

A Study on Power Finance Corporation of India

M. Prasad rao¹, Karishma kumari²

¹Assistant professor, CMRIT, Kandlakoya

²MBA Student, CMRIT, Kandlakoya

Abstract- Power Finance Corporation Ltd. (PFC) is a pivotal entity within India's power sector, established in 1986 under government ownership. As of June 30, 2023, PFC boasted a substantial net worth of INR 1,184 billion, reinforcing its stature as a leading financial institution in the industry. Recognized for its significant contributions, PFC ranks as the 8th most profitable central public sector undertaking (CPSU) based on the 2017-18 Department of Public Enterprises survey. It holds the distinction of being India's largest non-banking financial company (NBFC) and infrastructure finance PSU.

PFC's journey includes a landmark IPO in January 2007, which was oversubscribed by over 76 times, highlighting investor confidence and marking one of the largest such offerings by any Indian PSU. Listed on both the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE), PFC operates under stringent quality management standards as an ISO 9001:2000 certified entity. In recognition of its impact and scale, the government elevated PFC to 'Maharatna' status in 2021, underscoring its strategic importance.

INTRODUCTION

PFC (Power Finance Corporation Ltd.) is a government-owned company in India that supports the power sector. It was founded in 1986 and is a leading financial institution in this field. As of June 2023, PFC's assets are worth approximately INR 1,184 billion. According to the 2017-18 survey by the Department of Public Enterprises, PFC ranks 8th in profitability among central government-owned companies. It is the biggest infrastructure finance public sector company and the largest non-banking financial company in India. Notably, in 2021, the government upgraded PFC from 'Navratna' to 'Maharatna' status. After being initially wholly owned by the government, PFC became publicly traded in 2007 through an initial public offering that received an exceptional response, with over 76 times more demand than shares available.

PFC (Power Finance Corporation) primarily obtains funds by issuing bonds denominated in Indian rupees.

These bonds have exceptional credit ratings in both India and globally, on par with India's sovereign rating. PFC also secures short-term and long-term loans from various banks and financial institutions. Furthermore, it has obtained funds through external commercial borrowings (ECBs) via private placements in the United States market. Additionally, PFC is authorized to raise funds through capital gains tax bonds, as per Section 54EC of the Income Tax Act of 1961.

PFC has recently expanded its borrowing sources by obtaining funds from international markets. In the first quarter of the 2020 fiscal year, PFC secured approximately \$1.3 billion from these markets, marking its first such transaction after acquiring REC Limited. In 2017, PFC received approval from the Indian Ministry of Finance to raise funds under section 54EC of the Income Tax Act. PFC became the first organization to secure such approval after the budget announcement in February 2017. Since launching these bonds in 2017, PFC has raised over Rs.1000 crores through them.

PFC has been supporting electricity-related projects (generation, transmission, distribution, RM&U) throughout India since its establishment. It has expanded into financing other infrastructure projects connected to the energy sector, such as coal mining, fuel transportation, and oil and gas pipelines. Borrowers include government power entities at state and national levels, as well as private companies. PFC oversees the government's Ultra Mega Power Plants (UMPPs) and R-APDRP initiatives. Additionally, it evaluates and rates the performance of state Power Utilities.

REVIEW OF LITERATURE

- Ravinder Kumar (2019)
India's rapidly growing population has led to a surge in energy consumption, posing a significant challenge for efficient energy utilization. Factors such as global energy

demands, availability, affordability, environmental impact, and storage have become crucial considerations. Urbanization has accelerated the trend, with people moving to cities in search of opportunities and amenities. This shift has concentrated energy consumption in urban areas due to the presence of industries and increased infrastructure.

- Mark Bolinger (2019)
Traditionally, solar project funding has involved intricate financing models. However, as solar costs fall and tax incentives diminish, a shift towards simpler, more cost-effective approaches is likely in the coming years. In a future characterized by lower costs and less incentives, solar financing may align more closely with conventional methods. Large-scale solar projects could be funded similarly to natural gas-fired power plants, while smaller, distributed projects could be financed like typical infrastructure upgrades or major home appliances. This study compares and evaluates past, present, and potential future financing structures to determine how financial advancements and innovation contribute to the evolving landscape of solar project finance.
- Ritu Ritu Wadhwa (2020)
PFC has classified 21 potential threats into quantifiable (8) and non-quantifiable (13) categories. To ensure continuous risk management effectiveness, PFC has established a committee of experts to monitor risk policies and adapt them to the evolving power industry landscape. This study evaluates the efficacy of PFC's enterprise risk management (ERM) policies, considering various risks including credit, liquidity, market, operational, exchange rate, legal, regulatory, and interest rate risks associated with floating rates.
- Alok.R Gupta (2023)
India aims to reach 175 gigawatts of renewable energy capacity by 2022. This goal is essential for economic growth, energy security, and addressing climate change. However, financing remains a major obstacle, hindering progress. Despite reaching over half of the target,

significant financing challenges persist. One key issue is the lack of innovative financing options that provide larger loans with lower interest rates and longer repayment terms. Adequate financing would significantly accelerate the adoption of renewable energy in India.

