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An Introspection into the Power Sector Finances in India

Abstract

The Power Sector fuels the growth of the other sectors of the economy. Despite considerable progress in implementing the EA mandates and associated policies over the past decade, the distribution segment continues to post significant losses. The Power Utility finances is critical to realizing sector goals deteriorated sharply over the period from 2003–11. Power sector after-tax losses excluding state government support (subsidies) to the sector were Rs 618 billion ($14 billion) in 2011 which is equivalent to nearly 17 % of India's gross fiscal deficit and around 0.7 % of GDP. The Paper aims to study the evolution of the finances of the power sector from the period 2003-11 in order to introspect the debt burden faced by the power utilities.

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Introduction

The Power Sector in India Is suffering from the debt burden and it has reached a level which needs to be checked out immediately. The Power Sector Finances are very critical to realize the sector goals are experiencing a downward trend from 2009 onwards and it has reached crisis proportion in 2011. The Losses in the sector are largely financed by the state subsidies and the heavy borrowing by all segments of the value chain .During the Period of 2003-11 the state utilities received subsidies amounting Rs 1.3 trillion ($ 28 billion) which is 2 % of the Gross domestic product (GDP) in 2011 . The Total Debt stood at Rs 3.5 trillion ($77 billion) in 2011 which was equivalent to 5 percent of GDP that year. In 2001, the sector was given a bail out which was again offered a financial restructuring in 2012. This time also the crisis found its roots in the lack of creditworthiness of state power discoms which were unable to pay their bills or repay their debts. This Paper tries to focus on the evolution of the power sector finances since 2003 and its impact on the various stake holders.

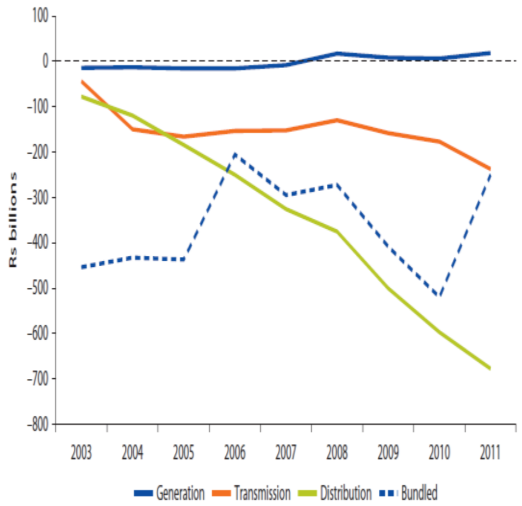
Aim of the Study

The Paper aims to study the evolution of the finances of the power sector from the period 2003-11 in order to introspect the debt burden faced by the power utilities. It tries to study the problems faced by the Generation companies, transmission companies and the discoms while managing the finances during the operation .The Study will also focus on the debt burden shared by the state governments in order to finance the loss making utilities.

State subsidies to the sector

The Subsidies given by the state to power sector imposes the heavy opportunity cost. In 2011, Power sector's accumulated losses stood at Rs 1,146 billion ($25 billion) which was more than the twice (real terms) that in 2003. The Accumulated losses grew at a compound annual growth rate (CAGR) of 9 percent in real terms from 2003 and the share of losses relative to GDP remained stable at about 1.3 percent. The discoms ,state electricity boards and power departments was the largest contributors to accumulated losses whose share has changed from 90 percent in 2003 to 73 percent in 2006 and back up to 81 percent in 2011. The Transmission companies and Generation companies on the other hand have collectively made profits since 2008. These Accumulated losses are heavily concentrated in a few states which includes Uttar Pradesh, Madhya Pradesh, Tamil Nadu, and Jharkhand. The State of Uttar Pradesh's losses was accumulating since 2003 which alone has contributed for 40 percent of the total in 2011. The Top five poor-performing states contributed for three-quarters of the power sector's accumulated losses

