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White Paper

A Macro Examination of Financial Reporting in India

EVALUESERVE

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Executive Summary

When it comes to financial reporting, as in any other economy, India has its share of 'clean' firms as well as ones that are not so. The purpose of this paper is not to call out any particular offender but to highlight potentially systemic issues. As we have discussed in this paper, even some of the largest Indian firms (in the aggregate) seem to fall short on several common housekeeping ratios, which builds the fear that something is amiss in their reported financials.

While only the recurrence of a Satyam-type scandal may refocus investor attention on this issue, such an event can lead to a massive outflow of Foreign Institutional Investor (FII) money. In the current period of heightened risk, investors tend to paint all companies in a market with the same brush, as it has just happened in the wake of the 'reverse merger' scandal in China, where the actions of a few companies impacted the valuations of the broader local market. In India, the impact of a new scandal can be far worse. The reason is that there exists a very high correlation between FII money flows and the performance of Indian stock markets. Combined with the relative illiquidity of Indian stock markets, even small FII outflows can lead to dramatic price swings.

There is evidence that smart investors are already quite concerned. In a recent "Economic Times" article, a renowned Indian investor and billionaire, Ajay Piramal, claimed that when he looked to make some investments in engineering and infrastructure companies, he could not make sense of their books. "We couldn't find anything," he said. "People get greedy. In their desire to get good valuations they resort to, if I can say, creative accounting." There is a more concrete and worrying sign of a setback in investors' confidence. In 2008, India attracted twice as much foreign direct investment – USD33 billion – than Indian investment contracted by foreign businesses. The tide had turned by 2010, when FDI currents flowing outwards from India reached USD40 billion, twice as much as foreign direct investment into India. Foreign apathy towards the Indian economy persisted in 2011. Though 2012 has started off on a good note with a flood of FII money coming to India, the time to act is now.

Prologue

In 2009, the chairman of Satyam Computers, Ramalinga Raju, confessed to falsifying the company's books. His prosecution is progressing at the usual slow pace of the Indian judicial system, while he is out on bail. More than two and a half years have passed since the case was uncovered, and it is time to ascertain if things have improved since.

Financial misrepresentation, especially involving financial statements, continues unabated worldwide. The uncovering and prosecution of high-profile cases, such as Enron, MCI/Worldcom, and Sunbean, does not seem to have had a deterrent impact on potential perpetrators. One of the common threads in many cases is the pressure to meet quarterly numbers, which inevitably leads to cutting corners. Small "adjustments" lead to bigger ones and eventually to a collapse. It might be impossible to eliminate this type of fraud, as evidenced by hundreds of convictions in the US alone.

The prosecutions in the US are a symbol of the robust system of checks and balances in the country, which lends credibility to the system. In India, on the other hand, we have not witnessed any accounting/financial statement fraud after Satyam. In fact, Satyam is perhaps India's only significant documented fraud in 60 years. This is very troubling, as it is hard to believe that India is free of accounting fraud, and only points to the institutional shortcomings that prevent the uncovering and prosecution of accounting frauds. While it is difficult to point to a particular company as a poster child for fraud (unless you want to risk libel charges), which, in any case, is the job of industry watchdogs and regulators, we have examined a few proxy measures with the aim of comparing transparency levels in India versus the US:

