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Credit Enhancement : An Enabler for Secondary Market Development of Infrastructure Finance in India

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Abstract

Quantum of investments needed for Indian infrastructure are huge. Credit Enhancement (CE) strengthens the lower rated bonds by bringing in some safety features and helps increase in the bond market activities. This paper examines various ways of Credit Enhancement, their usefulness, especially for infrastructure projects. A few cases, Indian as well as international, have been discussed which highlight the benefits of CE as a potential tool to augment cost effective long term fixed resources from bond market. One common finding is that this process, beneficial to almost all the stakeholders, certainly reduces financial cost and elongates the repayment period. This paper primarily deals with External Credit Enhancement offered by third party enhancers which include Letter of Credit and Wrapped Securities that have been found to be the best tools.

JEL Code : G23; G24
Keywords : Credit;Invesstment; Infrastructure Finance; Bonds; Financial Instruments; India

I. Introduction

Infrastructure projects in India face an issue of low credit rating on account of various factors like regulatory risks, low capitalization, high exposure to execution risk and inexplicit revenue predictability. Investors in Indian market typically have low risk appetite for debt market instruments and do not prefer to invest below AA. More than 75 percent of the infrastructure projects in India are rated in BBB or lower categories (ICRA, 2017).

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References

Acharya, Amarendra, (2011), "Corporate bond market in India: Issues and challenges.", *RBI Occasional Papers,* Vol. 32, No. 3, pp. 67-106.

ADB, (2018), "*India Infrastructure Finance Company Limited (IIFCL) Guarantee Facility Credit Enhancement of Project Bonds*", (India), Asian Development Bank Extended Annual Review Report, Project Number: pp. 43932-014.

AfDB, (2018), "Financing Africa's infrastructure: New strategies, mechanisms and instruments", *African Economic Outlook*, Vol. 4, pp. 101

Agarwal, J.D. and Aman Agarwal, (2004) "*Literature in Finance Vol. IV : Financial Systems and Markets*", IIF Publications, Delhi

Agarwal, J.D., Manju Agarwal, Aman Agarwal and Yamini Agarwal, (2018) "The Theory of Money, Wealth and Efficient Currency Markets : Modeling M5 as Money Supply with Crypto-currency", *Finance India*, Vol. XXXII No. 2, June 2018, pp. 405-457

Aravamuthan, Madhu, Marina Ruete, and Carlos Dominguez, (2015), "Credit enhancement for green projects" *International institute for Sustainable Development*, pp. 13-17

Banerji, Sanjay, Krishna Gangopadhyay, Ila Patnaik, and Ajay Shah, (2011), "*New thinking on corporate bond market in India*", Ministry of Finance, Government of India, pp. 106

Chowdhury, Abu Naser, Po-Han Chen, and Robert Tiong, (2015), "Credit enhancement and its risk factors for IPP projects in Asia: an analysis by network theory", *Procedia Engineering,* Vol. 125, pp.133-142.

Chaudhari, Kanad, Meenal Raje, and Charan Singh, (2014), "*Corporate bond markets in India: a study and policy recommendations*", IIM Bangalore Research Paper 450.

Dawar, Varun, (2012), "Development of Corporate Bond Market in India– Challenges and Reforms." *IOSR Journal of Business and Management (IOSR-JBM),* pp. 46-50.

Deloitte, (2013), "*Project Bonds -An alternative to financing infrastructure projects*", Deloitte Research Division, pp. 1-3

EC, (2011), "*Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Youth Opportunities Initiative*", European Environment Agency, European Commission Policy Document 52012DC0673

IIFCL, (2018), "*India Infrastructure Finance Company Limited (IIFCL) Guarantee Facility Credit Enhancement of Project Bonds*", IIFCL Extended Annual Review Report, pp. 1-4

Erwin, A., (2003), "*Financial Solutions: Partial Risk Guarantee*", Project Finance Euromoney, Deal of the Year,pp. 1-4

Gao, Haoyu, Yuting Huang, and Jingyuan Mo, (2021), "*Boosted Credit Ratings in China: The Effects of Credit Enhancement on Bond Pricing*", SSRN Network, 3549270

Jaochim Bartles, (2017), "*New Credit Rating System for Infrastructure Sector*", ICRA Report, pp. 1-2

Islam, Mohammad Rafiqul, (2018), "Sample size and its role in Central Limit Theorem (CLT)." *Computational and Applied Mathematics Journal,* Vol. 4, No. 1, pp. 1-7.

