WHAT'S FOR DINNER? USING EXCEL TO FORECAST THE FUTURE OF FINE DINING

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From construction to tax-services, Tom Jackson has had success in a wide array of industries over the years. In 2003, he ventured into yet another new industry by becoming an investor/partner in Bistro 101. In early 2008, Jackson became the restaurant's sole owner. However, the excitement of taking full control of the restaurant soon turned to trepidation as the financial news coming from Wall Street began pointing to the possibility of the worst recession the U.S. had seen since the Great Depression.

Students are presented with background information about the business that includes three years of data outlining monthly consumer demand and sales revenue. Students are asked to contemplate several forecasting methods that include techniques like moving averages, exponential smoothing, and seasonal adjustment. After determining the proper forecast model specification, they are then asked to put together a forecast of the consumer demand and sales revenue for early 2009. (Excel spreadsheet available upon request to the authors.)

INTRODUCTION

Christmas had always been important to Tom Jackson. It was a time for family and a time to reflect on another year gone by. Over the course of the past 30 years, Jackson thought that he had seen almost everything. He had seen recessions. He had seen weak housing markets. He had seen high unemployment rates. As he sat in his office, one week before Christmas day, 2008, Jackson realized, he had never seen anything like this.

Jackson knew people were uneasy about the events of the past few months and wondered how his restaurant would be affected. His years in the Boy Scouts had taught him to always be prepared. Any missteps in this economic environment could sink his restaurant, Bistro 101. He knew that any good business plan must include accurate projections of future revenues.

Jackson's introduction into the life of a restaurateur began innocently. In 2003, he was approached by Manny Rockwell, a local Chef and owner of Bistro 101, about becoming a partner in the restaurant. The restaurant was struggling and Rockwell needed financial assistance to maintain the business. Jackson and Rockwell knew each other from Jackson's time as a patron of the restaurant and he had hired Rockwell on several occasions to cater events. While he had never been in the restaurant business before, Jackson sensed that the business could ultimately become profitable if positioned properly in the marketplace.

Jackson never intended on becoming a restaurateur. Born in Santa Clara, California, Jackson demonstrated an appetite for success at an early age. He served as his high school's student body vice president and president, was awarded the prestigious rank of Eagle Scout by the Boy Scouts of America, and served as captain on his high school basketball and soccer teams. His success continued in a diverse, but very successful career in the areas of sales, tax and business services, insurance and finance, and construction. Here though, he saw a friend in need and had the cash on hand to help. In late 2008, Jackson and his wife Carey became silent partners, or so they thought, by purchasing 51%. With the influx of money from the purchase, the restaurant's immediate future seemed secure. In Jackson's eyes, no good deed goes unnoticed. Or was it no good deed goes unpunished? He would soon find himself thinking it might be the latter.

During the first year of the partnership, business was good with revenue approaching a million dollars. Over the next few years, however, the restaurant experienced a series of setbacks. The largest setback, however, came when Rockwell was diagnosed with cancer. The illness forced Rockwell out of the restaurant for a year. Jackson continued to pay Rockwell during his time away from the business and injected the restaurant with financial capital when needed to keep the operation going, but things never seemed to get back on track. Even with Rockwell's eventual return, they were never able to match the sales revenue that the restaurant achieved during their first year together. The effects on the business were straightforward.

As with any partnership, there were disagreements on how to handle things. Rockwell believed in his original vision for the restaurant and wanted incremental changes. He argued: "I know we can succeed with some small changes to the menu and increased social media exposure. I don't think we need to rethink our overall strategy!" Jackson, on the other hand, was not so sure. He thought that a major shake-up was in order. He wanted to explore all possible options.

