FINANCIAL PERFORMANCE ANALYSIS OF INDIAN OIL CORPORATION LIMITED

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ABSTRACT *Energy is at the core of any nation's development plan and India as a developing nation reserved the commanding heights of the economy for state enterprises keeping basic and capital intensive goods sectors under its purview. Indian Oil Corporation Limited (IOCL), India's flagship national oil company and downstream petroleum major performance is studied through this paper by using trends and ratio analysis. The study is purely based on secondary data which were collected from various sources such as annual reports of IOCL, National Account Statistics, CMIE Prowess, etc., which were analysed with the help of statistical tools like mean, standard deviation, CAGR and ratio analysis. The study revealed that the company's total assets exhibit the growth of 13.13 per cent followed by income (10.62 per cent), equity (9.27), total liabilities (7.77), turnover (5.89) and retained earnings (0.24). Company's liquidity position in term of current ratio and quick ratio was found to be less than industry and the same were consistently falling while leverage position indicates that company finance its projects from equity fund rather than from borrowed funds. Company's fixed assets turnover ratio also showed the downward trend which is a matter of concern and profitability of company in terms of ROA, ROE and ROC showed wide fluctuation over the period of the study owning the India's dependence on import of crude oil to fulfil the requirement of growing and expanding economy and making its oil marketing companies vulnerable to global events.*

Keywords: *Indian Oil Corporation Limited, Financial performance, Ratio analysis.*

INTRODUCTION

The voyage of Indian economy from a newly born state to a fastest growing economy of the world in its 72nd year of independence led by state-owned enterprises shouldering the responsibility of providing the basic infrastructure for country's industrial development[1] is going on by adopting the socialistic approach and taken core industries under its purview. These are the enterprises that are managed, controlled and established by the government with a holding of more than 50 per cent share in their paid-up capital (Preeti & Chhikara, 2018). In 1951 investment was ₹29 crores in 5 enterprises (Batra & Kaur, 1994) reached to ₹12, 50,373 crores in 331 enterprises in 2017[2] while contribution to total GVA stood at 18.6 per cent of public sector (administrative departments and public corporations) in 2015-16[3]. Oil and gas sector is among the core industries and at the time of independence was controlled by international companies. Government of India laid foundation for oil and gas industry through Industrial Policy Resolution 1954 with formation of Oil and Natural Gas Corporation (ONGC), Indian Oil Corporation (IOCL) and Oil India Limited (OIL). This paper studies the financial performance of Indian Oil Corporation, a national company and a downstream major was incorporated on 30th June 1959 as Indian Oil company to market the petroleum products. On 1st September 1964 the company was renamed from Indian Oil Company to Indian Oil Corporation following the merger of Indian refineries with it. It is a highest ranked Indian company in the prestigious Fortune Global 500 List and emerged as the 27st largest petroleum company in the world according to revenue of 2017[4]. Government of India introduced the Navratnas scheme for providing financial autonomy to state enterprises in 1997 and further in 2010 in consideration of improving their financial performance which requires delegation of decision making power to their managers (Ayub & Hegstad, 1987). In this world of uncertainty, unfavourable situations can be triumph by right information available at the right time in right form. Financial statements are the source of the financial information to its various users. Financial performance analysis is the analysis of financial statements aimed at diagnosing profitability and financial

[1] https://www.ft.com (assessed on 27 September 2018 at 1:45 pm)
[2] http://pib.nic.in (assessed on 30 September 2018 at 12:10 pm)
[3] National Account Statistics 2017
[4] https://en.wikipedia.org (assessed on 6 Oct 2018 at 12:48 pm)

soundness of the business. The need for financial statement increased due to the transfer of management from the enterprising capitalists to the professional manager and as a financial sector become a preeminent force in the economy (Horrigan, 1968).

LITERATURE REVIEW

Bhunia et.al (2011) investigated the financial strength and weaknesses of public-sector pharmaceutical enterprises covering two BSE listed companies- Karnataka Antibiotics and Pharmaceuticals Ltd. (KAPL) and Rajasthan Drugs and Pharmaceuticals Ltd. (RDPL) for the period of twelve years from 1997-98 to 2008-09. The study revealed the strong liquidity position of both the selected companies implying that companies ability to pay their short-term obligations on due dates while in terms of solvency, companies relied more on external funds thereby providing a lower degree of protection to the creditors. Multiple correlations between dependent variable- return on investment ratio and the independent variables- liquidity ratio, debt-equity ratio, interest coverage ratio, inventory turnover ratio, and debt-net worth ratio was highly correlated indicating that the profitability was perfectly influenced by its independent variables.