RESEARCH METHODOLOGY

RESEARCH GAP

The study of the literature shows that the Power Finance Corporation was restricted only to provide financial assistance to the power projects in India, However they have expanded and included Infrastructure and logistics in their venture in order to focus on E-vehicle fleets, metro cities and other large infrastructural projects.

NEED FOR THE STUDY

This study helps us to understand the PFC's impact on the power sector which determines their goal to provide power to every citizen and also helps to identify the challenges they face in achieving their objectives such as renewable energy integration.

PROBLEM STATEMENT

The PFC was introduced in order to provide the financial stability to the power sector in India, despite significant investments there remains a challenge in promoting the renewable energy adoption and sustainable infrastructure development. This study aims at identifying the gaps, challenges and opportunities within the PFC's operations.

OBJECTIVES OF THE STUDY

1. To study about the Power Finance Corporation role in financing and supporting renewable energy projects.
2. To know the awareness among students regarding PFC.
3. To study the initiative taken by the PFC in modernizing the power sector.

RESEARCH DESIGN

When you conduct a research, you need a plan to answer your questions with real data. This plan, called a research design, involves making decisions about your goals, how you'll gather data or what you'll study. You'll need to decide if you'll collect

your own data or use the existing one, and how you'll choose your research subjects.

RESEARCH TYPE: Descriptive in nature

Sampling technique: simple non-random sampling was utilized for the purpose of the study.

DATA COLLECTION TECHNIQUES

1. Primary data
2. Secondary

When researchers gather data directly from the source, it is known as primary data. The data is collected for projects at hand. On the other hand, the secondary data involves collecting the data which is already present or collected by someone else for a different purpose than the study which is currently being conducted.

Population – CMRIT

Population UNIT - MBA

Population size - 50

SAMPLE SIZE: 100

SAMPLE UNIT: MEDCHAL

QUESTIONNAIRE

A well-structured questionnaire with a straight forward question has been prepared for collecting the data. Close ended, Likert scale and multiple choice items were included in this survey.

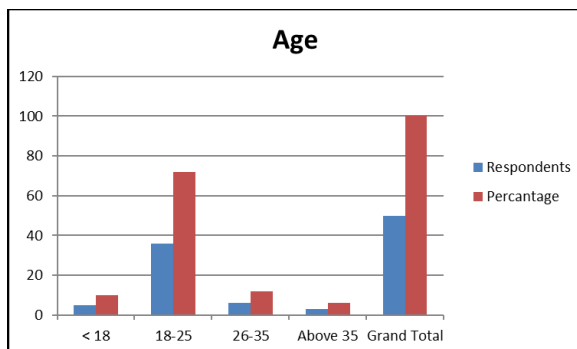
Hypothesis:

H0: There is no awareness among the students regarding the Power Finance Corporation.

H1: There is awareness among the students regarding the Power Finance Corporation.

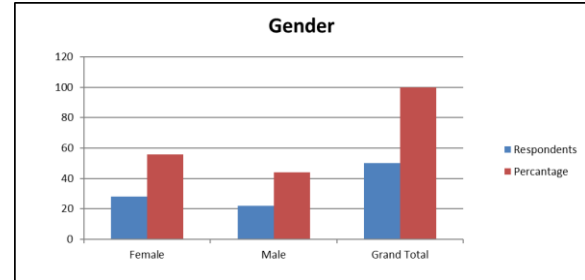
Data analysis:

Age	< 18	18- 25	26- 35	Above 35	Grand Total
Respondents	5	36	6	3	50
Percentage	10	72	12	6	100



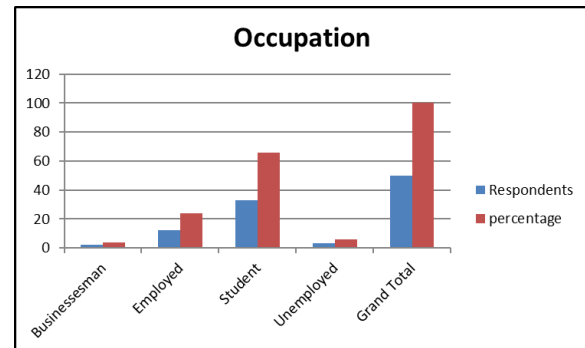
Interpretation: The above data shows that out of 50 respondents most of the students belong to the age group of 18-25.

