

# Financial Performance of the Luxury Market : A Study of Pre and Post Financial Crisis 2007-08

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## Abstract

The financial crisis of 2007-08 brought down the sentiments of the investors in the market and the owners of the concerns. During a financial crisis, unemployment is assumed at the lowest, profitability sinks, investments are low, inflation is high, productivity is low, and there is a decline in demand. The entire economy endeavours for survival. Many sources have stated that the luxury market is not hit by recessionary times. The consumers of this market are assumed not to have any inclination to the market, even if bad news is pouring in. In order to check the claims of the executives and the companies and to check the resilience of the market, the present study examined the financial performance of the luxury market pre and post the financial crisis of 2007-08. The luxury market is scattered across the globe. So, the S&P Global Luxury Index was taken as a proxy of the market. It has 80 members from various countries; 2004-2013 data was collected from the Bloomberg database. Paired t -test was applied on all the measures, and the results were discussed. The results revealed that the tough time of recession proved to be difficult for the luxury market as a whole. The liquidity of the market in all the segments did not change significantly. Almost all sectors were hit by the downturn, but the textiles, apparel, & luxury goods sector proved to be the most profitable to entrepreneurs and to investors as well.

**Keywords :** luxury market, financial crisis, financial performance, resilience

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Ever since the Great Depression, economists say that financial crisis of 2007-08 has been the longest and the most severe recession at the micro as well as at the macro level. In December 2008, a panel of economists announced the formal beginning and also the concluding phase of business cycle in NBER (National Bureau of Economic Research). Besides, they also disclosed that the U.S. economy entered in a recession in December 2007. What actually led to this slowdown was the 25 year long unusual consumption of credit, which impelled people to buy what they called 'luxury'. A renowned scholar Sombart in his essay on the concept and nature of luxury (Sombart, 1992) explained luxury to be an expenditure that is beyond necessity.

By theory, it is believed that a crisis influences the financial performance of firms negatively. When a crisis starts, it starts hitting one to many industries. People at large begin to act conservatively on extravaganza, credit policies are tightened, and acquiring funds becomes a distant dream. During a financial crisis, for every organization, capital is very crucial, and credibility is decided by the financial performance. Financial performance certifies the financial capability to meet the obligations even after the operation ceases. A financial performance demonstrates the efficiency of the economic goal of an organization, compares the sources of funds, turnover, risk, and so forth with the returns.

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## Literature Review

Claessens, Djankov, and Xu (2000) studied the sharp decline in the performance of East Asian corporations following the 1997 financial crisis. This article compared the growth and financing patterns of East Asian corporations in the years before the crisis with those in other countries. The study found little microeconomic evidence that corporate growth had weakened, but offered some support for the argument that many firms had a weak financial structure that left them vulnerable to an economic downturn. It appears that firm-specific weaknesses already in existence before the crisis were important factors in the deteriorating performance of the corporate sector.

Sur, Chakraborty, and Das (2007) conducted a study on measuring the efficiency of asset management of private sector enterprises in India during the pre and post liberalization periods. It was concluded that the efficiency of inventory management was achieved in the post-liberalization period. The average efficiency of cash management and the average turnover of fixed assets declined considerably in the post-liberalization period, signifying that the selected companies failed to adapt themselves to the liberalized and competitive environment.

Wilson and Eilertsen (2010) performed a survey study on how strategic planning affected company performance during the economic crisis of 2007-2009. The survey revealed that the sample reacted very differently as 49% of the companies took defensive actions, while 51% actually continued to invest in growth. The different reactions affected profitability differently, but in general, the decline in profitability ratios was not as steep as in revenues, suggesting that the reactions taken improved profitability relative to sales.

Kapferer and Tabatoni (2010) claimed that although sales in the luxury sector are modest, luxury does get a high share of investors' and financial analysts' attention. The reason this sector receives a share of attention much bigger than its actual weight is because of the prestige attached to its major brands. The paper analyzed luxury companies' key financial performance indicators over other sectors to assess the validity of the sector's attractiveness among the investors. The findings about the luxury industry were that luxury groups enjoyed clearly superior valuation multiples which could not be justified on the basis of shareholders' expectations in terms of growth and profitability.

Lopez, Monroy, and Cervino (2011) studied the performance of several hundred SMEs during the worst stages of the financial crisis (2008-2009). The authors reported a significant decline in profitability (gross operating profit and EBITDA) as a result of a sharp decrease in revenues due to falling demand. Furthermore, Lopez et al. (2011) argued that the fall in profitability was also higher in terms of return on equity as prior to the crisis, a large proportion of the sample had levered their balance sheets. Thus, despite the gradual reductions in the interest rates going through the crisis, the increase in financial costs explained part of the decline in ROE.