Jayawardhana, A. (2016) explored the financial performance of German Multinational Corporation – Adidas AG for 2014 and 2013 financial year ending on 31 December in every year via horizontal, vertical, trend and ratio analysis. The study unveiled that the company had high operating expenses affecting its overall performance, net income and ultimately EPS or shareholders return while on the other hand low ROCE indicated inefficient utilization of capital employed in the company. The study suggested that the company should establish cost cutting goals, implementing quality assurance practices and procedures, maximise employees task efficiency and should think about outsourcing.

Katchova, A.L. & Enlow, S.J. (2013) examined the financial performance of public-traded agribusinesses in comparison to all firms for a period from 1961 to 2011 (Ani L. Katchova, 2013)through indicators of company success such as financial ratio and balance sheet/income statement items. The study found that agribusinesses outperform the group of all firm at the median in terms of profitability, liquidity and market ratio but they had slightly lower debt and liquidity ratios. The Du-Pont analysis showed the higher ROE for agribusinesses that was mostly due to higher asset turnover ratio indicating towards high operating efficiency of agribusinesses. The study suggested that the strong financial performance could make agribusinesses as valuable companies in an investment portfolio.

Batchimeg, B. (2017) examined the performance of 100 Mongolian public companies listed on Mongolian Stock Exchange (MSE) which were divide into 6 sectors for the period of four years from 2012-15 through Data Envelopment Analysis based on financial ratios. The study conducted the efficiency in terms of profitability by using three output variables- revenue, pretax and ROA and ten input variables, which were decided by multi co-linearity and step-wise regression analysis. The result of DEA revealed that the food and grocery sector was most efficient followed by mining sector, while agriculture and service sector were least efficient than the other sectors.

Hooda, R. & Chhikara, K.S. (2018) evaluated the power sector performance with special reference to NTPC, a state-owned enterprise. It was revealed through the study that the power production which was dominated by state government lost its position to private sector while capacity utilisation fall drastically of the same compared to centre and state owned plants during the period under study. It was found that industries were the major consumer of power and thermal plants, major contributors in power generation. Whereas NTPC positive operating performance in terms of sales, total assets, sales per employee, asset turnover and capital employed showed strong position of company in achieving the government objectives.

OBJECTIVES OF THE STUDY

To examine the trends of financial performance and financial health of Indian Oil Corporation Limited during the period under study (2007-08 to 2016-17).

RESEARCH METHODOLOGY

Research Design: The present study is descriptive-cum-analytical in nature.

Data Collection: The data for the study were collected through various sources like annual reports of Indian Oil Corporation Limited, CMIE prowess, National Account Statistics, etc. for the period of ten years from 2007-08 to 2016-17.

Statistical tools: The secondary data collected from various sources were analysed with the help of suitable statistical tools and techniques such as percentage, standard deviation, ratios, CAGR, etc. to draw conclusion. Financial performance of companies can be examined either as absolute performance in terms of scale of operations or relative performance in terms of financial ratio. Ratios are a relationship between different pieces of financial information and facilitate comparison between companies and allow us to examine Indian

Oil Corporation performance versus Industry performance. We include the four different types of financial ratio in our analysis profitability, solvency, efficiency and liquidity for a total of 9 specific ratios. In addition to these we also report measures of various items from the balance sheet and income statement. We include six balance sheet and income statement items to examine the performance of Indian Oil Corporation: total assets, total liabilities, equity, turnover, net income and retained earnings.

ANALYSIS AND INTERPRETATION

The performance of Indian Oil Corporation Limited was measured in terms of absolute measures i.e. income statement and balance sheet items. The analytical table 1 showed various indictors of financial performance of Indian Oil Corporation Limited during a period of last ten years.

Table 1
Financial Performance Indicators of Indian Oil Corporation Ltd.