Gender	Female	Male	Grand Total
Respondents	28	22	50
Percentage	56	44	100



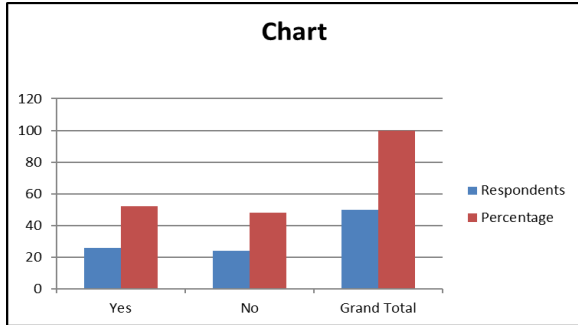
Interpretation: The above data shows that out of 50 respondents 56% of them are Female and 44% are male.

Occupation	Business man	Employed	Student	Unemployed	Grand Total
Respondents	2	12	33	3	50
percentage	4	24	66	6	100



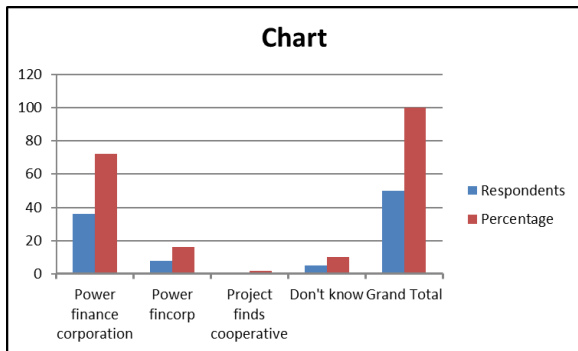
Interpretation: It is observed that out of 50 respondents 66% of them belongs to the Students Category.

Are you aware of PFC	Yes	No	Grand Total
Respondent	26	24	50
Percentage	52	48	100



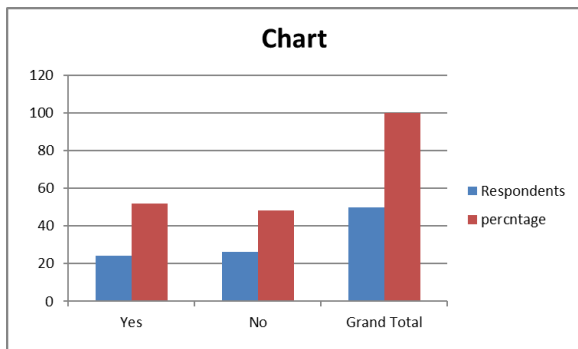
Interpretation: Out of 50 respondents, 52% of the respondents knew about PFC earlier.

PFC stands for	Don't know	Power finance corporation	Power fincorp	Project finds cooperative	Grand Total
Respondents	5	36	8	1	50
Percentage	10	72	16	2	100



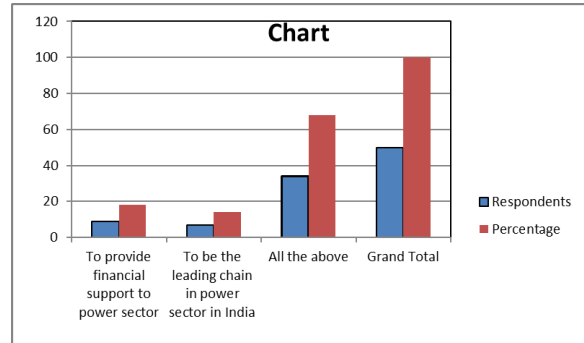
Interpretation: 72% of the respondents know the full form of the PFC.