They disagreed on the menu. Rockwell wanted to keep the high-end cuisine of the restaurant. He believed that the image of the restaurant would be damaged if they changed their offerings to more "common" foods. Jackson, however, strongly disagreed with this idea. He thought that, because of the struggling economy, the menu should include lower-cost alternatives to entice more customers into the restaurant. His experience had taught him the value of customer volume. According to Jackson, "The biggest thing is controlling your food cost and your labor cost. When you don't have a lot of volume, it makes that very difficult to control." They needed to have annual revenue of at least a million dollars to succeed, and Jackson expressed the struggle they were having in achieving it. "We just can't ever get over that million-dollar hump. At a million dollars, we can make a little bit of money. We can cover our overhead. When we don't have that kind of revenue, it's hard to manage."

They also disagreed about the location of the restaurant. The current location was the former home of a popular pizza chain restaurant. Although the interior décor had been upgraded, the exterior shape of the building still evoked images of cheap, fast-food. The location was also in a commercial district with many nearby businesses and strip-malls. Jackson thought that the building and location were major problems for their positioning. He wanted to take advantage of city development efforts and relocate the restaurant to an up-and-coming area in the middle of town. "Our customers want to see and be seen. We will be much more successful if we move near the performing arts center and museums in town." Rockwell did not see anything wrong with their location. He argued that their current customers were accustomed to their building and no longer noticed the exterior. "I don't think we can afford a new location, Jackson. What if our current customers don't follow us?"

After five years, Jackson and Rockwell knew something needed to change, but walking away from something that they thought could still be a profitable venture felt like losing. Just like his high school days, Jackson did not like to lose. "I've got too much pride for that and I've got the resources, so I [am] not willing to walk away from it at [this] point." But how much of an impact would this financial downturn have on his restaurant?

THE GREAT RECESSION

In hindsight, economists would date the beginning of the Great Recession back to December 2007. However, the events of mid-2008 brought the most troubling aspects of the recession to the public's notice. Its cause(s) would continue to be the subject of debate for years. Some blamed the financial crisis on a monetary policy of easy credit that was meant to assuage the growing income gap in the US. These policies kept interest rates low and made housing more affordable. Others pointed to a broken political system that was heavily influenced by the financial sector to ease regulations and oversight (Avent, 2011). Whatever its root causes, the events of the past few months had shaken the world's economy to its core.

In March 2008, Wall Street was stunned when Bear Stearns, one of its largest and most storied firms, collapsed and was forced to sell its shares to JP Morgan for $10 per share (Thomas Jr & Dash, 2008). For some perspective on the size of the devaluation, one of Bear Stearns largest shareholders, James E. Cayne (former CEO) received roughly $67 million for his shares. Had he sold those shares earlier in 2007, they would have been worth approximately $1.2 billion (Ross, 2008).

On September 7th, the government took over Freddie Mac and Fannie Mae, two privately owned, but public guaranteed institutions that help build the mortgage backed securities market. A week later, on September 15th, Lehman Brothers Holdings Inc., the fourth largest investment bank in the U.S., declared bankruptcy. This becomes the single largest bankruptcy in U.S. history. A day later, the government announced plans to bailout AIG, one of the world's largest insurance companies. From October 6th through the 10th, the Dow Jones Industrial Average experienced the largest single weekly loss in its history, dropping 1,874 points (18%) in one week (Exhibit 1). By mid-December, the Federal Reserve had taken the unprecedented step of lowering interest rates to zero and the government bailed out General Motors, Chrysler, and Citibank ("Timeline on the great recession," 2013). By the end of 2008, the national unemployment rate had risen 2.3 percentage points to 7.3% (Exhibit 2) and the housing market was in free fall (Exhibits 3 and 4).

These dire events were especially relevant to Jackson. It was 2008 when he and his wife Carey had become sole owners of Bistro 101 in Lexington, California. Even with the local economy doing relatively well over the past few years, the business struggled. Now the recent crisis in the national economy was significantly impacting Lexington's local economy. During 2008, the unemployment rate in Lexington and its' surrounding areas increased by 65 percent, from 6 to 9.9 percent. The impact was also felt at local cash registers, as residents began to spend less. Retail sales in Lexington were $105 million lower in the fourth quarter of 2008 than they had been in the same quarter the previous year. What role would Bistro 101 continue to have in Lexington?