Marques, Gonzales, Cruz, and Ferreira (2011) argued that the effects of the downsizing did not bear fruits as expected as they did not find evidence of improved performance after downsizing by using measures of ROA and profit margins. Their findings suggested that during a steep crisis such as the recent one, downsizing did not add to the companies' long-term profitability rates.

Wilson, Wright, Siegel, and Scholes (2012) studied the operating performance of private equity backed companies during recessionary times. The authors discovered significant differences in terms of profitability during crises. The active private owners were able to create better operating efficiency and profitability than their public peers. In addition, profitability of these companies - both when measured with ROA and profit margins - remained clearly higher than the peer groups.

Singh, Jain, and Yadav (2013) studied the profitability of the 166 non-financial companies of the BSE 200 index with particular emphasis on a pre- and post-recession analysis (2001-2011) with an attempt to link the profitability with the liquidity of the sample firms. Profitability of sample companies (measured through gross profit and net profit), prima-facie, appeared to be stable and attractive (as an investment choice). Though the recession did witness some fluctuations in the profitability of certain constituent sectors, overall, the sample

seemed to have emerged intact from the impact of the recession, perhaps due to its strong financial fundamentals.

Saji, Harikumar, and Kasim (2013) revealed that India did not face a full-blown recession, but only experienced an economic deceleration—a temporary phenomenon. Analysis of the financial parameters of corporate India revealed intrasectoral differences among them in respect of their financial fundamentals during the period of crisis, which could be attributed to many factors. The banking sector found an opportunity for growth in crisis. The automobile and construction sector were hit most adversely by the crisis due to their high capital-intensive nature and stringent measures taken by the lending institutions by cutting back of credit to individuals. The IT industry is more exposed to the U.S. and European markets; hence, the financial crisis in these advanced economies affected the export earnings of this sector. Domestic market orientation and not being very capital-intensive were among the factors that insulated the FMCG sector from the downturn. The degree of shock exerted by the global financial turmoil on the performance of the Indian corporate sector was also not the same. While some companies under a particular sector were severely hit by the crisis, fundamentally strong companies could unshackle themselves from it.

The Luxury Goods Worldwide Market Study 2012 by Bain & Company (2011) pointed to a continuation of the core market trends that created a sharp recovery of the luxury sector during the 2008-09 recession. Growth of online sales, rapid expansion in China, and a shift from wholesale to direct-owned retail remained factors to watch.

After thoroughly reviewing the mentioned literature on financial performance, it is observed that several studies have covered the profitability of the industries, few have covered the liquidity aspect, and the rest have taken care of examining the operating performance. Not many comprehensive studies have yet been conducted in the field of financial performance of pre and post 2008 crisis and that too in the luxury sector. Hence, the present study endeavors to fill this research gap.

## Objectives of the Study

The study is intended to focus on the financial performance of the luxury market and how it has been affected due to the advent of the financial crisis of 2007-08. The following are the research objectives:

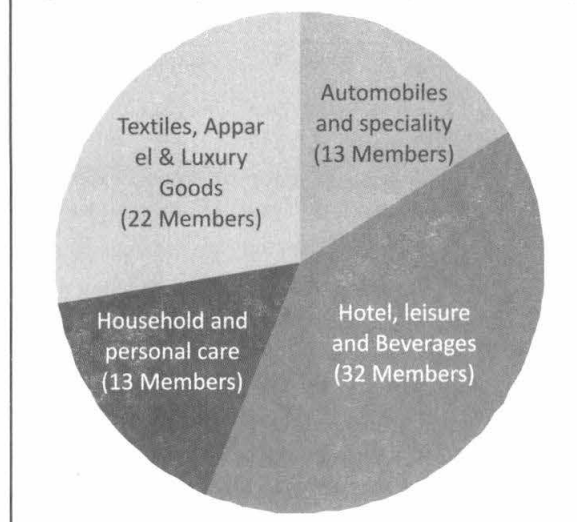
- ↻ To study the impact of the financial crisis of 2007-08 on the financial performance of the firms in the luxury market.
- ↻ To study the impact of the financial crisis of 2007-08 on the market measures of the firms in the luxury market.
- ↻ To analyze the sector wise performance of the luxury firms.
- ↻ To list the sectors of the luxury market that proved to be resilient to the crisis.

