



Coal shortage driven power crisis worsens credit outlook of the Indian power sector

by [Aditi Kamath](#)

- **NUS-CRI Agg 1-year (median) PD remains high owing to rising input costs and constrained cash flows**
- **NUS-CRI Forward PD suggests that the credit health of the Indian power sector may potentially worsen in the face of inflationary pressures and higher borrowing costs, despite policy support by the government**

The Indian power sector¹ is caught in [another](#) crisis as economic activity resumes propelling electricity demand [higher than pre-pandemic levels](#), amidst a [shortage](#) in domestic coal stock. Compared to the global power sector, the NUS-CRI Aggregate (median) 1-year PD (Agg PD) for the Indian power sector exhibits a higher credit risk and has trended upwards in the past few months as the shortage in coal supply compelled the power generating companies (gencos) to increase imports despite [higher global prices](#). At the same time, the excess demand [pushed up power spot prices](#) at the Indian Energy Exchange², resulting in higher operating costs for the power distribution companies (discoms). Notwithstanding government support, the sector's credit outlook might still potentially worsen as shown by NUS-CRI Aggregate (median) Forward 1-year PD (Forward PD³), owing to increased exposure to foreign exchange and global price volatilities, as well as financing headwinds.

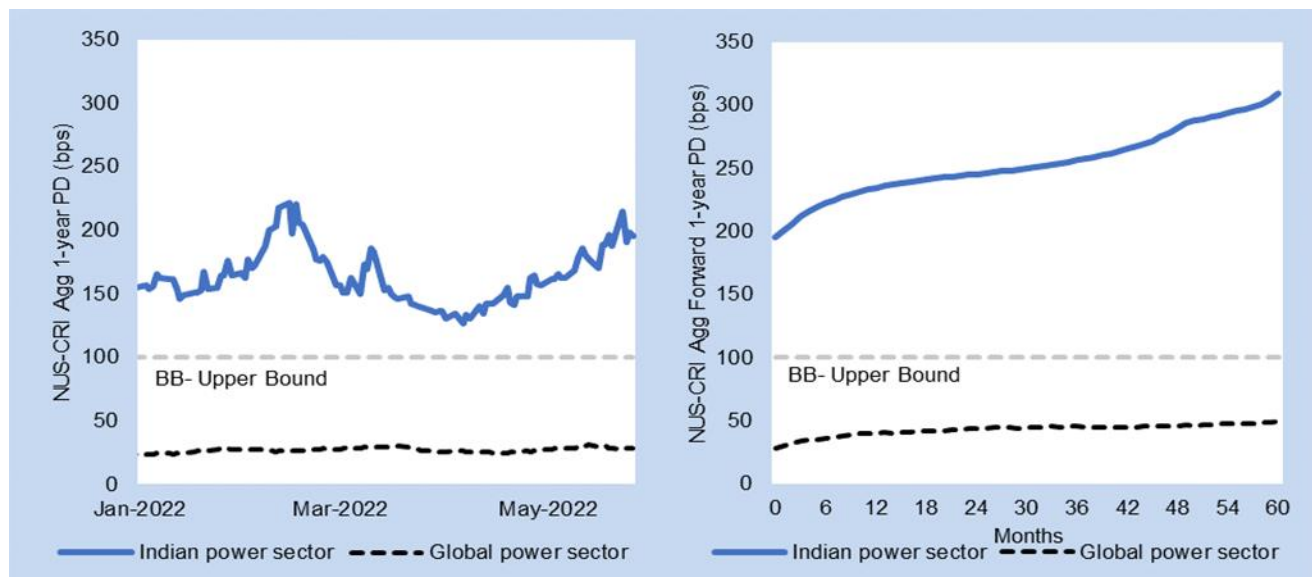


Figure 1a (LHS): NUS-CRI Agg (median) 1-year PD for Indian power sector and Global power sector from Jan-2022 to May-2022 with reference to PDiR2.0 bounds⁴. Figure 1b (RHS): NUS-CRI Agg (median) Forward 1-year PD for Indian power sector and Global power sector as of May-2022 with reference to PDiR2.0 bounds. *Source: NUS-CRI*

The [unprecedented surge](#) in electricity demand has not only pressured the Indian power sector to increase production but also depleted coal stockpiles as nearly [70%](#) of the nation's electricity is supplied by coal-dependent power plants. With coal inventory [allocations for the power sector](#) missing targets due to low mine

¹ India's power sector consists of the power generating companies which generate electricity from different sources (thermal, solar, etc.) and the distribution companies which sell power to end-consumers.