Did you know that PFC finances the power sector in India	Yes	No	Grand Total
Respondents	24	26	50
percentage	52	48	100



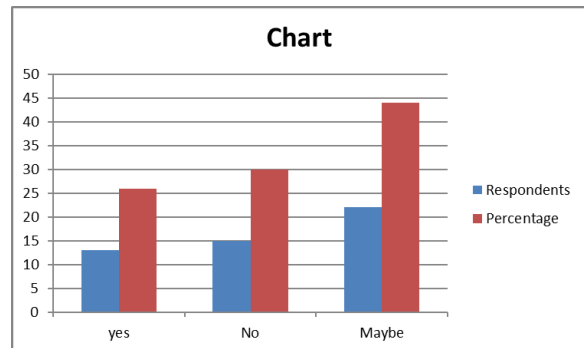
Interpretation: Out of 50 respondents 52% of the respondents know that PFC finances the Power sector in India.

	To provide financial support to power sector	To be the leading chain in power sector in India	All the above
Respondents	9	7	34
Percentage	18	14	68



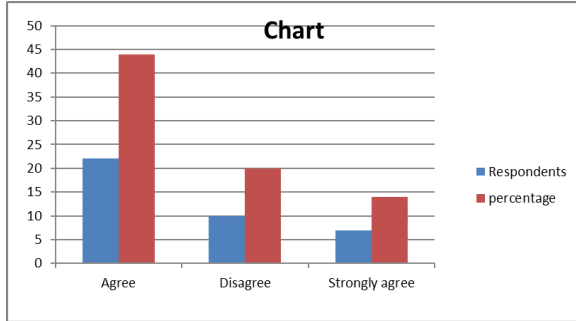
Interpretation: Almost 68% of the respondents feel that the main objective of the PFC is to provide financial support as well as to be leading chain in power sector.

Does PFC only concentrate on financing the power sectors?	yes	No	Maybe	Grand Total
Respondents	13	15	22	50
Percentage	26	30	44	100



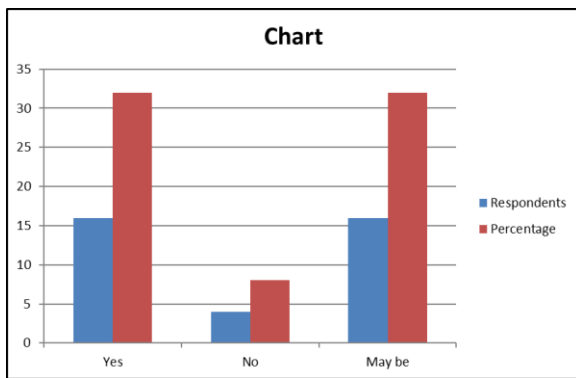
Interpretation: 26% of the respondents feel that PFC only plays role in financing the power sectors, 30% sat no, 44% feel PFC may not only concentrate on providing finance.

Is providing financial support only indicates giving or providing the money to the state power sectors?	Agree	Disagree	Strongly agree	Strongly disagree	Grand Total
Respondents	22	10	7	11	50
percentage	44	20	14	22	100



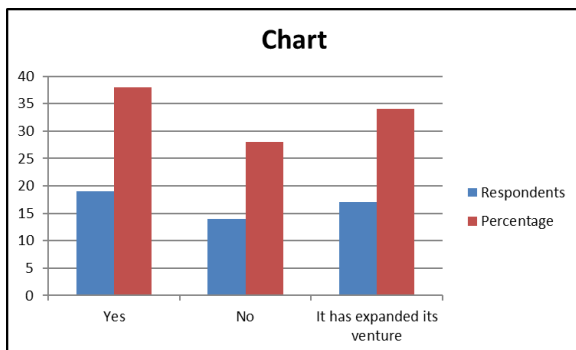
Interpretation: About 44% of the respondents agree that financial support indicate giving money to the state power sector, 20% of the respondents disagree to it.

Do you know that PFC also takes initiative in developing the India's power sector?	Yes	No	May be	May not take any initiative it just provides the finance.	Grand Total
Respondents	16	4	16	14	50
Percentage	32	8	32	28	100



Interpretation: Out of 50 respondents 32% of them feel that PFC also takes initiative in developing the power sector, however 28% feel that it does not take any initiative.

Is PFC is only related to the power/ energy?	Yes	No	It has expanded its venture	Grand Total
Respondents	19	14	17	50
Percentage	38	28	34	100



Interpretation: 38% of the respondents feel that PFC is only related to power sector, 28% say no, 34% feel that PFC not only related to power sector, it has expanded its venture.

STATISTICAL TOOLS FOR ANALYSIS

H0: There is no awareness among the students regarding the Power Finance Corporation.

H1: There is awareness among the students regarding the Power Finance Corporation.

	Yes	No	Row Totals
Male	12 (13.20) [0.11]	10 (8.80) [0.16]	22
Female	18 (16.80) [0.09]	10 (11.20) [0.13]	28
Column Totals	30	20	50 (Grand Total)

The chi-square statistic is 0.487. The *p*-value is .485263. The result is not significant at *p* < .05.