## Hypotheses

The study revolves around the following hypotheses :

- (1) H1 :** There is no significant difference in the liquidity of the firms in the luxury market pre and post financial crisis of 2007-08.
- (2) H2 :** There is no significant difference in the operating performance of the firms in the luxury market pre and post financial crisis of 2007-08.
- (3) H3 :** There is no significant difference in the profitability of the firms in the luxury market pre and post financial crisis of 2007-08.
- (4) H4 :** There is no significant difference in the market measures of the firms in the luxury market pre and post financial crisis of 2007-08.

**Figure 1. Composition of Data (80 Members)**



## Data and Methodology

The data collected for the study is of secondary nature. The final sample comprises of the members of S&P global luxury index collected from the Bloomberg database for calendar years 2004-2013. The S&P Global Luxury Index (80 companies; Figure 1) comprises of the largest publicly traded companies engaged in the production or distribution of luxury goods or the provision of luxury services. The annual data is gathered as on the last day of the calendar year, that is, December 31, except for market capitalization and price earnings ratio, which are quarterly reported.

The observations were collected for 80 companies - 10 accounting ratios for 10 years are 8,000 ( $80 \times 10 \times 10$ ), and for market measures of 80 companies, two measures (Market cap and PE ratio), quarterly for 10 years are 6,400 ( $80 \times 2 \times 4 \times 10$ ). In total, 14,400 observations were looked into for the study. After eliminating missing values and extreme values, the actual observations are 10,521. The data is clubbed into four sectors as indicated in the Figure 1, namely automobiles and specialty (13 members); hotels, leisure, and beverages (32 members); household and personal care (13 members); and textiles, apparel, & luxury goods (22 members) on the basis of similar principal business operations. The structural break was calculated from the value of S&P 500, which suggested that the markets confronted a slow down during February 2007 and August 2008. So, the pre crisis phase covered the observations from 2004 to 2006 (3 years), and the post crisis phase has years between 2009 and 2013 (5 years). Paired *t*-test was applied on the entire series and also on four different sectors on the arithmetic mean of the two phases to test if the variables showed any significant changes overtime. The two tailed paired *t*-test was conducted to evaluate the observations of means from two related samples. Here the two samples are: the pre crisis phase and the post crisis phase. The software used for data processing is SPSS.

↳ **Variables Used:** After reviewing the literature, 12 variables elaborated in the Table 1 are considered. In order to study the financial performance of the luxury market as a whole as well as sector wise, the variables are categorized into accounting measures and the market measures in this research. Ten accounting ratios (liquidity ratio, efficiency or activity ratio, solvency ratio, and profitability ratio) and two market measures (market capitalization and PE ratio) are discussed. The ratios short listed for the study are:

(i) **Liquidity:** Quick ratio (QR) and current ratio (CR).

**Table 1. Definitions and the Formulae for the Ratios**

Ratios	Descriptions
<b>LIQUIDITY</b>	Examines a firm's ability to meet short-term obligations
Quick ratio LA/CL	Liquid Assets = Cash + Cash equivalents +ST Marketable Securities +Accounts Receivable. Current liability =Accounts Payable +ST Borrowings +Other ST Liabilities.
Current ratio CA/CL	Current Assets = Liquid Assets + Inventories+ Prepaid expenses + deferred income taxes. Current liability =Accounts Payable +ST Borrowings +Other ST Liabilities.
<b>EFFICIENCY</b>	Activity ratios/ operating efficiency ratio. They indicate the ongoing operational performance of the firm.
Collection period (AR/Credit sales)x 365	Collection period indicates the effectiveness of a debt collection routine. The collection period is the number of days between the date that a credit sale is made, and the date that the money is received from the customer.
Inventory turnover Sales/Av. Inv	Sales =Total of operating revenues less adjustments (Returns, discounts, allowances, excise taxes, insurance charges, sales taxes, and VAT) to Gross Sales. Inventory includes raw materials, work in progress, finished goods.  This ratio looks at how quickly you turn over stock into sales. Higher the better.
Asset Turnover Sales/Total Asset	Assets =The total of all short and long-term assets as reported on the Balance Sheet.
Working capital turnover Sales/Net WC	Net working capital =Current assets -current liabilities.
<b>SOLVENCY</b>	Examines a firm's ability to meet long-term obligations
Debt Equity	LT Borrowings divided by Total Shareholder's Equity
<b>PROFITABILITY</b>	Explains the efficiency with which the economic activity is performed.
Net profit ratio Net profit /Sales	NPR, in percentage is an indicator of how profitable a company is relative to its sales.
Return on assets Net profit /Total asset	ROA, in percentage gives an idea as to how efficient management is at using its assets to generate earnings.
Return on Equity Net profit/ No. of o/s shares	ROE, in percentage shows the return earned on every share by the shareholders.