² Indian Energy Exchange is a nationwide energy trading platform which facilitates the purchase and sale of electricity under the governance of Central Electricity Regulatory Commission.

³ The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similarly to a forward interest rate. For example, the 6-month Forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 18 months – this is conditional on the firm's survival in the next 6 months.

⁴ The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates.

outputs, gencos have turned to [coal imports](#) to meet operational needs. The need to import coal has exposed the sector to rising global coal prices which have been triggered by the Russia-Ukraine war. In particular, the rally in the Indonesian [4,200 kcal/kg GAR coal](#), which accounts for nearly 40% of India's coal imports, has translated to a [95.41%](#) increase in input prices in FY 2021-2022⁵. In terms of YoY value, coal imports [more than doubled](#) as of Apr-2022, and are expected to further increase following the enforcement of the Ministry of Power's policy mandating a [minimum 10%](#)⁶ blend of imported coal in power generation. Furthermore, upcoming monsoon seasons in H2 2022 will likely curtail domestic coal production, increasing dependence on costlier imported coal to sustain operations. With the INR [weakening](#), increasing imports might further increase costs. In addition to rising input costs, the State Electricity Regulatory Commissions (SERCs) [regulates prices \(power tariffs\)](#) to protect consumers, [straining profitability](#) of the Indian power sector, although [power tariff hikes](#) were imposed around Apr-2022 and May-2022 providing temporary relief.

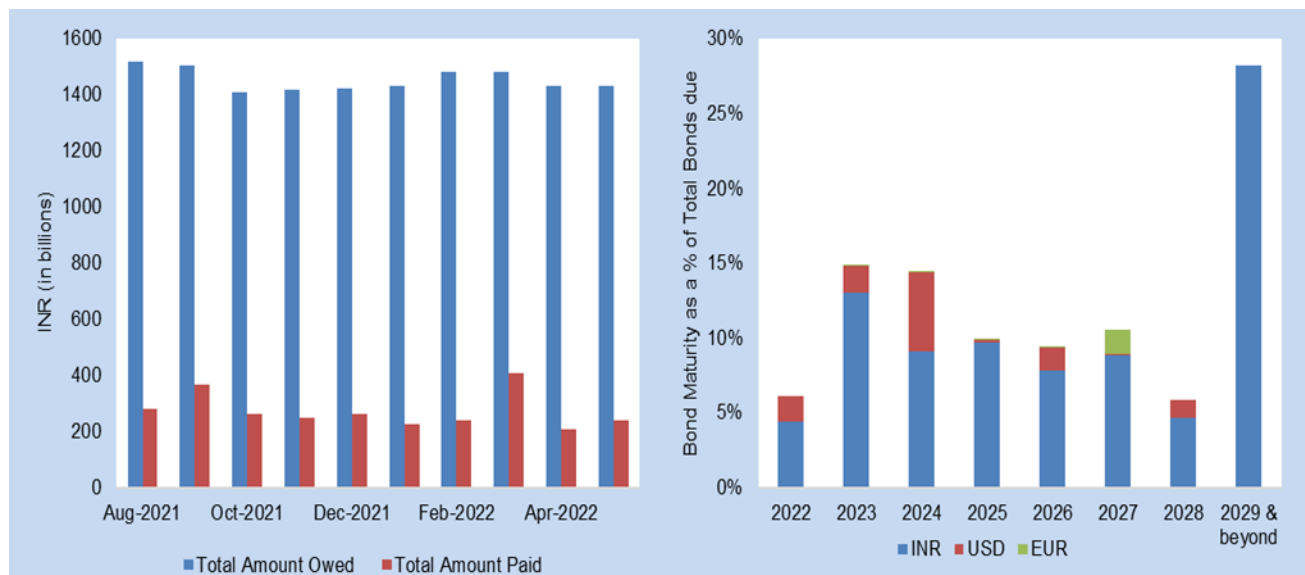


Figure 2a (LHS): Amount owed compared to amount paid⁷ by Indian power distribution companies (discoms) to Indian power generation companies (gencos). Figure 2b (RHS): Bond maturity as a percentage of total bonds due broken down by year and currency for the Indian power sector. Source: [PRAAPT](#), [Bloomberg](#)