- The weighted average dividend payout ratio for the Sensex constituents is nearly half of the figure for the Dow Jones Industrial Average (DJIA) constituents. If you take into account the return of cash by share repurchase (quite common in the US and very rare in India), the picture seems even more lopsided. Return of cash is an important measure of transparency. While earnings can be managed even over extended periods, cash payouts are much more difficult to manage for obvious reasons, i.e. they need to be paid out.
- A high accrual ratio (change in operating assets/average operating assets) indicates poor earnings quality. The accrual ratio of the Sensex constituents is 0.24, which is double that of the DJIA constituents in FY 2010. Over the last four years, Dow Jones displayed this ratio in the range of 0.11 to 0.14, while for the Sensex, it ranged as high as from 0.21 to 0.32.
- Similarly, a high net income to cash flows ratio (NI/TCF) is an indication of poor earnings quality. We reviewed this ratio for our select groups. While the Sensex constituents reported a high NI/TCF ratio of 21.70 in 2010, the DJIA constituents reported an NI/TCF ratio of 11.20. For BSE 500, we noticed an NI/TCF ratio of 49.72 in 2010. We also observed a wide dispersion in this ratio for the Sensex constituents, with a high of 52.56 in 2007.
- We also reviewed the subsidiaries of foreign companies, including merged entities listed on Indian stock exchanges, to account for any structural difference between the Indian and US economies. Interestingly, these firms reported various ratios that nearly matched that for the DJIA constituents.
- The average daily trading value for the Sensex stocks, as a percentage of total market capitalization, is only 0.06%, which is less than one-fourth of the average daily trading value for the DJIA stocks. This makes markets very vulnerable to investment inflows/outflows. Furthermore, there is a very high correlation (0.65) between the investment by foreign institutional investors (FIIs) and Sensex performance. This lack of liquidity can further amplify the negative impact of a potential scandal.
- Widespread corruption, lack of regulatory reforms, and the absence of enforcement and effective corporate governance practices have reinforced the negative investment climate in India. As a result, India is perhaps the only fast-developing economy to witness a reduction in FDI in the fiscal year 2010-2011.

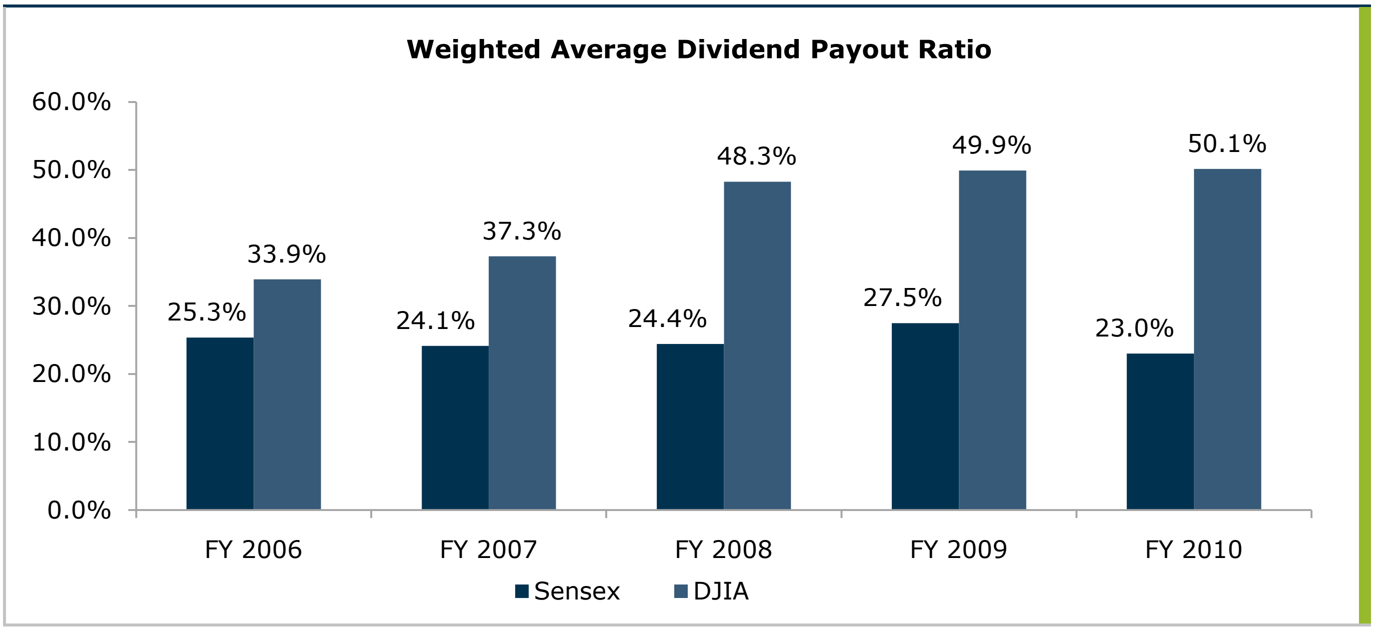
Are Indian Companies Reluctant to Disburse Cash to Shareholders?