**(ii) Efficiency :** Collection period (CP), inventory turnover (IT), asset turnover (AT), and working capital turnover (WCT).

**(iii) Solvency :** Debt equity (DE).

**(iv) Profitability :** Net profit ratio (NPR), return on assets (ROA), and return on equity .

## Analysis and Results

By theory, a financial crisis is known to make the organizations comparatively slower in terms of manufacturing owing to the slowed down demand of the market. People do turn conservative to spend, and they do not wish to spend as far as avoidable expenses are concerned. Their expenses tend to get postponed in this regard. This financial crisis witnessed the fall of numerous companies that were once considered to be too big to fail. However, the executives of the luxury market firms continuously reported about the efficiency and the perpetuity of the sector. They also said that the high end goods market (Table 2) fails to follow this concept of recession and retarded sales blindly.

**Table 2. Results of the t- test with Mean Values, p- values of the Whole Market**

Ratio	Mean	p - value
QR_Pre#	1.1562	.947
QR_Post#	1.1629	
CR_Pre	2.0531	.264
CR_Post	2.1189	
CP_Pre	36.4521	.266
CP_Post	34.3501	
IT_Pre	14.7389	.840
IT_Post	14.1295	
AT_Pre	1.0601	.116
AT_Post	.9952	
WCT_Pre	4.3375	.482
WCT_Post	5.2417	
DE_Pre	.4307	.255
DE_Post	.4942	
ROA_Pre*	9.0983	.018*
ROA_Post*	7.4412	
NPR_Pre**	15.8810	.053**
NPR_Post**	9.2932	
ROE_Pre	17.9981	.150
ROE_Post	15.7517	
MC_Pre*	7266017302.7898	.008*
MC_Post*	9963798330.3531	
PE_Pre	24.2153	.678
PE_Post	23.1567	

\*Indicates significance at 0.05 and\*\*Indicates significance at 0.10

#QR\_Pre and QR\_Post denotes the mean value of Quick Ratio pre financial crisis and post financial crisis, respectively, and so on as abbreviated in the Methodology section

**(1) Accounting Measures :** So as to ascertain the liquidity of the luxury market, quick ratio and current ratio are considered based on the literature review. *Ceteris paribus*, an investor prefers liquidity. By liquidity, we mean the degree with which the current liability can be met with quick and current assets. It explains the ease of marketability of the financial asset without making losses. The quick ratio and the current ratio are believed to be ideal if these are 1:1 and 2:1, respectively. Pomerleano (1998) insisted upon current ratio as a good measure to study the financial fragility of a firm. Investors and entrepreneurs prefer to have higher liquidity to keep the trading cycle in action. Liquidity is worst hit with the financial downturn of any company, but in case of the luxury market, no impact is evident on the liquidity ratios in the post crisis era. The two proportions seem to have similar mean values, and the difference between the phases is merely owing to the sampling error.

Business operations of entities are in general delayed during a financial meltdown. However, the luxury sector has a different story to narrate. The top level executives employed in this sector claimed to have that market segment as a consumer who is not affected by any slowdown, even in the developed economies. The collection period (in days) shows that it fell down from the firms' point of view, although not significantly, that is, from 36.4521 days to 34.3501 days. It may not suggest that the debtors were being liberal to pay; rather, it signifies that

the firms were paying attention to the credit policies and may be tightening them. Even if the mean values of the inventory turnover ratio and asset turnover ratio have diminished in the phase two, the difference shown is not statistical in the two sections. It indicates that a slight dip is observed in the sales that actually brought down the majority of the financial ratios of the luxe market.

The solvency ratio is ascertained to have the insights about a company's ability to meet its long term debts. It also assesses the likelihood of an organization to meet its debt obligations. Here, the debt equity ratio is regarded as the solvency ratio. The ideal value of the DE ratio is considered to be 2:1. The debt equity ratio is also a measure of financial leverage. It depicts the financial risk associated with a firm. It makes it easy to keep an eye on an organization from the bankruptcy point of view. In this study, although the DE ratio has been pushed up in the post-crisis phase, which indicates that hard times find it difficult to get an equal amount of equity issued in pace with the long term debt. But statistically, the mean values are not significantly different. It implies that financial leverage and financial risk are almost unchanged.