Accumulated Losses by Segment, 2003-11



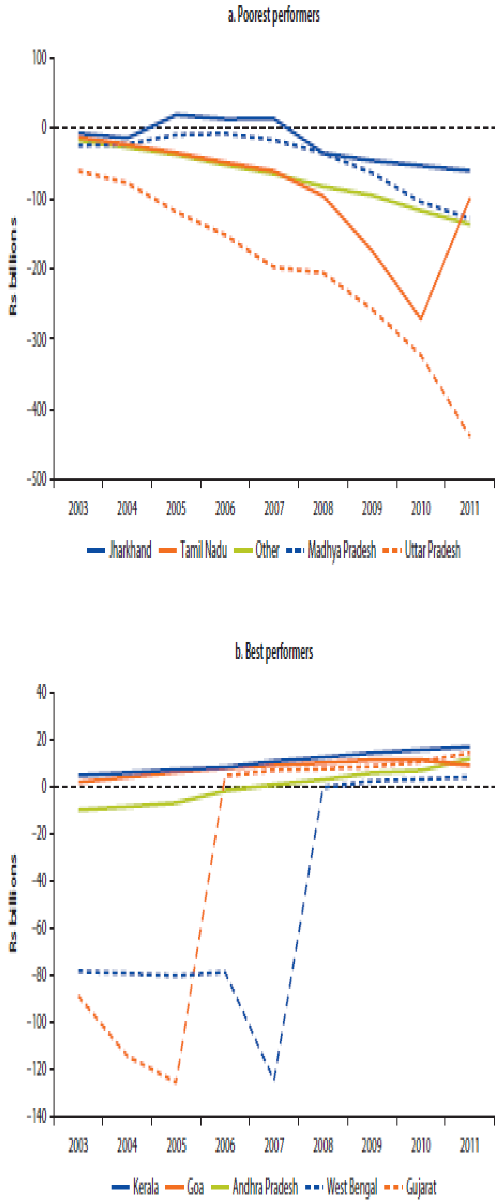
The States which had accumulated profits in 2011 includes Kerala, Gujarat, Andhra Pradesh, Goa, and West Bengal in which Gujarat and West Bengal has shown the best improvements in the state finance as both began the decade with slightly larger accumulated losses than any of the five poor performers.

In 2011, many states had accumulated losses amounted to a large share of state GDP which ranged from 1 percent to 25 percent. Out of the 22 states with accumulated losses in 2011 only 5 had losses less than 1 percent of state GDP which includes Maharashtra, Punjab, Karnataka, Rajasthan, and Chhattisgarh.

The accumulated losses presents a picture of the sector at a specific point in time whose annual profit after tax figures show the changes in performance each year. The state governments annually provides subsidies (transfer payments) from its budget to discoms or the distribution utilities which get approval from the state electricity regulatory commission (SERC). The subsidies are meant to cover losses from below cost recovery pricing for agriculture and in some states from domestic consumers. . The difference between profit after tax with subsidy booked and with subsidy received aggregated over time is known as the accumulated loss each year.

The after-tax losses of the power sector for the year 2011 amounted to Rs 618 billion ($14 billion) excluding subsidies which is nearly 17 percent of India's gross fiscal deficit and around 0.7 percent of GDP. These losses are heavily concentrated among state electricity boards (SEBs) and power departments (from the bundled states) and distribution utilities (from the unbundled states) where as the upstream generation segment recorded a small profit of Rs 15 billion ($344 million) in 2011 .

Accumulated Losses by State, 2003-11



Source: Khurana and Banerjee 2013.