Iyer, K. C., and Dhruba Purkayastha, (2017), "Credit risk assessment in infrastructure project finance: Relevance of credit ratings." *The Journal of Structured Finance,* Vol. 22, No. 4, pp. 17-25

Juneja, P., (2015), "*How credit enhancement works*" Management study guide, pp. 1-10

Khan, Harun R., (2012), "*Corporate debt market–developments, issues & challenges*", In BIS Central Bankers' Speeches–FICCI Annual Conference on Capital Markets, pp. 1-9

Milford, Lewis, Devashree Saha, Mark Muro, Robert Sanders, and Toby Rittner, (2014), "*Clean Energy Finance Through the Bond Market*", Brookings Institution, Brookings Rockefeller Project on State and Metropolitan Innovation.

Mosionek-Schweda, Magdalena, (2016), "Financing of European infrastructure investments through the bond market", *International Business and Global Economy,* Vol. 35, No. 2, pp.186-199.

GOI, (2020), "*National Infrastructure Pipeline*", India Investment Grid, Vol. I and Vol. II, Ministry of Commerce, Government of India, pp.20-228.

Pradhan, R. P., D. B. Zaki, R. P. Maradana, S. Dash, M. Jayakumar and D. Chatterjee, (2015), "Bond market development and economic growth: The G-20 experience." *Tékhne,* Vol. 13, No. 1, pp. 51-65.

PTI, (2022), "*India overtakes U.K. to become fifth largest economy in the world*", Press Trust of India, Press News

Raghavan, Sunder, and Daniel Sarwono, (2012), "Corporate bond market in India: lessons from abroad and road ahead", *International Journal of Trade, Economics and Finance,* Vol. 3, No. 2, pp. 120.

Rastogi, Anupam, and Vivek Rao, (2011), "*Product innovations for financing infrastructure: A study of India's debt markets*", ADB South Asia Working Paper No. 6, pp. 8-14

Singh, Anoop, (2008), "*Securitization and Credit Enhancement for Catalyzing Infrastructure Financing*", Indian Infrastructure Report, pp.52-59.

Venu, P., (2013), "*Credit enhanced infrastructure bonds in emerging markets*", SSRN Network

Vishwanathan, N. S., (2016), "Asset quality of indian banks: Way forward", *RBI Bulletin*, pp.1-10

Yoshino, Naoyuki, and Farhad Taghizadeh-Hesary, (2015), "Analytical framework on credit risks for financing small and medium-sized enterprises in Asia", *Asia-Pacific Development Journal,* Vol. 21, No. 2, pp.1-21.

Yoshino, N. and F. Taghizadeh-Hesary, (2016), "*Optimal Credit Guarantee Scheme Ratio for Asia*", Working paper series of Asian Development Bank Institute (ADBI), No-586, pp. 5-8

Annexure I
Questionnaire

The questionnaire that was circulated among relevant stakeholder

Q1. Name of the Respondent ______

Q2. Work Experience (in no. of Years) ________

Q3. Work Domain – – – –

Q4. Do you know what is Credit Enhancement?
A. Yes
B. No

Q5. There are 2 types of Credit Enhancements. Which one according to you is better for Infrastructure?
A. Internal
B. External

Q6. Which type of External Credit enhancement is Better for Infrastructure? *(More than one Answer)*
A. Cash Collateral Account
B. Letter of Credit
C. Surety Bonds
D. Wrapped Securities

Q7. Why we do not see more infrastructure deals taking advantage of credit enhancement solutions? *(More than one Answer)*
A. Low awareness
B. Cost implications
C. Regulatory issues
D. Difficulties in asset recycling

Q8. What can be done to increase the use of credit enhancement instruments? *(More than one Answer)*
A. Need for optimal market conditions, particularly interest rate conditions at the time of introducing a new fixed rate product
B. Discussions to address regulatory restrictions;
C. Measures to mitigate heavy legal documentation for a new financial product
D. Need for early dissemination of new product information to educate stakeholders
E. Need to enhance technical capabilities of implementing agencies

Source : Self Constructed