Moving towards the profitability of the whole market, which is also one of the key measures to assess the financial health of the industry, higher profitability of firms always fetches competitors. For any industrialist who is to begin a new business, what he/she seeks for his/her own interest is profitability. Harvey and Roper (1999) reported a statistical decline in return on equity prior to the Asian economic crisis. Claessens et al. (2000) pointed out towards significantly falling return on assets prior to the Asian crisis. Hence, on the profitability front, this market is not able to sustain even the previous levels of profit percentage.

Overall, for the luxury market, parallel liquidity, dipped sales, falling profitability, and the debt equity ratio are found to be increasing slightly. Hence, a sector wise study would lead to a better evaluation of the market.

**(2) Market Measures :** Besides the financial ratios, the market measures are tapped in the market capitalization and the price earnings ratio. The market cap is considered to be a better technique to value a company, especially when the asset side comprises of more of intangible assets. In the luxury market, what makes the products so unique is the skill of the workforce engaged in it. So, the market cap is apt for the study. It is the product of the current market price and the outstanding number of shares. The share price reveals the investors' expectations regarding a company's earnings. Investors in the stock market bid higher prices for the companies with growing earnings. The total market capitalization is price times the number of outstanding shares. The market cap in the two phases is significantly different. The market cap has gone up in the post crisis era, which is a sign of the growing phase of the industry. Big sized organizations are less prone to macro economic factors and they may not be uprooted easily with the threat of a financial meltdown. The smaller organizations are escorted with more of growth potential and even higher risk and vice versa.

Any investor tries to locate the PE multiple prior to bidding for a share. The price earnings ratio is actually a measure of the earnings growth. The most common measures of accounting returns used in studies of this question are simply earnings per share (EPS) or price/earnings (P/E) ratios. Bowman and Haire (1975) etc. all used EPS, P/E ratios, or some algebraic variation of them, and when the PE ratio is high, it implies that higher future earnings are expected than the current earnings. The PE ratio prices depict earnings growth.

The PER for S&P 500 & Dow Jones ranged between 7 to 10 during mid 1970s, and turned out to be over 20 in 1990s, and was found to be 33 in 2000, which is often called as a stock market bubble. In the sample for this study, the mean PE value in the first phase is 24.2153, and in the second phase, the value is 23.1567. It refers to the future performance potential of the entire market in a positive direction for the potential investors where they can be the buyer of the shares today and sell the same at later stages. In the phase two, investors demand for higher earnings for each dollar of the share price they are willing to pay. Even in this segment, the financiers felt the burn of the recent crisis in the prices and the increased volatility. Hence, hypotheses H1 and H2 are accepted, and hypotheses H3 and H4 are rejected.

**Table 3. Results of the Sector-wise t- test with Mean Values and p -Values**

Ratio	Automobiles and specialty sector		Hotel, leisure, and beverages sector		Household and personal care sector		Textiles, apparel & luxury goods sector	
	Mean	p-value	Mean	p-value	Mean	p-value	Mean	p-value
QR_Pre	0.9347	.480	1.2003	.643	1.0117	.106	1.3198	.941
QR_Post	1.0510		1.0811		1.1904		1.3137	
CR_Pre	2.3971	.438	1.6281	.850	1.8949	.378	2.4602	.583
CR_Post	2.5243		1.6462		1.9955		2.5278	
CP_Pre	17.3914	.155	32.2186	.790	48.0363	.805	44.0154*	.005*
CP_Post	21.2197		33.1661		46.6608		35.3257*	
IT_Pre	5.9434**	.077**	34.5899	.907	3.9382	.957	2.7750	.492
IT_Post	4.6777**		33.5565		3.9555		2.6673	
AT_Pre	1.5638*	.010*	.7641	.810	1.2732	.225	.9766	.672
AT_Post	1.2852*		.7435		1.1807		1.0015	
WCT_Pre	8.7417	.978	.7044**	.077**	4.8818	.793	5.9412	.350
WCT_Post	8.5533		4.6212**		5.2120		4.3977	
DE_Pre	.4989	.327	.4831	.174	.5137	.917	.2760	.665
DE_Post	.7284		.5745		.5319		.2478	
ROA_Pre	10.4188	.159	7.2075	.131	9.3420**	.082**	10.4398	.411
ROA_Post	7.6601		5.3481		5.6786**		11.0408	
NPR_Pre	7.1430	.836	30.4657**	.074**	7.3049**	.094**	10.7741	.913
NPR_Post	6.7369		12.1520**		4.6639**		10.8695	
ROE_Pre	21.4188	.309	16.1988	.237	18.5850	.270	17.7479	.416
ROE_Post	17.2243		13.1127		13.2289		19.6189	
MC_Pre	14129667178	.400	5975188568	.239	3815933405.0833	.407	8150265030.9091*	.006*
MC_Post	16127481591		8683100274		4530580182.5667		13503954395.3091*	
PE_Pre	18.1980	.502	31.9812	.472	22.5700	.485	19.5400	.938
PE_Post	16.5986		27.0212		25.6331		19.3439	