High sales growth, increased profitability, and low corporate tax are ideally the key determinants of dividend policy. India, as an emerging market economy, has been reporting excellent numbers on these parameters. In such a scenario, shareholders would expect to receive a portion of the increased wealth in the form of dividends. However, we do not see Indian companies disburse high dividends to their shareholders.

The dividend payout ratio of a company depends significantly on its ownership structure and corporate governance practices. A deficient system can act as a trigger for financial statement manipulation, rather than determine a healthy dividend payout ratio.

The weighted average dividend payout ratio of the DJIA stocks is 41.09% (five-year average dividend payout per share). In comparison, the Sensex stocks have a weighted average payout of only 24.59% (Exhibit I in the Annex). The DJIA stocks reported higher dividend payout ratio for all years, posting 50.1% compared to 23.0% for the Sensex constituents in FY 2010 (FIGURE 1). We see a similar trend in the case of the BSE 100 stocks, which have a dividend payout of 23.92% (latest available data).

FIGURE 1: Weighted Average Dividend Payout Ratio for DJIA and Sensex – A Comparison



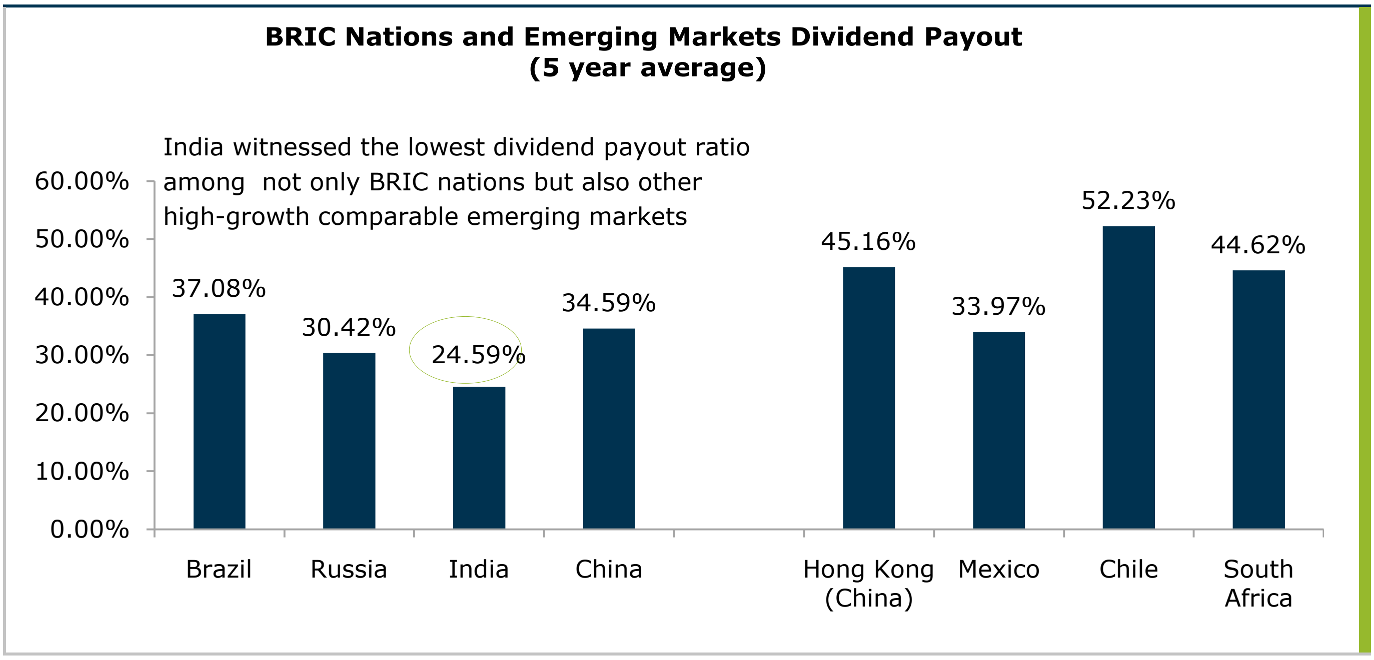
Source: Evalueserve analysis based on data from Thomson Reuters and Bloomberg