BISTRO 101

Bistro 101 was an upscale restaurant that originally opened in 1998 that served lunch and dinner with a full-service bar. They have received several dining awards, including a 3-Diamond rating from the AAA and the Best of Lexington: Fine Dining award. Lunch offerings consisted of salads, soups, sandwiches and entrees priced less than $10.00. The lunch crowd included many employees of local businesses. For dinner, the menu and the prices were kicked up to make Bistro 101 the go-to place for date night and special occasions, such as birthdays and anniversaries. Dinner offerings included soups, salads, appetizers, pasta, seafood, steaks, and chops offered at a wide range of price points, with top prices for specials reaching $50.00 a plate.

Bistro 101 had very little direct high-end competition in the Lexington area. Chain restaurants, such as Longhorn Steakhouse and Red Lobster, competed for diner's dollars, but Bistro 101 was positioned as superior to these options in food quality, ambiance, and exclusivity.

The restaurant had only one location and was independently owned. It was, therefore, classified as a single location, full-service restaurant. In the U.S. in 2008, there were 189,683 restaurants with this classification, with total revenue of 125 billion dollars and consumer spending totaling around 10 trillion dollars (Brennan, 2014). In the Lexington, California Metropolitan Statistical Area, there were 321 food service and drinking places. Of these, 111 were full service restaurants (U.S. Census, 2008).

Because of competition for consumer's food spending, profit margins were generally low for single location, full-service restaurants, and the ability to succeed in this industry was determined by a number of factors, such as "access to multi-skilled and flexible workforce, ability to quickly adopt new technologies, attractive product presentation, proximity to key markets, ability to control stock on hand, and ensuring pricing policy is appropriate" (Brennan, 2014). Bistro 101 was well situated to succeed according to these factors. In addition, this type of restaurant had customers who generally make over $100,000/year (Brennan, 2014). Lexington was also attractive from this perspective, with approximately 19% of families earning over $100,000 and 30% earning over $75,000 (U.S. Census, 2012).

THE DECISION

In order to develop a strategy to make Bistro 101 a profitable restaurant, Jackson must make some important decisions. How should the restaurant be positioned: as a high-end, exclusive venue or an affordable, approachable place to eat? Should the restaurant change its menu and location to support the chosen positioning?

Jackson needs information to make these decisions. Table 1 below gives data on Bistro 101's restaurant traffic and sales revenue for the past three years. With these data, estimate the restaurant's revenue for the upcoming year (2009) and advise Jackson how to proceed.

TABLE 1
Bistro 101 Sales and Revenue Data

Year	Period	Number of Clients	Number of Tables	Avg. Client Revenue	Avg. Table Revenue	Table Turnover (min)
2006	1	2112	755	$31.99	$89.50	95
	2	2394	844	33.09	93.87	90
	3	2130	740	30.91	88.97	99
	4	1981	686	32.15	92.85	91
	5	2132	761	31.70	88.81	93
	6	2055	673	32.52	99.29	99
	7	1821	656	31.63	87.80	95
	8	2682	966	27.12	75.29	80
	9	2344	831	28.13	79.34	79
	10	2227	825	28.59	77.17	74
	11	2143	724	31.42	93.00	85
	12	3349	961	31.61	110.16	81
2007	1	2332	842	28.40	78.67	85
	2	2556	941	30.80	83.66	85
	3	2541	914	29.39	81.70	84
	4	2441	874	30.34	84.73	87
	5	2468	840	29.11	85.54	86
	6	2446	832	29.74	87.42	98
	7	2348	791	29.18	86.62	91
	8	2520	885	30.71	87.45	94
	9	2155	719	28.33	84.92	97
	10	2097	747	33.64	94.44	100
	11	2252	823	30.88	84.48	95
	12	2793	941	37.44	111.12	83
2008	1	2414	907	28.55	75.99	84
	2	2741	988	31.29	86.82	80
	3	2420	865	29.69	83.07	82
	4	2003	741	30.95	83.67	80
	5	2112	744	32.16	91.30	86
	6	1944	668	33.37	97.11	90
	7	1727	639	37.33	100.90	92
	8	1741	656	38.53	102.26	87
	9	1788	618	36.01	104.18	86
	10	1797	613	36.23	106.20	88
	11	1431	531	35.30	95.13	85
	12	2190	718	41.25	125.81	83
	Average	2,240	785	31.93	91.09	88.03