Amidst weakening profitability, the Indian power sector is also suffering from cash flow headwinds that have deteriorated its credit health. The cash flow woes of the Indian power sector stem from the [stressed financial position](#) of discoms, which are [precluded](#) from increasing power tariffs, resulting in [losses](#)⁸ and accumulating unpaid dues to upstream members in the power sector. Historically, the amounts owed by the discoms to the gencos have remained high, contributing to the [cash flow crunch](#) in the sector (See Figure 2a). Similarly, gencos also face stringent pricing conditions as the Central Electricity Regulatory Commission has capped spot power prices at [INR 12 per unit](#), which further hinders their ability to capitalize on the demand-supply disparity.

As a result of constrained cash flows, companies in the sector are compelled to increase borrowing to finance their [working capital requirements](#), even as their ability to service debt remains [stressed](#). With a view to expanding capacity to meet the economy's demand, the Ministry of Power has attempted to coax banks to [lend to idle power projects](#), of which many had been earlier recorded as [non-performing assets \(NPA\)](#). With an estimated [INR 500bn](#) of power sector NPAs on bank balance sheets and facing losses on [10 power projects under liquidation](#), banks have also stated their [reluctance to lend](#) to these companies. Additionally, with inflation exceeding the Reserve Bank of India's (RBI) target range for the fifth consecutive month, and [expected](#) to remain high in the near term, margins of the power sector may be adversely impacted. Faced with lower margins, an increase in delayed payments, and an expected rise in [financing requirements](#), the 50bps rate hike announced in Jun-2022 could further burden the power sector. Furthermore, as over 35% of debt is expected to mature over the next 3 years (Figure 2b), higher refinancing costs may exacerbate existing cash flow problems, as suggested by the worsening credit outlook (Figure 1b). The depreciation trend of the INR against the USD could amplify the foreign bond repayment burden as approximately 25% of the debt set to mature over the next three years is denominated in USD.

⁵ In India, the financial year runs from April 1 to March 31 of the next year.

⁶ Currently, orders for imports are set to be in abeyance awaiting further clarifications from the Ministry of Power of whether the imports orders are set on a Government-to-Government [centralized](#) system or states and Individual power producers to issue their own tenders.

⁷ Amount owed is calculated as a sum of overdue at the beginning of the month and amount billed for the month. Amount paid is calculated as the sum of amount paid against current dues and amount paid against overdue.

⁸ As per the FY2021 Economic Survey of India, losses of India's discoms are [2.5 times](#) higher than the world average.

To alleviate the repayment pressure on the sector and improve overall repayments, the Indian government has proposed an [interest-free scheme](#). However, the newly established [weekly billing cycle](#) might place additional strains on the cash cycle of discoms. In the long term, the government aims to resolve the long-term coal shortage of the power sector through a transition to greener sources of energy. In line with the [carbon emission targets](#), India plans on reducing power generation in nearly [half of its coal power plants](#) over the course of four years. However, renewable energy power plants also face [considerable headwinds](#) owing to the lack of cash flows from the discom sector which, in turn, slows down the transition process. Furthermore, companies may have to raise [additional capital](#) to finance renewable energy projects⁹ as they try to meet the government's emission targets. Overall, as suggested by the Forward PD, the credit outlook of the power sector may worsen and diverge from the global median, despite the government's efforts.

⁹ Capital expenditure in renewable energy must increase by more than [two-fold](#) in order to attain the carbon emission goals set by India.