YEAR	TOTAL ASSETS (₹)	TOTAL LIABILITIES (₹)	EQUITY (₹)	TURNOVER (₹)	NET INCOME (₹)	RETAINED EARNING (₹)
2007-08	75488.97	75488.97	41086.3	247457	6962.58	6231
2008-09	86002.49	86002.49	43998.2	261849	8254.63	1885
2009-10	94074.09	94074.09	50552.9	250065	15525.63	6556
2010-11	173679.85	118347.36	55332.3	303713	7445.48	4779
2011-12	209859.75	151983.05	57876.7	373943	3954.62	2547
2012-13	228019.32	166895.01	61124.3	414919	5005.17	3244
2013-14	251554.65	185562.57	65992.1	457571	7019.09	4548
2014-15	223527.68	135963.46	67970	450756	5273.03	3345
2015-16	220504.17	132369.86	88134.3	399105	11242.23	6320
2016-17	259213.27	159484.55	99728.7	438710	19106.4	6384
MEAN	182192.42	130617.141	65139	359809	8978.886	4583.9
SD	70915.241	34888.5266	20089	85793.6	4900.094	1753.064
COV	38.92	26.71	30.84	23.8	54.59	38.24
CAGR	13.13	7.77	9.27	5.89	10.62	0.24

Source: Annual reports of Indian Oil Corporation Limited

The minimum value of assets was ₹75488.97 crores and maximum value was ₹259213.27 crores with mean of ₹182192.424 crores and standard deviation of ₹70915.24 crores having the coefficient variation of 38.92 per cent which indicates toward the fluctuation occurred in the position of assets of the company for the period under study. Company's asset varies in the range of negative 11.14 per cent to positive 84.62 per cent attributable to consecutive events happened on world map and their repercussion on Indian economy. Events were financial crisis of 2007-08, caused slowdowns of growth in advanced economies affecting demand position of crude oil in relation to its supply in international market resulting in price fluctuation, then European sovereign debt hit the world economy simultaneously existent of geo-political tensions and supply outrages in middle-east while Indian economy growth decelerate in response to global events and faced sharp depreciation in currency. Indian economy is highly dependent on crude oil imports with more than 80 per cent oil requirement fulfilled from the same making oil sector companies fragile to turbulent environment present outside an economy in terms of fluctuating oil prices and currency exchange. These events affected the current position of assets of Indian Oil Corporation Limited severely. Similarly, minimum value of liabilities was ₹75488.97 crores and the maximum value was ₹185562.57 crores with mean of ₹130617.14 crores and standard deviation of ₹34888.526 crores. Coefficient of variation was 26.71 per cent. Liabilities of company increased by 25.80 per cent in 2010-11 which were caused by the burden borne by oil marketing companies due to rise in crude oil prices in international market while in India, petroleum products were sold at administered prices. The difference between international prices and domestic prices were reimbursed by government but due to delay in compensation from the government led to high level of borrowings for company. Next year liabilities elevated by 28.42 per cent due to confluence of rising

international crude oil prices and sharp rupee depreciation against dollar. During 2014-15 the liabilities of company plummeted by 26.73 per cent following the de-regulation of diesel prices by the government making it market-linked. The minimum value of equity was ₹41086.3 crores and maximum value was ₹99728.7 crores with mean of ₹65139 crores and standard deviation of ₹20089 crores. During 2010-11, company increased its authorised capital and issued bonus shares to its shareholders in 2016-17. Minimum value of sales was ₹247457 crores and maximum was ₹457571 crores with mean of ₹359809 crores and standard deviation of ₹85793.6 crores having coefficient variation of 23.8 per cent indicates consistent hike in sales of the company that may be either because of rise in volume or in international oil prices except in 2014-15 and 2015-16, turnover fall due to fall in international oil prices and exports of petroleum products in both value and quantity terms. The minimum value of net income was ₹3954.62 crores and maximum value was ₹19106.4 crores with mean of ₹8978.886 crores and standard deviation of ₹4900.094 crores having highest variation of 54.59 per cent. Fluctuations in income range from negative 52.04 per cent to positive 113.20 per cent highlighting the instability in net income of the company due to various external and internal environments. During 2009-10, net income of the company surged by 88.08 per cent on the part of fall in international oil prices and consequently significant fall in the companies' expenditure in terms of manufacturing, selling and interest expenses on its short-term borrowings. Next year company's profit fell by 52.04 per cent irrespective of rise in sales revenue owning to rise in international oil prices that caused increase in company's expenditure. In 2011-12, company's net profit fell to its lowest level when an amount of ₹7707.82 corers deposited of arrears towards the Entry Tax and full tax in respect of crude oil imported in the state of UP on Court orders. For next two years i.e. 2012-13 and 2013-14 profits increased with respect to sales revenue. Then in 2014-15, again profit fell with decreased in sale revenue on account of fall in international oil prices. During 2015-16 company's profit showed the sharp rise of 113.20 per cent on account of drastic fall in the international oil prices and similarly in 2016-17. The minimum value of retained earnings was ₹1885 crores and the maximum value was ₹6556 crores with mean of ₹4583.9 crores and standard deviation of ₹1753.064 crores exhibiting variation of 38.24 per cent. Positive retained earnings of the company helped to provide dividend to its shareholders for 50 consecutive years. In terms of CAGR, total assets showed the highest growth of 13.13 per cent followed by net income (10.62 per cent), equity (9.27 per cent), total liabilities (7.77 per cent), turnover (5.89 per cent and retained earnings (0.24 per cent).