To account for any structural difference between Indian and US firms (e.g., high vs. low growth), we took into account the dividend payout of large Indian subsidiaries of international firms listed on Indian stock exchanges, as well as companies that have formed joint ventures (JV) with Indian counterparts. We selected seven companies (HUL, Maruti Suzuki, Cummins, Glaxo, Nestle, Siemens, and ABB) to study this parameter.

These stocks show an average dividend payout ratio of 38.0%, very close to that of the DJIA stocks. (EXHIBIT II in the Annex)

We further reviewed the dividend payout ratios of the benchmark indices of several emerging market economies similar to India, including the other BRIC countries. It is noteworthy that the Sensex reported the lowest dividend payout ratio in this group, while Brazil and China (including Hong Kong) reported numbers close to that of the DJIA stocks.

FIGURE 2: Weighted Average Dividend Payout Ratio – BRIC and Emerging Markets – A Comparison



Source: Evalueserve analysis based on data from Thomson Reuters

The story does not end there... Share repurchase is another means used by companies to distribute cash to their shareholders. While companies prefer following a stable dividend policy based on a long-term target payout ratio, they frequently use residual cash in some quarters for share buybacks. India scores low on this parameter as well. In the last five years, there have been only seven transactions by the Sensex constituents (including subsidiaries), in contrast with 160 transactions by the DJIA constituents (including subsidiaries). The total repurchase value of the DJIA constituents is USD756 billion, compared with only USD1.6 billion for their Indian counterparts (only 0.21% of the US repurchase value).

Dividend payout is an important measure of transparency (as well as of fair treatment of minority shareholders). While earnings can be 'managed' even over extended periods, cash payouts are much more difficult to manage.

High (Quantity) Earnings vs. High-Quality Earnings

Market pressures as well as personal incentives are responsible for inducing managers to manipulate financial statements. They can report unbankable earnings by merely adopting an aggressive accounting policy. With the global economy witnessing increased recessionary pressure, determining the earnings quality of entities within an economy is of utmost importance.

To determine the earnings quality of Indian stocks, we took into account the following indicators:

- Accrual ratio
- Net income to total cash flow ratio
- Net income to operating cash flow ratio
- EBITDA to operating cash flow ratio

High Accruals as a Warning Signal

The two most important determinants of economic income are cash flow from operations and accounting accruals. The higher the cash component and the lower the accruals of a company over long periods, the more sustainable are its earnings. Thus, it makes sense to use accrual ratio as a proxy for earnings quality – the higher the accruals, the lower the earnings quality.

We calculated accrual ratio as

Change in net operating assets
Average net operating assets
Net operating assets = operating assets - operating liabilities
Operating assets = total assets - cash and cash equivalents
Operating liabilities = total liabilities - total long-term debt - current portion of long-term debt

Our analysis revealed some interesting statistics:

Accrual Ratio Analysis				
Index	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**
Dow Jones	0.13	0.14	0.11	0.12
Sensex	0.32	0.30	0.21	0.24

Source: Evalueserve analysis based on data from Thomson One Banker

The DJIA constituents witnessed stable accrual ratios of 0.14 in FY 2008, 0.11 in FY 2009, and 0.12 in FY2010. On the contrary, the Sensex constituents reported a ratio as high as 0.32 in FY 2007. With a significant deviation over these years, the accrual ratio was 0.24 in FY 2010, twice as much as the ratio of the Dow Jones constituents.