\*Indicates significance at 0.05 and \*\*Indicates significance at 0.10

To study the market segment wise, the whole market is divided into the following four sections:

**(i) Automobiles and Specialty :** As far as the automobiles section is concerned, there are no issues relocating to liquidity as even after the hard times of the crisis, it has proved to be better on the parameters of quick ratio and current ratio, although the liquidity is not found to be significantly different. It seems that the luxury vehicles went comparatively slow on the mean activity ratios and the companies could not efficiently turn the inventories into sales. The probable reason behind this performance is not just the financial crunch, but also the 2008 oil price shock which made oil \$140/barrel, an all time high that impelled the consumers to resist the purchase of automotives.

While the financial ratios did not fall significantly, the impact of the financial crunch is not found statistically on any of the ratios of this sector. The results show that the industry is quite similar to the pre crisis era. On making the payments, even the debtors slowed down slightly and the change was not statistically significant. This shows that during a financial crisis, the consumers are comparatively reluctant to spend on this asset. Market capitalization did not change significantly and the PE ratio has fallen, showing a better potential for the investors. The PE collapsed for this sector, mainly because the bubble burst in the market and excessive growth reduced and came back to normal.



**(ii) Hotels, Leisure, and Beverages :** Current assets and quick assets are sufficient enough in the section to maintain the current liabilities at an optimum level. The sales slowed down in proportion to the inventory and assets but have been efficient when scaled against the working capital. Since the market cap and debt equity ratio are rising overtime and the PE ratio is falling down, it can be concluded that the sector issued equity as well as long term debt to meet the capital requirements. For this sector, it can be concluded that the people were willing to spend on beverages even when the economy slows down. The statistical change in the NPR overtime indicates that the sectoral companies might have attempted to fetch more sales proceeds by promotional tools that has also cut short their profits. The Table 3 illustrates that the declined PE ratio is a sign of higher current earnings than the potential future earnings.

The credit period of the debtors declined in the final phase indicates towards the stringent credit policy of the companies. The short term liabilities are smoothly paid off by the companies. Not much impact has been seen in the performance of the firms and the credit policies are almost unchanged. The gainful aspect of this division is showing a positive trend. The investors are optimistic for the prospective earnings in the future.

**(iii) Household and Personal Care :** As soon as the bad news of the crisis poured in, the household and personal care sector made its credit policies even more rigid, which is prominently reflected in the collection period. For funds, firms rely more on debt. Besides the jump in the market cap, the DE ratio has shown a positive graph ; it points out that the companies went for shrinking the outstanding equity in proportion to debt. The profitability did not statistically change with the recession. During the recession phase, liquidity ratios may become more favorable as liquid assets increase in relation to total assets, and a firm tries to become more solvent. The liquidity is almost the same for this sector with respect to the pre and post crisis period as mentioned in the Table 3. The debtors did not show any slow down.

On the other hand, to visit this variable with respect to the collection period, the clients who were paying off their bills over a long period of time ceased to buying the same. But this is not true as the efficiency ratios, which also measure firm productivity, say that the inventory is converted into the sales at almost the same pace. A similar story is being narrated by other activity ratios. The profitability of this slice dipped down, which reveals that a sustainable level of operating ratios was deliberately maintained by the companies, even at the cost of profitability. That is why the ROA and the NPR have stepped down overtime by rolling the mark up margins. Whenever the exuberance is excessive in the market and PE makes an all time high, the PE starts falling soon after the bubble bursts. But as the multiple is not actually coming down, rather is on an upside trend, the peak prices are yet to be achieved. It might fetch a good return for the existing investors. A high P/E ratio is normally a sign that price has become higher than it should. Investors know that low earnings, even if accompanied by a little drop in price, makes the stock eye-catching to buy on the conjecture that these earnings will recover in the times to come.