Table 2
Trends in Liquidity of Indian Oil Corporation Limited

	IOCL		INDUSTRY	
YEAR	Quick Ratio	Current Ratio	Quick Ratio	Current Ratio
2007-08	0.64	1.53	0.71	1.33
2008-09	0.55	1.26	0.85	1.39
2009-10	0.51	1.33	0.67	1.26
2010-11	0.49	1.01	0.79	1.56
2011-12	0.54	1.01	0.71	1.46
2012-13	0.56	1.02	0.74	1.46
2013-14	0.51	0.99	0.75	1.45
2014-15	0.39	0.96	0.77	1.43
2015-16	0.39	0.88	0.92	1.59
2016-17	0.28	0.86	0.90	1.54
MEAN	0.49	1.09	0.78	1.45
SD	0.10	0.21	0.08	0.10
COV	20.47	18.92	10.17	6.75

Source: Annual reports of IOCL and CMIE

Liquidity ratios review the short-term financial strength of the firm. In the table 2, liquidity position of Indian Oil Corporation Limited studied in terms of quick ratio and current ratio in conjunction with industry average. The quick ratio of Indian Oil Corporation Limited was lower than the industry average over the

period under study indicates toward decreasing liquidity of company in form of cash, marketable securities and trade receivables while the company as well as the industry position were less than the ideal ratio i.e. 1:1. On the other hand, current ratio was also lower than industry average and consistently decreasing means either current asset were decreasing or current liabilities were increasing and similarly their position were less than the standard current ratio i.e. 2:1. The quick ratio of Indian Oil Corporation Limited was higher (0.64) in 2007-08 and lower (0.28) in 2016-17 due to radical variation in the position of trade payables and short-term borrowing of the company while of Industry's quick ratio was higher (0.92) in 2015-16 and lower (0.67) in 2009-10. The quick ratio from 2007-08 to 2013-14 was higher than mean score while current ratio from 2007-08 to 2012-13 was higher than mean current ratio. Quick ratio and current ratio of Indian Oil Corporation Limited were found to be lower than industry average implying that the company may face difficulty in repaying its short-term obligation and COV of quick ratio and current ratio were 20.47 and 18.92 respectively, which showed less consistency in comparison to industry's quick ratio (10.17) and current ratio (6.75) indicates inefficient utilisation of short-term funds. The quick ratio (0.4857) and current ratio (1.085) indicates that Indian Oil Corporation Limited has large portion of current assets tied with slow moving and unsaleable stocks and slow paying debts or less liquidity state of the company.

