,927	475,846	499,923
Operating Income	25,517	68,088	81,234	111,532	117,176	123,105	129,334	135,878	142,754	149,977
Net Income (35% Tax Rate)	16,586	44,257	52,802	72,496	76,164	80,018	84,067	88,321	92,790	97,485
DCF Value	**$950,016.06**							Terminal Value		1,218,563
Price Per Share	**41.25**									

Other Points of Consideration

Strong Executive Team

Led by Jeff Jordan, a former executive at Ebay, Paypal and Disney, the OpenTable business team is a strong supporting point. The management team is smart and competent and has grown the business well. However, their intelligence cuts both ways. These guys have been dumping their shares of late, perhaps reflecting the fact that they realize that current expectations far exceed anything any executive team could possible accomplish.

Other Sources of Growth

There are certainly different ways that OpenTable could monetize the current network of restaurants it has built up – perhaps increasing advertising etc. There is also the question of TAM. Could OpenTable sell their service to other restaurants that are more of the walk-in variety as opposed to reservation taking? The fact though remains that OpenTable's central business model is selling this service to reservation taking restaurants. If you believe that that business – selling this service to reservation taking restaurants – is worth only $41.25 under optimistic scenarios – then the current stock price gives you a wide margin of safety in the unlikely case that OpenTable invents some new revolutionary business model.

Conclusion:

We often fight the last war. In the last few years, there have been internet stocks like Amazon and Netflix that despite their high valuation have confounded the shorts with their continued out performance due to very strong business models. Now, the market is wary of shorting stocks that look like they might have similar stories. However, OpenTable is no Netflix. It is a middle man in an industry that doesn't necessarily need a middle man and moreover can barely afford to pay one. Calling up a restaurant to get a reservation is not nearly as inconvenient as driving to a movie store to pick up a movie. It is nice to book things online and perhaps we will do more of it in the future but at the end of the day, booking reservations online will not replace calling for reservations, the way steaming movies are replacing rental movies.