Since 2003 , total losses of the power sector have grown 133 % which was driven by the Losses among State Electricity Boards and distribution companies (in unbundled states) together growing at a rate of 134 %. However In 2011 these distribution companies saw a modest drop in the annual losses Where as the Generation companies registered an annual growth in profits over the period between 2003-11 excluding the year of 2009 .The transmission companies saw small losses shrink and became small profitable by the mid-2000s, but by 2011 the gains had been reversed and the segment's losses were larger than in 2003

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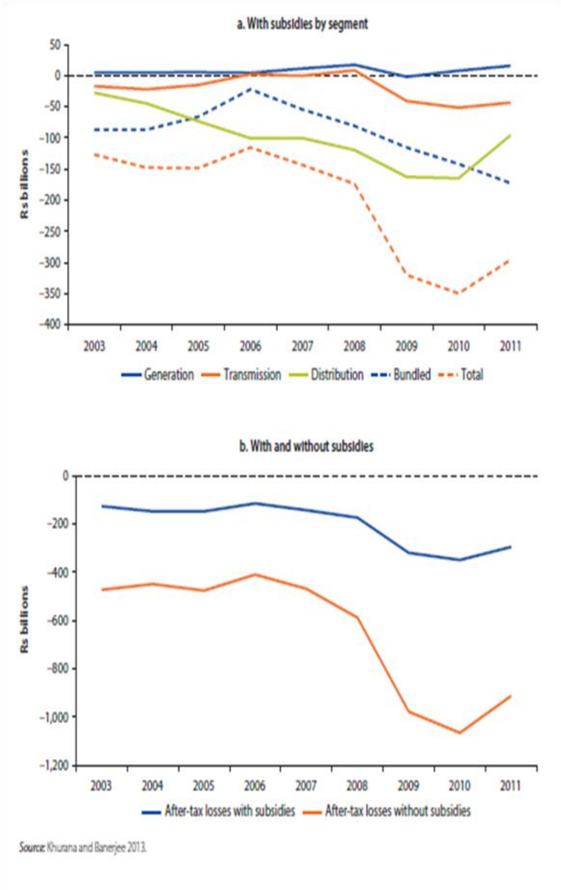
Annual Profit or Loss after Tax, 2003-11

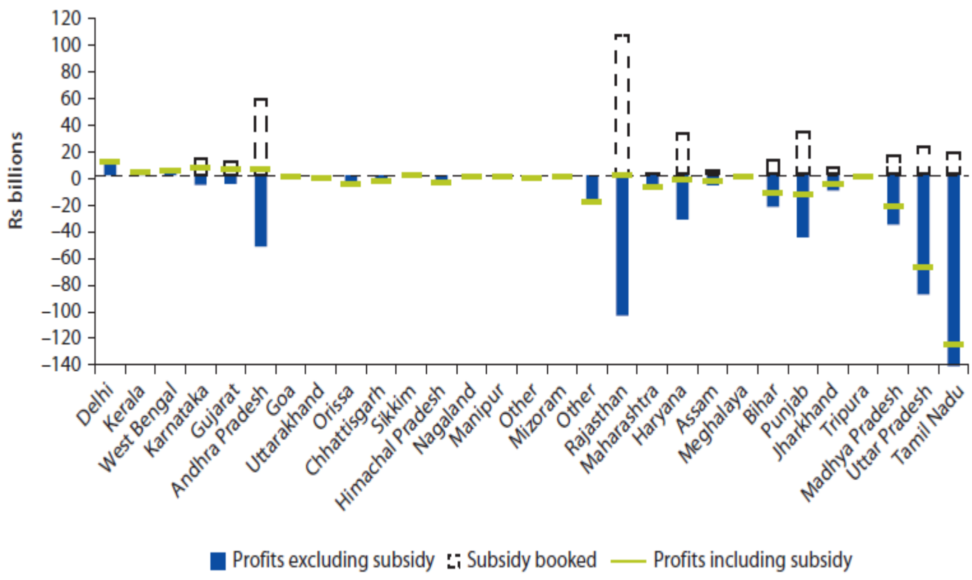


If we include subsidies then the annual after-tax losses of the power sector were Rs 295 billion ($6.5 billion) in 2011. Thus, the recorded losses fell by over 50 % when subsidies booked are counted as revenue.