EXHIBIT 1:
Dow Jones Industrial Average (2000-2008)

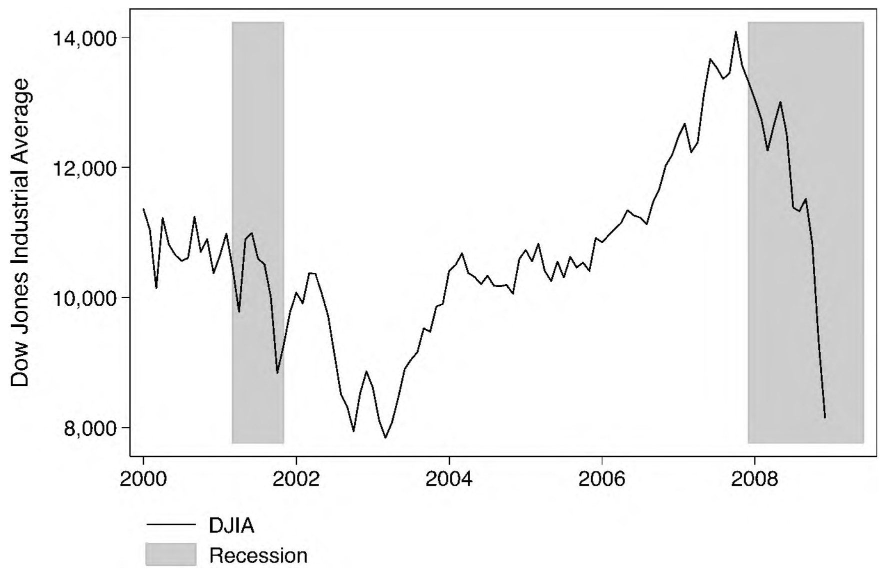


EXHIBIT 2:
U.S. Unemployment Rate (2000-2008)

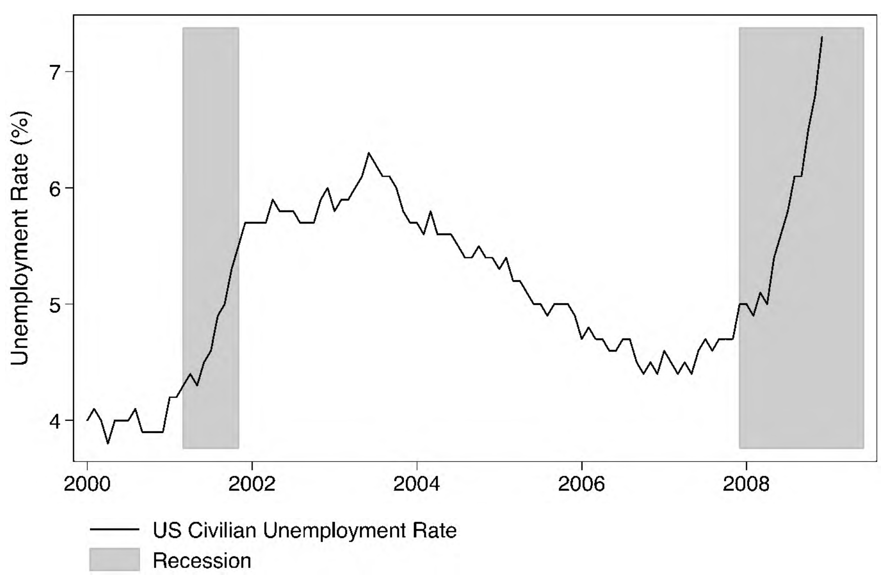


EXHIBIT 3:
Median Sales Price of Houses Sold in the US (2000-2008)