Table 3
Trends in Solvency of Indian Oil Corporation Limited

	IOCL		INDUSTRY	
YEAR	Debt-Equity Ratio	Interest Cover	Debt-Equity Ratio	Interest Cover
2007-08	0.86	7.49	0.69	22.32
2008-09	1.02	2.09	0.75	17.95
2009-10	0.88	10.24	0.64	31.01
2010-11	0.95	4.40	0.82	38.15
2011-12	1.30	3.05	1.15	29.39
2012-13	1.32	1.88	2.47	23.55
2013-14	1.31	2.61	0.75	29.85
2014-15	0.81	2.84	0.77	27.53
2015-16	0.60	6.00	0.72	71.45
2016-17	0.55	8.64	0.57	27.11
MEAN	0.96	4.92	0.93	31.83
SD	0.27	2.84	0.53	14.19
COV	27.72	57.65	57.15	44.57

Source: Secondary data compiled from annual reports of IOCL and CMIE Database

Table 3 depicted the trends in the solvency of Indian Oil Corporation Limited and industry. The debt equity ratio of the Indian Oil Corporation Limited indicates that assets of the company were highly financed by the owners' capital than the outsiders' funds implying an ample margin of safety to the creditors, less burden of interest payments and company was retaining its operational flexibility whereas the industry average was lower than Indian Oil Corporation Limited and consistent during the period under study. Debt equity position of company as well as of industry was less than ideal ratio i.e. 2:1. On the other hand, interest coverage ratio of Industry was much higher than of Indian Oil Corporation Limited indicating towards its ability to handle fixed charge liabilities. The debt equity ratio of Indian Oil Corporation Limited was higher (1.32) in 2012-13 owning to high volatility in international crude oil prices led to high borrowing of companies on account of under recoveries and delayed in compensation from government while interest coverage ratio was lower (1.88) in the same year. On the other hand debt equity ratio was lower (0.55) in 2016-17 while interest coverage ratio was higher (10.24) in 2009-10. The mean debt equity ratio of Indian Oil Corporation Limited and Industry were 0.96 and 0.93, respectively. While mean interest coverage ratio of Indian Oil Corporation Limited (4.92) and Industry (31.83) show a big gap in the performance of the two. As far as deviation was concerned, interest coverage ratio (57.65) of Indian Oil Corporation Limited showed

highest variation followed by debt equity ratio of industry (57.15), interest coverage ratio of industry (44.57), debt equity ratio of Indian Oil Corporation Limited (27.72), respectively. It was revealed through the analysis that the petroleum industry was financing its assets more from owner's capital than borrowed funds indicating less interest burden compared to their earning capacity led to attractive interest cover.

Table 4
Trends in Asset Utilisation of Indian Oil Corporation Limited

	IOCL		INDUSTRY	
YEAR	Fixed Asset Turnover Ratio	Inventory Turnover Ratio	Fixed Asset Turnover Ratio	Inventory Turnover Ratio
2007-08	8.18	17.23	15.38	28.13
2008-09	9.77	20.89	12.87	40.34
2009-10	7.63	16.01	10.41	26.06
2010-11	7.17	16.10	11.32	50.19
2011-12	7.23	16.98	11.96	25.58
2012-13	7.90	16.80	11.73	24.85
2013-14	8.15	16.92	11.83	48.48
2014-15	7.35	17.18	11.05	26.87
2015-16	5.53	14.47	10.16	28.59
2016-17	5.38	11.23	9.45	23.62
MEAN	7.43	16.38	11.62	32.27
SD	1.21	2.30	1.57	9.60
COV	16.34	14.04	13.49	29.75

Source: CMIE Database

Efficiency ratio along with liquidity ratio determines the real liquidity state of the firm. Here in the table 4, activity ratio in terms of fixed asset turnover ratio and inventory turnover was examined of Indian Oil Corporation Limited. The fixed asset turnover ratio of Indian Oil Corporation Limited was declining constantly over the period under study i.e. 2007-08 to 2016-17 and comparing it with industry indicates underutilisation of its fixed resources and presence of idle capacity. On the other hand, the inventory turnover ratio was also lower than industry average highlights that company carries too much inventory compared to industry standard and that involved high carrying cost and locked up of funds. Fixed asset turnover ratio was higher (9.77) in 2008-09 and lower (5.38) in 2016-17 with mean of 7.429. Inventory turnover ratio was higher (20.89) in 2008-09 and lower (11.26) in 2016-17 owing to variation in inventory position of the company due to fallout of global events on Indian economy growth. Inventory turnover ratio improved with fall in inventory by 18.72 per cent in 2008-09 and same in 2014-15 as inventory fell by 29.60 per cent whereas in 2016-17, inventory position surged by 63 percent and the same was reflected in inventory ratio (11.26). In terms of deviation, industry's inventory turnover ratio (29.75) showed the highest variation followed by Indian Oil Corporation Limited fixed asset turnover ratio (16.34) and inventory turnover ratio (14.04).

