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#### Testing Performance of Public Sector Enterprises in India Using Carhart Four Factor Model : Empirical Analysis

Jaspal Singh \* & Sidharath Seth \*\*

As part of its agenda to reform the Public Sector Enterprises (PSE), the government has selectively been disinvesting its holdings in public sector enterprises since 1991. As a result, it becomes imperative to find out if these PSEs have created wealth for their shareholders after disinvestment when they got listed. This paper focuses on evaluating the long-term performance of PSE stocks in the Indian stock market. The 20 stocks comprising CNX PSE are chosen as the sample of the study. They were considered for analysis from their respective listing date till 31st March 2014 using total return values. Their performance is evaluated using annualized return, annualized standard deviation, Sharpe ratio and Carhart four factor model. No single PSE stock was successful in generating statistically significant positive excess returns over CNX Nifty index. Nine stocks along with CNX PSE index failed to generate excess returns over risk free rate, showing that they could not beat the return generated by 91 day treasury bills. Furthermore, the under performance of CNX PSE index does not necessarily mean that every PSE stock that comprises the CNX PSE Index will always under perform. So, an investor should take utmost care while choosing between CNX PSE Index or individually in any of the CNX PSE 20 stocks to make investment. While considering economic significance, Container Corporation of India Ltd was found to be the most profitable PSE company for investment. Also, market risk premium, size, value and momentum were found to have statistically significant impact on the returns generated by these stocks.

Keywords: Public Sector Enterprises, National Stock Exchange, India, Carhart Four Factor model, Statistical Significance, Economic Significance.

## Financial Performance of ONGC during the Post-Liberalization Period : A Case Study

Sumit Kumar Maji \* & Debasish Sur \*\*

The role of Central Public Sector Enterprises (CPSEs) in Indian economy cannot be over emphasised. Since Independence the CPSEs have played instrumental role in contributing revenue to the central exchequer, creation of huge employment opportunity, removing the regional disparity and making notable contribution towards the economic growth of India. ONGC is one of the seven 'Maharatna' CPSEs of India and it is contributing tremendously to the Indian economy in many facets. Considering its dominant position in the Indian oil exploration sector and its importance in the national economy, the assessment of the financial performance ONGC in the post-liberalization period highlights much significance. In this backdrop, the present paper attempts to analyze the financial performance of ONGC for the period between 1999-2000 and 2013-2014. While tackling the issue addressed in this paper, the 'Corporate Distress Prediction Models' as suggested by Prof. Jayadev was used. The result of the study reflected prominent financial performance of ONGC throughout the study period. The study also revealed a noteworthy improvement in the financial position of ONGC over the study period.

Keywords: CPSEs, Maharatna, Post-liberalization Period, Corporate Distress Prediction.

# Measuring Result-Oriented Accountability of Public Sector Enterprises in India: Evidence from the Coal Based Industries

Chinmoy Roy\*

In recent decades, accountability mechanisms of public sector enterprises have shifted from a focus on legality of spending resources efficiently and authoritatively to a focus on effectiveness and outcomes, representing what the impacts of results to put external pressure on sustainable solutions based on 'doing the right thing' perspective. Through best practices from mine to market, the central public sector enterprises in the coal-based industries in India can produce planned outputs with due regard to sufficiency initiatives. The focus of this paper is to gain insight into the comparative resource regeneration and value addition practices of the coal sector in terms of efficiency and effectiveness both from deontological and axiological stand points in fulfilling the public sector responsibility. This paper with the help of a new set of variables with price and value directory as preference weights employed Data Envelopment Analysis (DEA) model to assess the comparative cost and revenue efficiency, equally from productivity and effectiveness view points of the coal enterprises between and within periodic segments using static and dynamic panels and ranked them through the means for groups in homogeneous range test. The analytical results validates that though the enterprises are not fully effective on the basis of outcomes, however, all are fairly productive on the basis of outputs. Most of the enterprises maintained productive capacity in the higher order as compared to the averages in maintaining the effectiveness and all the enterprises are more efficient in generating outputs than in utilizing optimal inputs.

Keywords: Coal-Based Industries, Efficiency Score, Resource Utilization, Effectiveness.

#### Capital Adequacy of Indian Public Sector Banks : A Different Perspective

Swapna Samanta\* & Ram Pratap Sinha\*\*

The present paper compares the capital adequacy of Indian public sector commercial banks from a different perspective: capital in relation to their level of activities. Thus we have constructed a capital adequacy frontier and compute capital adequacy efficiency of the insample commercial banks by using BCC envelopment model. Further, we have tried to see the impact of net NPA ratio and operating profit ratio on the capital adequacy efficiency of the banks under observation. The results indicate that net NPA ratio do have a significant positive relationship with capital adequacy while no such relationship could be established in the case of operating profit ratio.