**(iv) Textiles, Apparel, & Luxury Goods :** Louis Vuitton Moet Hennessy, the French luxury-goods conglomerate reported in 2008 that their jewelery division faltered, and sales of watches, wines, and spirits fell. Consumers have less of a taste for quality in the downturn. "There are four main elements to our business model - product, distribution, communication, and price," explained an executive at LVMH, the world's largest luxury-goods group. "Our job is to do such a fantastic job on the first three that people forget all about the fourth."

Liquidity position is all about how equipped is the concern in meeting its short-term obligations with short-term assets. A higher figure signals that the company's day-to-day operations will not get affected by working capital issues. A liquidity ratio of less than the ideal one is a matter of serious concern. Sometimes, companies find it difficult to convert inventory into sales or receivables into cash. This may hit its ability to meet obligations. In such a case, the investor may estimate the liquidity ratio. It has hardly shown any drift ; relatively, the probability value of QR and CR came out to be .941 and .583, respectively. It seems that the phase two also could not spot any statistical change in these ratios.

**Table 4. Comparisons of the Present Study with Similar Past Studies**

Authors	Studied	Results
Claessens, Djankov, and Xu (2000)	Performance of East Asian corporations following the 1997 financial crisis.	Sharp decline in the performance.
Sur et. al. (2007)	Efficiency of asset management of private enterprises in India during the pre -post liberalization.	Average efficiency of the average turnover of fixed assets declined considerably post-liberalization.
Wilson & Eilertsen (2010)	Strategic planning affected the company performance during the economic crisis of 2007-2009.	Decline in profitability ratios.
Kapferer and Tabatoni (2010)	Analyzed luxury companies' key financial performance indicators over other sectors to assess the validity of the sector's attractiveness among investors.	Luxury groups enjoy superior valuation multiples which could not be justified on the basis of shareholders' expectations in terms growth and profitability.
Lopez et al. (2011)	Studied the performance of SMEs during the worst stages of the financial crisis (2008-2009).	Significant decline in profitability (gross operating profit and EBITDA) due to falling demand.
Marques et al. (2011)	Downsizing adds to the companies' LT profitability.	During a steep crisis, downsizing does not add to the companies' LT profitability.
Gonchar (2013)	Impact of 2008-2009 crises on Russian manufacturing firms.	All manufacturing firms were affected by the 2008-2009 crises.
Singh et al. (2013)	Studied the profitability of the BSE 200 index with particular emphasis on a pre- and post-recession analysis.	Indian companies have emerged intact from the impact of the recession.
Saji et al. (2013)	Financial parameters of corporate India during the period of crisis.	The degree of shock exerted by the global financial turmoil on the performance of the Indian corporate sector was also not the same.
Jain & Bothra (2016)- (current study)	Financial performance of the luxury market before and after the financial crisis 2007-08.	Luxury textiles and apparels are the only head under the luxury market to be resilient to the downturn.

On the operating performance front, the collection period, that is the time period between the sales and the cash realization, went down from 44.0154 days to 35.3257 days after the crisis. However, the inventory turnover ratio claims that the industry is somehow more efficient in converting its inventory into sales despite the slowdown in comparison to its other counterpart sectors. The profitability ratios say it is a lucrative slice of the market. For capital, organizations went in for issuing capital as shares as well as debt. In proportion, the luxury textiles and apparels issued more of shares over the long term borrowings. Market capitalization is also observed to have made a significant jump in the sector. The rise is a sheer indicator that either fresh capital issues have been made or the market prices of the shares have increased. Both these sides with a similar level of PE ratio and the same level of profitability ratios is either a measure of lower risk or a measure of high returns in the future.

The studies conducted by Claessens, Djankov, and Colin (2000), Sur et al. (2007), Wilson and Eilertsen (2010), and Lopez et al. (2011) as also discussed in the Table 4 showed a negative impact of the crisis on liquidity, profitability, and operational performance of the firms. Marques et al. (2011) reported that the impact of recession was so severe that even downsizing could not help during the crisis to maintain a sustainable profitability in the long run. Kapferer and Tabatoni (2010) ; Singh, Jain, and Yadav (2013) ; and Saji, Harikumar, and Kasim (2013) statistically concluded that the downward phase of the globe could not impact the luxury market and the Indian corporate sector to that extreme extent. The conclusions drawn in our study cannot be put in a watertight compartment of negative impact or resilient to the crisis. There is no significant difference in the liquidity and operating performance of the firms in the luxury market during the pre and post financial crisis of 2007-08. But the profitability and the market measures of the firms witnessed a negative impact of the crisis of 2007-08.