Credit News**End of ECB stimulus to leave demand 'void' in corporate bond market**

Jun 08. With ECB planning to cease its bond-buying program, investors fear there will be a gap in demand in the corporate debt market. As of May 2022, under this program, the ECB held around GBP 341bn of corporate debt, an amount much higher than the GBP 140bn seen in Mar 2020 just as the pandemic struck. Currently, in a bid to tame inflation, the ECB plans to halt the bond-buying program in the third quarter of 2022 before its planned rate hikes. Traders have already begun exiting their positions in anticipation of cessation of bond-buying by the ECB and also as surging inflation and the possibility of additional rate hikes make fixed income paying securities unattractive. ([FT](#))

Inflation drives investors away from Asian emerging market debt

Jun 12. Asian sovereign bonds are among the worst performers in a gauge of local-currency debt, with some saying the pain is just starting. Bond investors are avoiding Asia's emerging markets as the region's resilience to the global inflation threat shows signs of cracking. Supply-chain bottlenecks due to the lockdowns in China are exacerbating inflation pressure in the region, as China is the dominant trade partner for many Asian nations. That uptick in inflation is pushing the region's central banks to act, joining their peers in Latin America and Eastern Europe in raising rates to combat price pressures. ([Bloomberg](#))

Rout in bond markets is so severe that double-digit losses are the norm

Jun 10. The central banks' tightening policies to control inflation have pushed Treasury yields higher attracting more investors, who would naturally tend towards high-quality instruments amidst economic uncertainties. This flight to quality, in turn, spurs selloffs in other credit markets. As a result, Euro corporate bonds, along with US dollar and sterling markets, have been posting double-digit losses in 2022. ([Bloomberg](#))

China new bank loans nearly triple in May as Beijing steps up policy support

Jun 10. Chinese banks extended CNY 1.89trn in new loans in May, nearly tripling April's tally and handily beating expectations. Chinese policymakers have stepped up support for the slowing economy as Shanghai and other cities ease Covid-19 lockdowns following a drop in new infections. The Cabinet announced a package of policy steps last month, and the central bank cut its benchmark reference rate for mortgages by an unexpectedly wide margin, in a bid to turn around the contracting housing market, a key economic growth driver. New bank lending in China jumped far more than expected in May and broader credit growth also quickened. Besides, the Broad M2 money supply grew 11.1% from a year earlier, above estimates of 10.4% forecast. ([BT](#))

Europe bond risk gauge near 'danger zone' piles pressure on ECB

Jun 10. With the ECB expected to start hiking rates in the coming months, concerns about its possible disproportionate effects among its member economies are surfacing. Generally, more indebted countries tend to be more sensitive to changes in monetary policy. As the spread widens, any new debt issued would likely increase finance costs and add to the debt servicing burden. To date, the spread between 10-year German and Italian bonds is at 226bps. Further widening could prompt the ECB to impose additional measures to reduce the impact of tightening monetary policy on weaker markets. ([Bloomberg](#))

Garuda plans to tackle liabilities with USD 800mn of new debt ([WSJ](#))

Rate rise prospects raise concerns for debt-laden Eurozone countries ([FT](#))

Debt-saddled Kepco turns to dollar green bond after losses mount ([Bloomberg](#))

Regulatory Updates

ECB takes hawkish turn to counter record-high inflation

Jun 10. The ECB has finally announced plans to hike interest rates by the third quarter of 2022. Additionally, the pace of anticipated rate hikes also surprised markets. The ECB plans an additional half percentage point hike in September after a quarter-point increase in July, to tame inflation in the Eurozone which reached 8.1% in May. With the initiation of rate hikes, the ECB finally joins its peers at the US Fed and BoE, which have already undertaken multiple interest rate hikes in 2022. Officials at the ECB cited fears of inflationary pressures stemming from increasing wages, supply chain shocks, and energy shocks as the main drivers behind their decision. ([FT](#))

BoE could exceed rate expectations to show it is serious on inflation

Jun 12. The net satisfaction rating of the BoE had fallen to -3, its lowest score since 1999, as surging cost of living hounds the UK. This survey result indicates that action undertaken by the BoE may have been perceived by the public as softer in comparison to the ECB and the Fed. With consumer prices at a 40-year high of 9%, the BoE is expected to emphasize its willingness to control and rein inflation towards its 2% target, by raising interest rates further. Likewise, the government's plans to ease the impact of rising costs to households through tax cuts increases the possibility of a larger hike in interest rates. The BoE has previously raised interest rates four times since Dec-2021, with its latest in May-2022 by 25bps. ([FT](#))

Yen tumbles to lowest since 1998 as policy driven fall continues ([Bloomberg](#))

Bonds rally in India as Das promises to support borrowing plan ([Bloomberg](#))