In 2011, six states reported a profit with subsidies but only three states reported a profit without subsidies which are Delhi, Kerala, and West Bengal. The State of Kerala is the only bundled state which has reported a profit (with or without subsidies) where majority of other bundled states reported a huge loss in 2011. The Amount of State subsidies varied widely from zero in 14 states to Rs 130 million ($2.8 million) in Meghalaya to more than Rs 100 billion ($2 billion) in Rajasthan.

In India, Not every state governments pay the entire subsidy booked by their power utilities. The Average annual subsidies booked by the power utilities have risen by 12 % where as the subsidies actually received grew by 7 percent since 2003. The divergence between the subsidy booked and subsidy received is noticeable only after 2008. The Data in the figure shows that Rajasthan and Andhra Pradesh contribute for 98 percent of the difference between subsidy booked and received where as in other states this difference is fairly minor.

Profit /Loss after Tax and Subsidies, 2011



Source: Khurana and Banerjee 2013.

The Cumulative subsidies booked and received during the period 2003–11 are Rs 1.75 trillion ($38 billion) and Rs 1.3 trillion ($28 billion) respectively.The State of Rajasthan followed by Andhra Pradesh, Punjab, and Haryana was the largest recipient of cumulative subsidies booked where as the states lie Punjab, Haryana, Andhra

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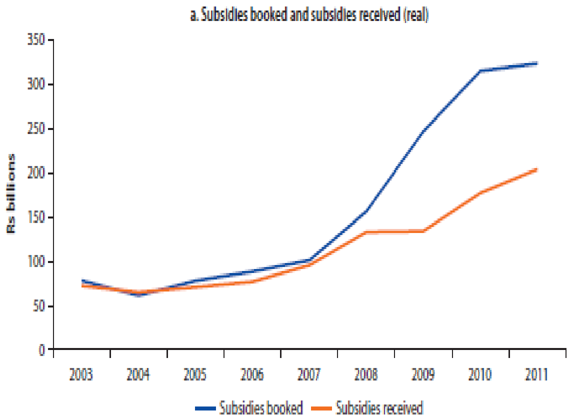
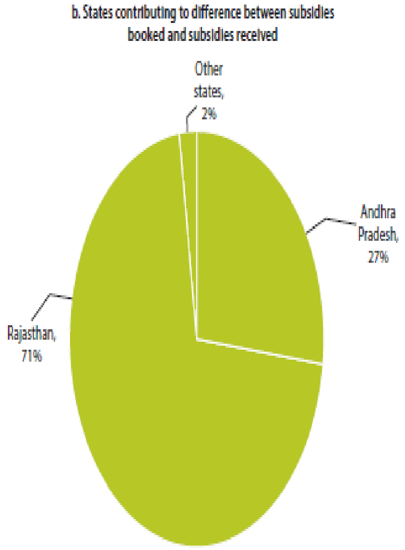
Pradesh, Karnataka, and Uttar Pradesh were the largest recipients of cumulative subsidies received.

Other than state support by subsidies to the power sector the utilities get injections through loans, grants and equity injections which accounts for a significant share of state budgetary spending and GDP. But the Subsidies are the largest component of state support to the power utilities. The share of the state support to power utilities in the state budget is averaged about 2 % across the 16 Indian states that received such support whose range was as high as 15 % in Bihar and 22 % in Uttarakhand in 2011. On an average the state support to the power sector amounted to 1.3 % of state GDP in 2011 in which Punjab and uttarakhand had the share of 5 % and 4.5 % of state GDP respectively.

Subsidies Booked and Received, 2003-11

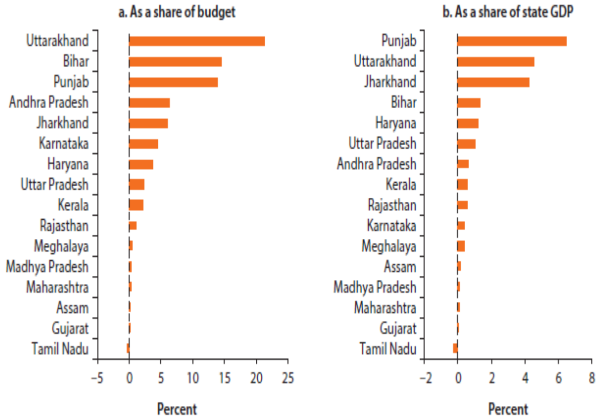




Source: Khurana and Banerjee 2013.