Table 5
Trends in Profitability of Indian Oil Corporation Limited

	IOCL			INDUSTRY		
YEAR	Return On Net Worth	ROCE	Return On Asset	Return On Net Worth	ROCE	Return On Asset
2007-08	17.45	9.55	5.79	24.58	17.87	10.19
2008-09	5.54	2.84	1.78	16.02	12.66	7.76
2009-10	20.80	10.68	6.61	22.96	17.59	10.03
2010-11	13.07	6.81	4.01	24.79	19.20	10.82
2011-12	18.13	8.50	5.08	15.47	12.49	7.23
2012-13	6.90	2.98	1.81	5.04	8.08	4.85

2013-14	8.12	3.50	2.08	10.67	8.69	4.97
2014-15	4.46	2.17	1.21	8.85	7.89	4.07
2015-16	13.51	7.68	4.07	18.97	14.20	7.35
2016-17	24.71	14.60	7.28	22.73	16.23	9.39
MEAN	13.27	6.93	3.97	17.01	13.49	7.67
SD	6.58	3.87	2.08	6.66	4.02	2.31
COV	49.60	55.79	52.29	39.14	29.83	30.11

Source: CMIE

Table 5 depicted the profitability in relation to investment of Indian Oil Corporation Limited. Nagaraj (2006) said that return on capital employed is a better measure of public sector profitability owing to high depreciation cost since they had to incur social overhead capital and PSEs capital structure is not aimed to maximise return on shareholder's investment and they often set up with high proportion of debt. The return on net worth was lower (4.46) in 2014-15 and simultaneously the return on capital employed (2.17) and return on asset (1.21) were lower in the same year. While return on net worth was highest (24.71) in 2016-17 and simultaneously the return on capital employed (14.6) and return on asset (7.28) during the same year. Profitability measures showed that Indian Oil Corporation Limited was performing inefficiently compared to the Industry. During 2008-09, all profitability measures falls drastically in response to the global slowdown affecting Indian economy with negative growth of industrial production. Economic slowdown in the country affected petroleum product demand. Next year international economic conditions exhibited marked improvement and that continued for next few years highlighted in performance of company. Again global economy hit by the deterioration of the sovereign debt conditions in Europe and turbulence in oil market due to geo-political events and supply outrages in middle east combined with drop of GDP growth in the country and in particular decline in industrial output. Improvement in performance of the company return with surge in petroleum products sale owning to deregulation of diesel prices, implementation of PaHaL scheme in LPG, reduction in international oil prices and high economic growth. Company's profitability measures such as Return on net worth, return on capital employed and return on assets are lower than industry average.

CONCLUSION

The present study which was attempted to examine the trends of financial performance indicators i.e. total assets, total liabilities, turnover and net income, etc. and to analyse the financial health of Indian Oil Corporation Limited via ratio analysis during the period when world economy was hit by various political and economical events, revealed that total assets of the company grew at higher rate compared to its liabilities, followed by net income, equity and retained earnings. Events had direct bearing on the various aspects of the Indian economy and simultaneously affected the financial health of the company. The liquidity position of the company was not found to be good and solvency position is an indicative of was less dependent on the borrowed funds but showed improvement at the time of unfavourable events. The falling fixed asset turnover ratio seems to be the major concern and profitability ratios showed wide variations over the period under study. The high dependence on oil of Indian economy makes oil sector companies vulnerable to international issues that consequently affect their financial position severely. IOCL accounts 35 per cent share of refining capacity, manages one of the world's largest pipelines network and has one of largest petroleum marketing and distribution network in Asia, is contributing towards economic and social growth of a country. On the basis of the findings of the study, it is proposed that the concerned ministry should take initiatives of promoting better utilisation of its present capacity to meet energy needs of every citizen.