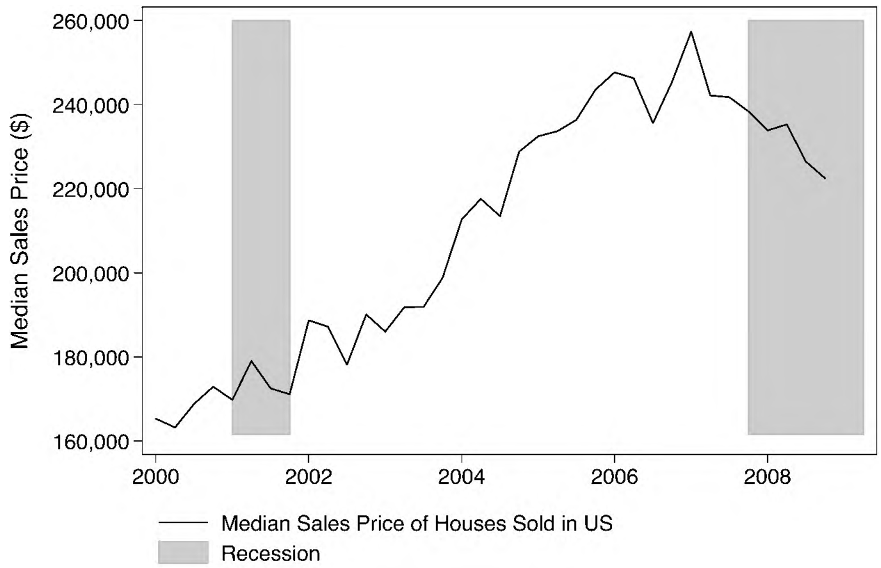
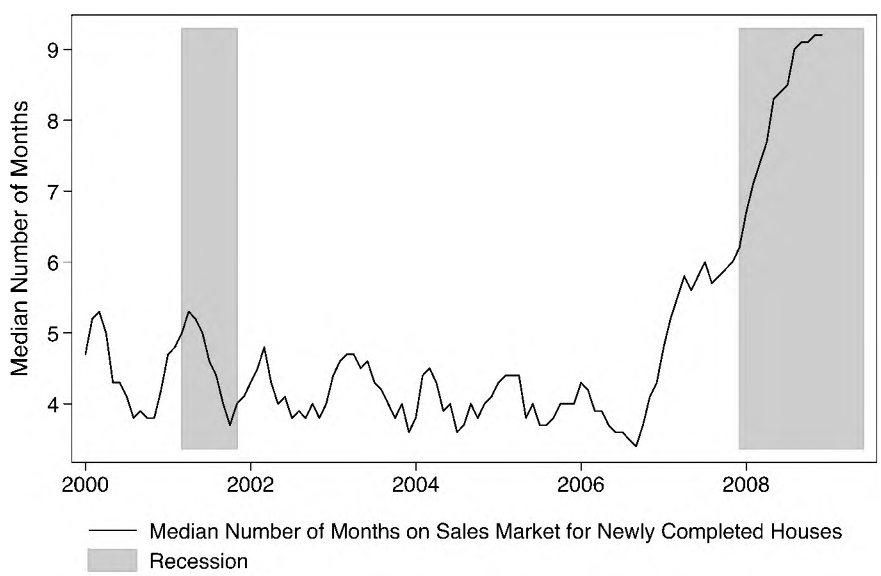


EXHIBIT 4:
Median Number of Months on Sales Market for New Completed Houses in the US (2000-2008)



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