Keywords: Public Sector Banks, Capital Adequacy, DEA, BCC Model.

#### Efficiency Analysis of Indian Railways : Decomposition into Pure Technical and Scale Efficiency

Manpreet Kaur\* & Anjali Mehra\*\*

This paper attempts to analyze the inter-temporal variations in the overall technical efficiency (OTE) of Indian Railways (IR) over the period 1991-92 to 2010-11 using output-oriented DEA model. For determining the sources of inefficiency in IR, technical efficiency has been decomposed into pure technical and scale efficiency. The empirical findings reveal that IR operate at 82.6 per cent level of overall technical efficiency i.e. given the bundle of inputs, only 82.6 per cent of output was produced and there was 17.4 per cent scope for improving the outputs given the inputs. Further, the reorganization strategy of 2003 has resulted in a decline in the efficiency level of IR. It was also observed that the contribution of scale inefficiency in overall technical inefficiency was smaller than that of managerial inefficiency (pure technical inefficiency). Among the drivers of technical efficiency, percentage of electrified network (ELC), wagon turn round (WTR), passenger revenue per train kilometer (PRTKM), and infrastructure costs per train kilometer (ICTKM) are observed to be significantly affecting the efficiency of IR.

Keywords: Indian Railways, Technical Efficiency, Pure Technical Efficiency, Scale Efficiency, Data Envelopment Analysis, Truncated Regression.

#### Financial Performance of State Level Public Enterprises in Uttar Pradesh

Nagendra Kumar Maurya\*, Sapana Singh \*\* & Ajit Kumar Singh \*\*\*

The paper makes a critical analysis of the financial health of the SLPEs of Uttar Pradesh and attempts to contribute policy suggestions. As far as the methodology is concerned financial and operating ratios have been used to analyse the financial health of these commercial entities. Four types of financial ratios have been applied in the process, namely liquidity ratios, profitability ratios, leverage ratios and asset management ratios. Thus the paper provides an analytical study of the financial health of the 40 SLPEs of Uttar Pradesh on the basis of financial and operating ratios computed from the latest available data i.e. from 2008-09 to 2011-12 from the Bureau of the Public Enterprises, UP. Analysis of the financial performance of energy sector SLPEs and non-energy sector SLPEs reveals that while the later earned a net income during all the four years, the energy sector SLPEs incurred huge losses. The operating performance SLPEs during the period showed that 31 out of 36 SLPEs were earning profit during the period, though in many cases the profit was small or nil. Select financial ratios show low return on capital, negative net worth, low gearing, poor utilization of financial resources and low labour productivity. It has been concluded with relevant empirical findings that the SLPEs are putting a serious financial burden on the state budget and many of them are not serving the purpose for which they were set up.

Keywords: SLPEs, Financial Ratios, State Subsidies, Disinvestment.

#### Performance of State Level Public Enterprises in the Plantation Sector in Kerala

Febi Varghese \* & V.Mukunda Das \*\*

This study is an attempt to assess the relevance and effectiveness of State Level Public Enterprises in the plantation sector in Kerala. The financial performance of the three major State Level Public Enterprises in plantation sector, namely, Plantation Corporation of Kerala Ltd., State Farming Corporation of Kerala Ltd., and Oil Palm India Ltd., necessarily indicate that these companies requires further improvement to reduce the distance to performance frontiers and best practices. Policy implications deduced from the inferences point to the need for a systematic revamping interventions to correct system failures. The study urges the authorities concerned to initiate immediate meaningful steps towards implementing a series of interventions to address critical issues posing the public sector undertakings in plantation sector and calls for rapt attention and apt response to pave the way for the healthy and sustainable growth of public enterprises, which could indeed serve as the propellant of rapid economic transformation, if run on the track of enhanced economic efficiency. Such efficient public enterprises prove that efficiency is not necessarily the monopoly of the private sector.

Keywords: Public Sector Undertaking, Plantation Sector, Financial Performance.

#### Assessment of Lending Pattern of SIDBI: An Appraisal

Shallu Sharma \* & Navkiranjit Kaur Dhaliwal \*\*

The micro, small and medium enterprises (MSMEs) play a key role in the economic development of our country. The MSME sector has been passing through a phase of transformation due to globalization. In this context, Small Industries Development Bank of India (SIDBI) being an apex financial institution, has been consistently involved in meeting the diverse credit requirements of the MSME sector through its varied innovative schemes. In the present paper, an attempt has been made to study the lending pattern of SIDBI to its entrepreneurs. The lending pattern has been analyzed on the basis of number of times loans raised by the borrower, factors influenced borrowers for availing loan from SIDBI, purpose of their loan, amount of loan, duration of loan, rate of interest, security requirements, moratorium period, repayment schedule, respondents opinion about adequacy of loan amount and problems faced by respondents in sanction and disbursement of loan.