REFERENCES

1. Annual reports of Indian Oil Corporation Limited.
2. National Account Statistics 2017.
3. Amalendu Bhunia, S. S. (2011). Financial Performance Analysis-A Case Study. Current Research Journal of Social Sciences , 269-275.
4. Ani L. Katchova, S. J. (2013). Financial performance of publicly-traded agribusinesses. Agricultural Finance Review , 58-73.

5. Ayub, M. A., & Hegstad, S. O. (1987). Management of Public Industrial Enterprises. Oxford University Press , 79-101.
6. BATCHIMEG, B. (2017). Financial performance measurement with the use of financial ratios: case of Mongolian companies. International Journal of Mathematical, Engineering and Management Sciences , 20-32.
7. Batra, G., & Kaur, N. (1994). ECONOMICS OF PUBLIC SECTOR AND RESTRUCTURING STRATEGIES IN A DEVELOPINGECONOMY (A CASE STUDY OF INDIA). Department of Economics, University of the Punjab , 41-59.
8. Bhunia, A., Mukhuti, S., & Roy, G. (2011). Financial Performance Analysis-A Case Study. Current Research Journal of Social Sciences , 269-275.
9. Hooda, R., & Chhikara, K. S. (2018). A Critical evaluation of Power Sector in India with Special Reference to NTPC. ZENITH INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH , 253-264.
10. Horrigan, J. O. (1968). A Short History of Financial Ratio Analysis. American Accounting Association , 284-294.
11. Jayawardhana, A. (2016). Financial Performance Analysis of Adidas AG. European Journal of Business and Management , 74-82.
12. Katchova, A. L., & Enlow, S. J. (2013). Financial performance of publicly-traded agribusinesses. Agricultural Finance Review , 58-73.
13. Khanna, S. (2012). State-Owned Enterprises in India:Restructuring and Growth. The Copenhagen Journal of Asian Studies , 5-28.
14. Nagaraj, R. (2006). Public Sector Performance since 1950: A Fresh Look. Economic and Political Weekly , 2551-2557.
15. Preeti, & Chhikara, K. S. (2018). Status and Performance of Central Public Sector Enterprises in India. ZENITH International Journal of Multidisciplinary Research , 111-120.
16. https://www.ft.com/content/cb5a4668-1c84-11e8-956a-43db76e69936 (accessed on 27 September, 2018 at 1:45 pm)
17. https://www.businessinsider.in/india-overtakes-china-to-become-the-worlds-fastest-growing-economy-in-q1-2018/articleshow/65653486.cms (accessed on 28 September, 2018 at 4:06 pm)
18. https://www.simplilearn.com/financial-performance-rar21-article (accessed on 8 September, 2018 at 12:15 pm)
19. https://ebstudies.wordpress.com/2012/11/06/financial-performance-analysis/ (accessed on 8 September, 2018 at 12:15 pm)
20. https://accountingexplained.com/financial/ratios/quick-ratio (accessed on 10 September, 2018 at 11:00 am)
21. https://www.ndtv.com/business/stock/indian-oil-corporation-ltd_ioc/reports (accessed on 11 August, 2018 at 10:20 am)
22. http://pib.nic.in/newsite/PrintRelease.aspx?relid=177357 (accessed on 30 October, 2018 at 12:10 pm)
23. https://economictimes.indiatimes.com/industry/energy/oil-gas/crude-import-bill-may-rise-20-in-fy19-on-soaring-global-prices/articleshow/63886532.cms (accessed on 27 October, 2018 at 1:15 pm)
24. https://www.iea.org/publications/freepublications/publication/IndiaEnergyOutlook_WEO2015.pdf (accessed on 20 October, 2018 at 10:15 am)
25. https://www.thebalancesmb.com/what-is-financial-ratio-analysis-393186 (accessed on 30 October, 2018 at 3:48 pm)
26. https://www.macrotrends.net/1369/crude-oil-price-history-chart (accessed on 8 November, 2018 at 12:01 pm)
27. http://www.dghindia.org/index.php/page?pageId=56 (accessed on 27 October, 2018 at 1:15 pm)
28. https://corporatefinanceinstitute.com/resources/knowledge/finance/return-on-capital-employed-roce/ (accessed on 27 October, 2018 at 1:15 pm)
29. https://www.iocl.com/aboutus/profile.aspx (accessed on 6 November, 2018 at 3:25 pm)