Such budgetary resources given to the power sector causes a huge opportunity cost to the economy. Back-of-the-envelope calculations says that a hospital cost is Rs28 million ($0.6 million) and a school cost is Rs 4 million ($0.08 million) which suggests that about 15,000 hospitals and 123,000 schools could have been built in 2011 if the power sector had not granted these funds.

State Support to the Power, 2011



Source: Khurana and Banerjee 2013.
Note: GDP = gross domestic product.

Rising Power Sector Debt Has Escalated the Risk of Financial crisis

The power sector has also been supported by substantial borrowing by all segments, with total debt growing to Rs 3.5 trillion ($77 billion) in 2011, equivalent to 5 percent of GDP (figure 3.7a). The debt in distribution grew the fastest over 2003–11—at a CAGR of 23 percent in real terms—and expanded as a share of total debt from 9 percent in 2003 to 36 percent in 2011. Transmission and generation debt grew at real CAGRs of 10 percent and 9 percent, respectively. Bundled utilities' debt has fallen sharply in recent years, though largely because states that unbundled transferred their SEB or power department debt to the newly created utilities.

However many distribution utilities have now started relying on short-term loans in order to meet their operating expenses whose with share in the total sector borrowing increased from 11 % in 2007 to 22 % in 2010 .The share of long-term loans declined from 87 % in 2007 to 77 % in 2010. However the interest burden on Power utilities from short-term borrowing is heavy and increasing at a rapid rate.

The total debt of the power Sector is highly concentrated among a few large states which includes Rajasthan, Meghalaya, and Haryana whose power sector's debt is more than 10 % of state GDP and in Uttar Pradesh it is 43 %. The Ten states with the largest power sector debt together contributed for 78 % of India's total power sector debt in 2011. Rajasthan had the largest absolute debt whose borrowing increased at a rate of massive 15 % annually in real terms during the period 2003–11. The Debt of Bihar also increased at a faster rate but from a far lower base. The overall credit worthiness have seen a decline due to the factors like Mounting debt and continuing losses.

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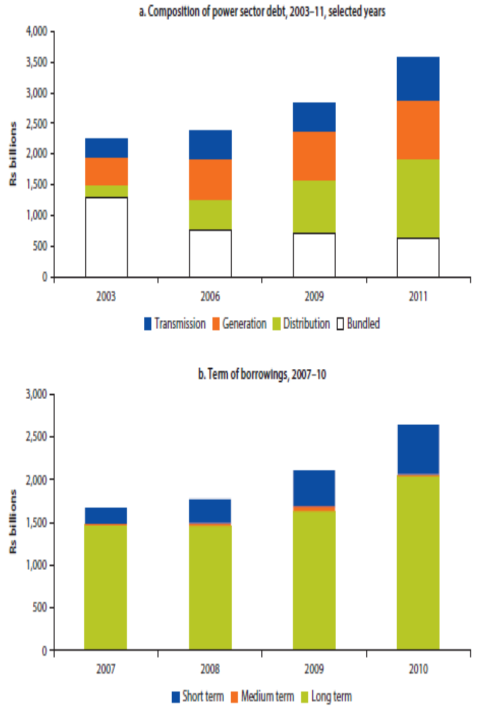
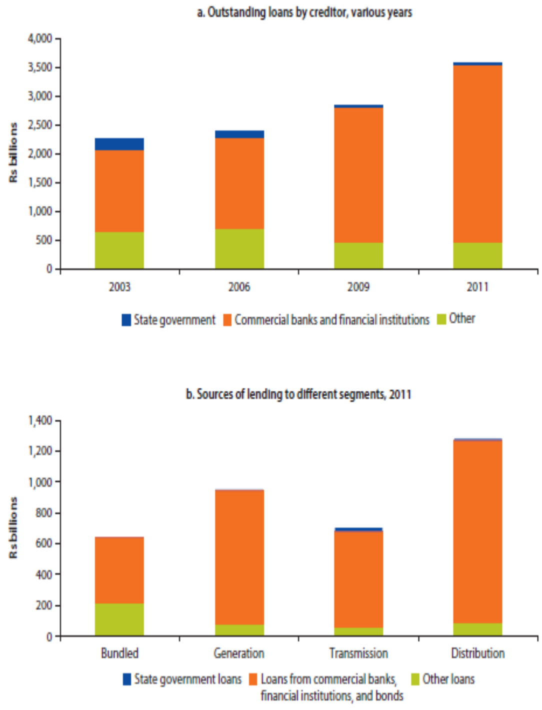
Debt Owned by the Power Sector