Cash is King: Better than Net Income

Two often quoted facts – "cash flow is harder to manipulate than net income" and "a company that does not generate cash over the long term is on its deathbed" – prove that operating cash flow is a better metric of financial health. With significant leeway in calculating net income, analysts around the globe have observed companies reporting tremendous earnings growth, which is not supported by their operating cash flows. Stocks such as Enron and Sunbeam, now busted, constantly reported positive net income growth, accompanied by negative cash flows.

Net Income to Total Cash Flow				
Index	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**
Dow Jones	9.97	14.66	11.07	11.20
Sensex	52.56	16.56	14.05	21.70
BSE 500	46.23	27.37	45.24	49.72

Source: Evalueserve analysis based on data from Thomson One Banker

We observed the following trends with regard to the three categories of stocks analyzed for this white paper:

- The DJIA constituents reported a net income to total cash flow ratio (NI/TCF) of 11.20 in FY 2010, while the Sensex constituents reported an almost double NI/TCF ratio (21.70).
- In the last four years, the ratio of the DJIA constituents ranged between 9.97 and 14.66, while the Sensex reported a ratio as high as 52.56 in FY 2007.
- To complement our results, we note that the BSE 500 constituents reported a very high NI/TCF ratio of 49.72 in FY 2010.

To remove any bias resulting from any fundamental difference between the DJIA and Sensex firms (e.g., stable vs. high growth), we also studied a few merged entities and subsidiaries of foreign companies listed on Indian stock exchanges. EXHIBIT III in the Annex supports our hypothesis that structural environmental differences do not account for the difference in NI/TCF ratios between the DJIA and Sensex firms.

Net Income to Total Cash Flow	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**
Average for Select Stocks	6.84	3.59	4.87	8.12

Source: Evalueserve analysis based on data from Thomson One Banker

The average NI/TCF ratio of these companies is better than that of the Sensex stocks and closer to that of the DJIA stocks.

Operating Cash Flow: The Lifeblood of a Company

As total cash flow reflects not only the operating decisions but also parameters such as growth prospects (capital expenditure or investing activities) and capital structure decisions (financing activities), academics sometimes argue that comparing firms on the basis of their total cash flow might not be an apples-to-apples comparison because of the difference in capital structure and capital expenditure.

We therefore calculated the net income/operating cash flow ratio for our selected universe of stocks. The higher the ratio, the more accrual-focused is the stock and the lower is its earnings quality.

Net Income to Operating Cash Flow				
Index	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**
Dow Jones	0.65	0.93	0.62	0.80
Sensex	1.13	0.99	1.27	0.93

Source: Evalueserve analysis based on data from Thomson One Banker

As the table above shows, the NI/OCF ratio of the DJIA constituents is consistently lower than that of the Sensex constituents.

Again, it is interesting to note that select MNCs and merged entities under study reported NI/OCF close to that of the DJIA constituents (EXHIBIT IV in the Annex).

EBITDA vs. Net Income: Removing Non-operational Items

We also considered the EBITDA/operating cash flow ratio of our select universe of stocks, which yielded similar results:

EBITDA to Operating Cash Flow					
Index	**FY 2006**	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**
Dow Jones	1.30	1.28	1.89	1.20	1.55
Sensex	2.91	2.07	1.79	2.45	1.66

Source: Evalueserve analysis based on data from Thomson One Banker

In FY 2006, FY 2007, and FY 2009, the DJIA constituents reported EBITDA/OCF ratios at almost half the ratios of the Sensex constituents. Though we saw a great improvement in Sensex numbers, from 2.45 in FY 2009 to 1.66 in FY 2010, they still remain higher than that of their DJIA counterparts.