Since the *p* value is less than 0.05, we reject H0 and accept H1, therefore, there is awareness among the students regarding the Power Finance Corporation.

	Yes	No	Row Totals
< 18	3 (2.90) [0.00]	2 (2.10) [0.00]	5
18-25	20 (20.88) [0.04]	16 (15.12) [0.05]	36
26-35	4 (3.48) [0.08]	2 (2.52) [0.11]	6
Column Totals	29	21	50 (Grand Total)

The chi-square statistic is 0.374. The *p*-value is .945556. The result is not significant at *p* < .05.

FINDINGS

- The total no of respondents were 50 out of which 56% were female and 44% were male.
- About 66% of the respondents were students, followed by the 24% of employed, 6% of them are unemployed and remaining 4% of them are businessman.
- It is found that 52% of the total respondents knew about the PFC and remaining 48% of the respondents were not aware of the PFC.
- As 52% of the respondents did know about PFC, they also know about the full form of the PFC which stands for Power Finance Corporation.
- They also know that PFC finances the Power sector Industry in India.
- Out of 52% of the known respondents most of them also think that PFC not only provides financial support to the Power sector but also it is one of the leading chains in Power sector.
- About 26% of the respondents think that PFC only concentrates on financing the Power

sectors, whereas, 30% of say no and 44% of them are not sure regarding that.

- 44% of the respondents feel that providing financial support indicates giving money to the state power sector; however 14% strongly agree to that statement, 20% disagree and 22% strongly disagree to that statement.
- Around 28% of the respondents feel that PFC does not take any initiative in developing India's Power sector.
- Most of the respondents follow different understanding/opinions in order to promote the sustainable practices in the Power sector.
- Almost 38% of the respondents feel that PFC is only related to Power/energy, 34%, 28% of the respondents feel that it is not only related to Power it has expanded its venture respectively.

SUGGESTIONS

Power Finance Corporation is related to the Power Sector Industry in India. Its role in financing power sector projects in India is an important aspect, as it contributes to the energy infrastructure within the economy which helps in developing the economy. It has also taken the initiative in using sustainable practices in order to encourage today's world in sustainability. PFC is also one of the largest government enterprise and leading Non Banking Financial Corporation in country in providing the Power to its citizens. Over the years it has grown economically and financially. It has market cap of 1,39,198 cr.

As per the study 52% of the students know about the Power Finance Corporation, however there are 48% of the students who don't know about PFC nor their role in the economy. Studying about PFC helps the students to understand the initiative taken by the Government of India in providing the renewable energy to each and every home.

Students should be able to understand that how government is providing funds to the state power sectors. The impact that can be seen if the Government do not provide enough funds to the state power projects. They should be able to analyze the Power sector by its financial stability, market dynamics, its performance etc, for the better understanding.

CONCLUSION

Most of the students do know about PFC. They might have come across this topic in their lives due to the investment which they do in PFC stock or most of them might have studied in their finance subjects. But still there are many students/individuals who neither know about PFC nor they know about its vision and mission to develop the economy. Having knowledge about PFC helps the individuals to understand that the power which they are use in their daily lives how it is generated or what are the sustainable practices that Government is using in order to generate the power which does not harm the environment. It helps them to understand how PFC plays an important role in providing financial stability to power sector and also how it provides assistance to the state power sectors.

REFERENCE

- [1] Ravinder Kumar (2019): "A review status on alternative arrangements of power generation energy resources and reserve in India" - International Journal of Low-Carbon Technologies, Volume 15, Issue 2, May 2020, Pages 224-240.
- [2] Mark Bolinger (2019): "Emerging Opportunities and Challenges in Financing Solar" - On the Path to SunShot, 2016.
- [3] J.Hickey (2018): "The Impact of Financial Development on Renewable Energy Consumption: A Multidimensional Analysis Based on Global Panel Data" - Int. J. Environ. Res. Public Health 2023, 20(4), 3124.
- [4] Ritu Ritu Wadhwa (2020): "An Analysis of Factors Affecting Corporate Risk Management with Special Reference to Power Finance Corporation" - The IUP Journal of Financial Risk Management, Vol. XVII, No. 2, June 2020, pp. 45-77.
- [5] Alok. R. Gupta (2023): "Financing India's Renewable Energy Vision" - ORF Issue Brief No. 336, January 2020, Observer Research Foundation.