Source: Khurana and Banerjee 2013.

The banks and financial institutions appear not to have followed strict due diligence and prudential norms in the recent years. They continued granting loans to distribution utilities due to the reliance on the guarantee of state governments in the face of known borrower insolvency. During the period 2006 to 2011 the lending to unbundled distribution utilities increased at a rate of 35 % annually which have accounted for 41 % of total Power sector lending. In 2011, about a half of the sector's borrowings came from commercial banks. The financial institutions such as the Power Finance Corporation, Infrastructure Development Finance Company and Rural Electrification Corporation lent an additional amount at concessional rates which has brought the total contribution of commercial banks and financial institutions to 86 % (amounting to Rs 3 trillion [$64 billion]) of sector's borrowing in 2011 .The continuing flow of liquidity limited the pressure on distribution utilities to think about the improvement in performance. In 2011, the banks were directed to decrease lending to the Power sector which has resulted states to increase power tariff.

Outstanding Loans among Subsectors and by Creditors



Source: Khurana and Banerjee 2013.

Facing the challenges of huge and growing nonperforming assets even greater than sector exposure limits the lenders finally pulled the plug on loss-making utilities in 2011-12. The credit has dried up which made distribution companies unable to pay for power purchases caused the Investors to look for other sectors for investment. According to the data more than half of 13 major state-owned banks have funded loans to the power sector to 50 % or more of net worth which have raised the concerns of a recession in the power sector that may spread to financial sector.

The Central Government's Response in the face of power sector crisis

The poor state of utility finances may go to a far-reaching consequences. The Power utilities are unable to cover their costs and can't make adequate investment which is needed to serve customers. It will result in poor quality of electricity supply and inadequate capacity utilization in generating companies which will further cause to weakening of sector finances. This will lead Customers to switch to use of expensive standby options which will again results in productivity losses and decreased competitiveness. Finally, the financial sector also now faces huge risks because of the loans made to the utilities for capital investments and working capital. In 2001 , Central government have given a bailout to state electricity boards but this time the amount of the bailout was four times larger .In 2012 the Central government announced a Scheme for Financial Restructuring of State Discoms which was available to all loss-making discoms amounting to total Rs 1.9 trillion ($18.7 billion; Ministry of Power 2012). Under this initiative, state governments will take over 50 %

of the short term liabilities of discoms outstanding as of March 31, 2012 and will convert it into bonds to be issued by discos to participating lenders which have the backing of state governments. The banks will restructure the other 50 %, with a three-year moratorium on repayment.

Conclusion

The Power Sector in India needs an urgent restructuring and should focus on the increasing the efficiency of the Power utilities instead of financing their losses by taking more liabilities. The crisis in the power sector have also created a risk of crisis in the financial sector of the economy which may transfer to other sectors also. The power sector is very important for an economy because it fuels the growth in other sectors of the economy like agriculture, industries and service sector. No or limited power will decrease the output in the other sectors which will affect the GDP growth of India .However the policies of the New government elected in 2014 have improved the Investment in the power sector which may bring change in the working of the state discoms .

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