Once again, the given set of select MNC stocks reported EBITDA/OCF ratios very similar to the Dow Jones statistics for almost all the stocks for all the years (except Siemens in FY 2007, because of ultra low operating cash flow, and ABB in FY 2008; EXHIBIT V in the Annex)

Earnings Quality: Dow Jones Scores a Clear Victory over Sensex

Our earnings quality analysis based on the above-mentioned four ratios for the three sets of stocks (DJIA, Sensex, and foreign entities with Indian operations listed on Indian stock exchanges, including merged entities) points to the consistently poor quality of earnings reported by Indian companies. It is noteworthy that the difference is not marginal but substantial for all the ratios.

Shallow Base of Indian Markets

While we do see an obvious need to improve the quality of financial reporting, we consider the current situation in India as especially risky because the fallout from any scandal could be huge. The risk is magnified by the fact that Indian markets are not highly liquid and are prone to wide swings. We used daily trading value (the percentage of total market capitalization) as an indicator of the depth and breadth of the market. We noticed order imbalances and that large orders led to significant stock price movements. The average daily trading value as a percentage of total market capitalization for the trading activity over the last six years is 0.06% for the Sensex stocks and 0.25% for the DJIA stocks. US stocks are traded at more than four times the average trading value of their Indian counterparts. This explains the shallow base of Indian versus US markets. (EXHIBIT VI in the Annex)

As many as 27 of the 30 Sensex stocks traded at less than 0.16% of their market capitalization, which is the minimum for any stock traded at Dow Jones. US exchanges provide smaller decimalization of ticks to increase the overall market depth, ensuring better liquidity and volume to support small price changes.

High Correlation with FII Funds Flow

Furthermore, Indian equities witnessed significant volatility in the last decade, with the Sensex reaching a low of 2600 in September 2001 and touching a high of 21,207 in January 2008. This period has also been characterized by a massive increase in the involvement of foreign institutional investors (FIIs). On certain days, it seems that FII money flow is the primary determinant of the Sensex level.

For the last 10 years, a very high correlation of 0.65 has been observed on a monthly basis between FII flows and Sensex levels. (EXHIBIT VII in the Annex)

Do Fundamentals Matter?

The primary determinant of investment value is earnings per share (EPS). Other integral parameters, such as dividends per share (DPS) and sales per share (SPS), help in explaining investment returns. A regression analysis shows that these three parameters together explain only 1.54% of the quarterly returns of the Sensex for the last 10 years. Individually too, the variables are insignificantly correlated with the Sensex: correlation with EPS, DPS and SPS reaches coefficients of only 0.24, 0.024, and 0.071 respectively.

The bottom line is that Sensex stocks move in tandem with FII investment, with little or no role of fundamental analysis in stock selection. Low liquidity only compounds this problem by generating wild swings. It seems that investors either pay little attention to fundamentals or altogether disbelieve the reported numbers.

What Needs to Be Done

The decisive point is that institutional checks and balances need to be strengthened considerably. Even if one hypothesizes that a vast majority of companies don't indulge in financial reporting fraud (which is unfortunately not consistent with data presented in this paper), the actions of a few companies can tarnish the reputation of the market as a whole.

- The enforcement mechanism needs to be strengthened to (a) uncover irregularities and (b) ensure swift justice. Despite a very detailed public confession by the Satyam founder, there has been little movement in the case. This contrasts very unfavorably with the US, where most perpetrators of well-known financial scandals, such as Enron and Worldcom, have been brought to justice with very long jail sentences being handed out.
- Whistleblower laws need to be strengthened. There is a need to have professionals within companies or audit firms to observe financial misconduct. Clearly, the Satyam episode serves as a cautionary tale.
- While enforcement needs to be strengthened, Indian corporations (especially the good ones) need to voluntarily push for a clean-up. The stock exchanges can also take the initiative, and rather than waiting for the government or regulators, they can unilaterally implement stronger listing requirements supplemented by continued monitoring.

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