**(3) Du Pont Analysis :** The DuPont analysis is a comprehensive analysis of a company's ROE. It locates that a return on equity is earned by which of the following sources: high net profit margin or efficiently using assets to generate more sales or has a high financial leverage. The following is the formula to segregate the impact of the ROE out of the three ways:

Return on Equity = Net Profit Margin × Asset Turnover × Financial Leverage

$$= \frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Total Equity}}$$

The DuPont equation provides a fair picture of the return a company is earning on its equity. It tells where a company's strength lies and where there is a room for improvement. For the analysis, the three-factor analysis is taken into account. The data of 80 luxury companies shows that the sinking ROE is due to a decline in the asset turnover ratio, a significant fall in the NPR, and also because of the mounting financial leverage. The first three sections were not very fruitful when measured on ROE. The automobiles and specialty sector observed that the collapse in the ROE is suitably pointing towards the inefficiency in the assets and the rest two factors chased the same market trend, but the results were not statistically proved.

Hotels, leisure, and beverages segment could spot the slowdown in the ROE mainly because of the negative returns on sales. The household and personal care sector also saw diminishing returns on equity due to similar reasons. It is only the textiles, apparel, & luxury goods sector that has contributed to the ROE in the entire market. Although all the three - NPR, asset efficiency, and financial leverage have played an equally important role, but nothing could be proved to be statistically different. The entire market is low on profitability. Elaborating the explanation sector wise, the hotels, leisure, and beverages segment and household and personal care sector have blindly followed the same. The automobiles and specialty sector, which has more of fixed assets to incur, could sustain the asset turnover ratio and, therefore, the ROE went down as well.

## Conclusion and Suggestions

For sure, the luxury market also experienced some of the impacts of the financial crisis. Besides, the collection period of the automobiles and specialty and hotels, leisure, and beverages sectors is highlighting the delayed payments made by the debtors, and none can deny that the liquidity was kept intact. The luxury market as a whole may not be generalized to be recession proof. The results confirm that the sector - luxury textiles, apparel, & luxury goods is the only sector which came out to be corporate resilient and was also not affected by the ill winds of the economic recession.

These findings also suggest that the luxe market could not make luxurious margins, with the exception of few sectors. The socio cultural aspects play a crucial role in the goods demanded by the people. In less-developed countries, even today, the traditional and ethnic apparels and accessories are preferred over the branded goods. The companies should discover these avenues as well. Secondly, when one country confronts any crisis, companies can also play safe if they have diversified their operations across the globe. Thirdly, every country has some events where enormous unavoidable expenses are made, this might be any festive season, or weddings, or hosting any games, and so forth. These areas can be deciphered so as to maintain the continuity in the demand. Fourthly, whenever companies plan to expand their businesses beyond the national territory, the workforce employed should be domestic so that the local preferences of the denizens can be studied as it is a long learning process.

## Implications

The study has predominantly focused on the financial performance of the luxury sector and the withstanding power of the whole industry as well as the sectoral division of the same. The research has implications for the following entities:

**(1) Entrepreneurs :** There have been reasons which make entrepreneurs think that the luxury sector has a very high mark up, is always profitable, and is indifferent to economic shocks. However, this may not always be true.

**(2) Investors :** The findings have tried to highlight the return on equity, profitability, financial risk, market cap, and PE ratio for the pre and post financial crisis period. Although existing and potential shareholders possess different interests, each one of them can decide which sector can fetch them higher returns over the rest.

**(3) Management:** The managers need to decide the prospects of the concern they are dealing into. They can also incorporate other factors which can also contribute to a handsome degree of turnover ratios. They may also learn the demographic reasons for the success or failure of a sector.

**(4) Researchers and Academicians :** The researchers who are keen to study the luxury sector can always go through the financial aspect of the industry and can even link it to the non financial performance as well.

## Limitations of the Study and Scope for Further Research

The study has considered data from S&P Global Luxury Index but could also examine the unlisted companies in the luxury market which could witness slight deviations in findings from the given results. The country-specific data of the companies is found to be limited in number, so the conclusions could be subjective to every country.

The study has merely focused on the financial performance of the luxury sector, so future research can be carried out to highlight the non financial performance of the same. A similar study on the corporate performance of the luxury companies can be conducted country wise since the present study has only classified the market on the basis of the principle business. The financial performance of the small scale, medium scale, and unlisted companies can also be a part of future studies. The leverage of the luxury sector can still be studied with respect to profitability.

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