Keywords: Micro, Small and Medium Enterprises, SIDBI, Lending Pattern.

#### National Food Security Act : Awareness, Issues and Strategies from Bottom of the Pyramid Perspective

Chaman Lal\* & Kamal Singh \*\*

To eliminate hunger and provide food to the identified beneficiaries, Government of India enacted the National Food Security Act (NFSA). The NFSA is a 'Right Based' effort of Government of India to provide food security to its citizens. To achieve the underlying objectives and for better results public participation is of utmost importance. To ensure public participation, awareness among the stakeholder is of prime importance. The purpose of the paper is to analyze the awareness level and to raise the issues of real stakeholders and design implementation strategies for effective results. Various dimensions of NFSA and existing public distribution system (PDS) are taken into consideration while collecting data. Random sampling technique is used to collect data from 200 rural households. The inference drawn from the study is that the awareness level is very low especially among the socially deprived classes. There is need for collaborative efforts by integrating the self-help groups (SHGs), Gram Sabha and women for effective promotion and implementation of the Act.

Keywords: Public Distribution System, Food Security, National Food Security Act.

#### Profitability Analysis of Select Public and Private Sector Telecommunication Network Service Providers in India

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The state of the telecommunication industry of a country is the direct result of the telecom reforms taken up by the government of that country. It will be the first to show signs whether these reforms on the policy front such as establishment of Bharat Sanchar Nigam Ltd (BSNL) privatization of VSNL termination of monopoly of VSNL in International Long Distance, opening up of National Long Distance (NLD) and International Long Distance (ILD) services to competition, introduction of Unified Access Licensing (UASL) regime, implementation of calling party pays (CPP) increase in FDI limits and mobile number portability had a positive or a negative impact. The paper attempts to study using statistical techniques and ratios, the profitability of select public and private sector telecommunication network service providers in India.

Keywords: Public and Private Service Providers, Profitability, Telecom Reforms.

## Making Diversity a Business Imperative : A Suggestive Note to CPSEs

Dipak Kumar Bhattacharyya\*

Diversity issues are now important in organizations. Indian organizations, along with their business responsibility reporting need to disclose their diversity management issues. Appropriate diversity management practices are positively seen by the stakeholders, and also contribute to organizational value-stream. Worldwide through various government actions, discriminatory employment practices based on race, colour, religion, age, disability, gender, culture, and ethnicity have now been prohibited. With diverse workforces, culture of organization also becomes complex. Hence organizations need to accommodate the principles of `valuing diversity'. Among others, this requires focus on changing employees' attitudes and eliminating behaviours that reflect more subtle forms of discrimination and exclusion. Based on literature survey and organizational practices, this paper discusses on gender mainstreaming and then outlines the diversity management principles, which can benefit CPSEs in terms of long-term sustainability and growth.

Keywords : Diversity, Gender Mainstreaming, Cultural Diversity, Diversity Management, Diversity Neutral Workplaces.

#### Reappraising the Relevance of Public Enterprise : The Case of Passenger Road Transport in India

Sudarsanam Padam \*

As the Mahabharat war was drawing to a close, Karna lay dead and Arjuna, with pardonable pride, boasted to Krishna: 'I've done it!' Krishna remonstrated : 'But you were only the instrument, Arjuna. Karna was killed by his mother Kunti, by me and by several others, before you have done the final deed.' This parable has a striking relevance to the slow and halting demise of public enterprise in India. Those responsible for the decline and demise of much of public enterprise are Government, their mother, Trade Unions, their self-proclaimed guardians and the management and employees. The coup de grace is left to the market. State Transport Undertakings (SSTUs), the principal actors in road passenger transport sector, are the Karna of the parable and provide a classic enunciation of a tragedy which has no villains and only sympathizers, beneficiaries and benefactors.

To present my case, I need to go back to the early years of 20<sup>th</sup> century. The only public transport for long distance travel were the railways, which were run as companies owned by British interests. The introduction of motor vehicles was seen as a mere novelty, particularly in India, till the end of the first war. What started as a novelty, blossomed into a veritable public transport by spontaneous operation of motor vehicles, initially those left behind after the war and later some improvised machines. But by the 1920s this unorganized road transport was seen as a potential threat to the railways and the Mitchel-Kirkness Committee called for a controlled monopoly. The British had no interest in public enterprise and the railways themselves were private companies.

There were several legislative attempts to organize road public transport, on the one side to bring operational discipline in terms of safety and on the other to prevent its encroaching on the railways traffic. The Motor Vehicles Act (1939) (which took its inspiration from the British Transport Act of 1935) was, indeed, a remarkable document for its time and the fact that it lasted for

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